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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1967

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HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

EIGHTY-NINTH CONGRESS

SECOND SESSION

ON

H.R. 14215

MAKING APPROPRIATIONS FOR THE DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES FOR THE FISCAL YEAR ENDING JUNE 30, 1967, AND FOR OTHER PURPOSES

PART 2

(PAGES 1101 TO END)

(FRIDAY, MARCH 4, 1966, THROUGH WEDNESDAY, MARCH 16, 1966)

Printed for the use of the Committee on Appropriations

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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1967

FRIDAY, MARCH 4, 1966

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room 1223, New Senate Office Building, Hon. Carl Hayden, chairman, presiding.

Present: Chairman Hayden, and Senators Bible, Proxmire, and Young.

U.S. DEPARTMENT OF AGRICULTURE

FOREST SERVICE

STATEMENTS OF HON. JOHN A. BAKER, ASSISTANT SECRETARY OF AGRICULTURE; ACCOMPANIED BY E. P. CLIFF, CHIEF; A. W. GREELEY, ASSOCIATE CHIEF; C. W. HENDEE, DEPUTY CHIEF; M. M. NELSON, DEPUTY CHIEF; B. L. RASMUSSEN, DEPUTY CHIEF; G. M. JEMISON, DEPUTY CHIEF; AND R. F. DROEGE, ASSOCIATE DEPUTY CHIEF, FOREST SERVICE

1967 BUDGET REQUEST

Chairman HAYDEN. The subcommittee will come to order.

This morning, Assistant Secretary of Agriculture Baker appears to open the Forest Service presentation of its fiscal year 1967 budget. Mr. Secretary, the committee will be glad to receive your statement at this time.

Mr. BAKER. It is a real pleasure to appear before you to present this statement to the committee regarding the proposed budget for fiscal year 1967 for the Forest Service, in the Department of Agriculture.

The estimates recommended for your consideration are based on economy and progress. They have been developed in accordance with the principles established by President Johnson in his program of frugal management for major aims in Government. Therefore, the requests are designed to attain priority goals with maximum economy. A part of the program increases proposed is needed to continue the Appalachian program at the fiscal year 1966 level. As you recall, the amounts made available to the Forest Service for acceleration of work in the Appalachian region were included in the Supplemental Appropriation Act of 1965. Therefore, such amounts will not be available beyond June 30, 1966.

NEW DOMESTIC PROGRAMS NOW UNDERWAY

A substantial part of the budget requests flows from deep and growing Forest Service involvement in many of the dramatic new domestic programs now underway. To us, the Great Society is taking shape in specific action programs. Because of it, the job of the Forest Service has grown in depth and has widened in scope. We now have 4,888 boys in Job Corps camps and will have 7,513 by the end of this fiscal year, and 8,500 by June 30, 1967. Center construction should be largely completed by fall. We are highly pleased with the results of training being provided the corpsmen. We have helped State foresters establish several thousand young people in the Neighborhood Youth Corps and this is only the beginning. More than 50 percent are rural youth. We have a large share of the job of implementing the Land and Water Conservation Fund Act of 1965 on Federal lands. We administer the entire national wilderness preservation system established in 1964, and we have a huge job to do this decade in implementing that legislation. We are deeply committed in Appalachia in a variety of ways. We are promoting natural beauty. We have made progress in equal employment and civil rights programs. All of these, and more, underlie the budget proposals before you.

Each year brings new challenges and new opportunities. This year, for example, wild rivers, scenic roads, and parkways, the Potomac Basin, National Recreation Areas, National Trail System, natural beauty, water resources, pollution abatement, and regional economic development require our immediate attention. Many other urgent and worthwhile efforts are on the horizon.

The point to which I invite your attention is that the Forest Service is hard-pressed now to do more, to accomplish more, to contribute more toward new activity. We are glad to have an important role in the frontline of these emerging programs. But it takes manpower and dollars to perform well—to meet our responsibilities in a way that will bring satisfaction to us and credit to the Congress. From all indications, fiscal year 1967 will be a critically important year in terms of these new programs alone.

OLDER PROGRAMS GROWING STEADILY

Meanwhile, our older, traditional programs are also growing steadily. We are facing ever-increasing pressures of all kinds. This year, our timber business and our recreation business is at an alltime high—they will be significantly higher in 1967. Roadbuilding, fire and pest protection, research, land exchange, range, watershed and wildlife habitat improvement, and technical assistance and cooperative programs, are all booming in response to the growing needs and demands of more and more Americans.

We are encouraged by the growing awareness and interest of the public in our many resources. We hope to be able to satisfy, within reason and within the funds available, their diverse desires and needs. We feel that the public interest is best served if the forests are developed for their optimum multiple-use potential. The American people have a great heritage as well as a great investment in their national forests. To the extent consistent with their proper multiple use, national forest resources should be developed and managed so that

all people can enjoy the manifold benefits which can be gained from these lands. We would like to get on with that development and management job as rapidly as possible.

Rural Areas

The rehabilitation and development of rural areas is a very important consideration in the future management and use of forest lands. Many of the so-called pockets of poverty are associated with forest-land management and more efficient utilization of forest resources have proven to contribute much to the welfare of such communities. Forest Service programs create additional job opportunities and improve economic conditions in rural areas as they gain in strength and scope.

Rehabilitation and Restoration of Roads

We are pleased to report that we are running ahead of original plans in the rehabilitation and restoration of roads, trails, and other improvements damaged by the disastrous floods which struck the Pacific Northwest during the winter of 1964–65. The job of restoring facilities and improvements will be completed by the close of this fiscal year. Road and trail repairs, originally planned for completion by June 30, 1967, are now expected to be completed several months earlier. This is the type of response and accomplishment that the Forest Service can produce when given the tools to work with.

I have asked Chief Cliff to highlight for you some of the record accomplishments of this past year. He and his staff will be glad to answer any questions that you may have.

Thank you again, Mr. Chairman, for this opportunity.

Purpose Statement

Chairman Hayden. Thank you, Secretary Baker.

As usual, the Forest Service provides a "purpose statement" with its budget justifications. The statement will be printed in the record at this point.

(The statement follows:)

The Forest Service was established February 1, 1905, pursuant to the Transfer Act of February 1, 1905, which provided for the transfer of the forest reserves from the Department of the Interior to the Department of Agriculture. Forest Reserves and the Bureau of Forestry were established by other acts prior to the Transfer Act. By the act of March 4, 1907, the name "Forest Reserves" was changed to "National Forests" and the latter name has been used since that time.

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 engages in three main lines of work, as follows:

1. *Management, protection, and development of the national forests and national grasslands.*—The 186 million acres of national forests and 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. These management and utilization principles were recognized in the Multiple Use-Sustained Yield Act of June 12, 1960 (74 Stat. 215).

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 streamflow, prevent floods, and provide water for power, irrigation, navigation, and municipalities. Management includes the handling of 144 million visits of people to the national forests for recreation purposes. Wildlife habitat is managed to provide a suitable land and water environment for both game and nongame 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: (1) timber production, (2) watershed protection, (3) forage production, (4) wildlife production, and (5) 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, corrals, etc. 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.

Gross area within unit boundaries encompasses about 226 million acres in 44 States and Puerto Rico, of which some 186 million acres are under Forest Service administration. Protection from fire and trespass is made difficult by the large area to be protected, the general inaccessibility, many thousands of miles of exterior boundary, the intermingled public and private land, the impossibility of taking preventive action with such a problem as lightning-caused fires, and the rapidly increasing public utilization of these lands and their associated resources.

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.

The economic importance of the national forests and national grasslands is evident when it is considered that:

(*a*) They produced a cash income in the fiscal year 1965 of over $149.2 million. The following table summarizes cash receipts:

Class of receipts	1964 actual	1965 actual	1966 estimated	1967 estimated
Timber sales	$127,059,538	$138,768,926	$143,100,000	$146,400,000
Grazing and power	3,181,940	3,126,997	3,200,000	3,200,000
Land uses	4,580,180	5,514,911	6,700,000	7,525,000
National grasslands	1,792,840	1,828,606	1,850,000	1,850,000
Total receipts	137,514,498	149,239,440	154,850,000	158,975,000
Above amounts include:				
Suspense account, Alaska [1]	(915,812)	(839,406)	(850,000)	(850,000)
Suspense account, O. & C. lands [2]	(4,154,700)	,210,925)	(5,500,000)	(5,500,000)

[1] Account established pending settlement of Indian rights on Tongass National Forest, Alaska.
[2] Account establishedf or Oregon and California railroad grant lands, for which receipts are transferred to Department of the Interior for distribution under the acts of Aug. 28, 1937, June 24, 1954, and Aug. 3, 1961 (43 U.S.C. 1181f-g).

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, minerals, etc. There are also the important values of water, recreation, and wildlife which cannot be readily expressed in monetary terms.

(*b*) The area within national forest boundaries is equivalent to some 10 percent of the area of the continental United States. Over 40 percent of this land is within areas now experiencing severe 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.

(c) The national forests supplied 11.2 billion board feet of timber in fiscal year 1965 to the Nation's forest products industries. This is expected to increase to 11.4 billion board feet in 1966. 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.

(d) About 6 million head of domestic livestock (including calves and lambs) are grazed on the national forests and grasslands.

(e) These lands 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 waterpower 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.

(f) They provide a habitat for a large part of the big game animal population, for birds, for millions of small game animals and furbearers, and for fish.

(g) They provide opportunities for healthful outdoor recreation, with a minimum of restrictions, for millions of people who yearly visit the national forests.

2. *Forestry research.*—The Forest Service conducts research in the entire field of forestry and the management of forest and related ranges. 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. Results of research are made available to owners of private forest and range lands, to public agencies which administer such lands, to forest product industries, and to consumers. The program has a twofold objective: (1) to backstop the national forest development program by devising more efficient practices for protecting, managing, and utilizing forest resources; and (2) to develop new and improved practices that will lead to sounder uses of forests in other public and private ownerships and more efficient and profitable utilization and marketing of forest products.

The Forest Service also cooperates with the Agricultural Research Service of the Department by reviewing and appraising for technical adequacy forest research projects beneficial to the United States which are conducted abroad. These projects are carried out with foreign currencies under section 104(k) of Public Law 480, as amended, and the dollar expenses of the Forest Service in connection with this work are paid from the appropriation "Forest protection and utilization."

3. *Cooperation with State and private forest landowners.*—The Forest Service cooperates with State agencies and private forest owners to (a) better protect the 440 million acres of State and privately-owned forests and critical watersheds against fires, insects, and diseases; (2) encourage better forest practices, both for resource conservation and profit, on the 358 million acres of private forest lands; (c) aid in the distribution of planting stock for forests, shelterbelts, and wood lots; (d) stimulate development and proper management of State, county, and community forests.

The Forest Service is also responsible for carrying out the provisions of section 401 of the Agricultural Act of 1956 (16 U.S.C. 568e), by providing assistance to the State forester or equivalent State official, through advice, technical assistance, and financial contributions for increased tree planting and reforestation work, in accordance with plans submitted by the State and approved by the Secretary of Agriculture.

Proper administration, protection, and development of these forest resources is essential as they must be so managed as to yield the maximum resource potential. In many rural areas, the forestry resource is the key to the establishment and maintenance of sound local economies. The State and private forestry programs of the Forest Service are a vital part of the Department of Agriculture's overall rural area development program.

Other work related to forestry includes:

4. *Insect and disease control.*—Activities to suppress and control destructive insects and diseases that threaten timber areas include two types of work carried

on jointly by Federal, State, and private agencies: (a) Surveys on forest lands to detect and evaluate infestations of forest insects and infections of tree diseases and determination of protective measures to be taken, and (b) control operations to suppress or eradicate forest insects and diseases, including white pine blister rust.

5. *Flood prevention and watershed protection.*—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 of December 22, 1944, 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 also cooperates with the Soil Conservation Service, appropriate State agencies and the local organizations sponsoring small watershed protection and flood prevention projects initiated under the Watershed Protection and Flood Prevention Act of 1954, as amended, 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 Public Law 89-80 and section 6, Public Law 83-566.

6. *Work performed for others.*—The Forest Service is frequently called upon to perform services for other Federal, State, or private agencies on a reimbursable or advance payment basis. Examples of these activities are:

(*a*) Protection of other Federal and non-Federal forest lands intermingled with the national forests.

(*b*) Disposal of slash resulting from sales of timber and the rehabilitation of such areas.

(*c*) Construction and maintenance of roads, and other improvements.

(*d*) Research investigations in forest, range, and water management and utilization problems.

(*e*) Cooperative survey, mapping, administrative, and reforestation projects, etc.

(*f*) Cooperation with defense and mobilization agencies on forest production and utilization projects, and related work.

(*g.*) Acquire lands for outdoor recreation purposes under the Land and Water Conservation Fund Act.

(*h.*) Construct, equip, and operate Job Corps centers to carry out part of the youth program authorized by the Economic Opportunity Act.

7. *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 in rural areas of the United States.

8. *Timber development organization loans and technical assistance.*—The Forest Service provides technical assistance and loans to timber development and utilization of timber stands in the Appalachian region.

The Forest Service maintains its central office in Washington, with program activities decentralized to 10 regional offices, 130 forest supervisors' offices, 819 district rangers' offices, 10 forest and range experiment stations, the Institute of Tropical Forestry, and the Forest Products Laboratory.

ESTIMATED APPROPRIATIONS AND RECEIPTS FOR 1966 AND 1967

Chairman HAYDEN. There also will be included a table summarizing estimated appropriations and receipts for fiscal years 1966 and 1967.

(The table follows:)

	Estimated available, 1966	Budget estimate, 1967	Increase (+) or decrease (−)
Appropriations:			
Forest protection and utilization:			
Forest land management	$164,152,000	$172,856,000	+$8,704,000
Forest research	37,372,000	34,435,000	−2,937,000
State and private forestry cooperation	17,558,000	17,897,000	+339,000
Total, forest protection and utilization	[1] [2] [3] 219,082,000	225,188,000	+6,106,000
Forest roads and trails	[1] [3] 102,136,000	102,530,000	+394,000
Acquisition of lands for national forests, special acts	80,000	80,000	
Acquisition of lands for Uinta National Forest		300,000	+300,000
Cooperative range improvements	700,000	700,000	
Assistance to States for tree planting	[1] 1,000,000	1,000,000	
Timber development technical assistance and related loans	[1]	500,000	+500,000
Expenses, brush disposal (permanent)	[1] 8,500,000	8,600,000	+100,000
Roads and trails for State (permanent)	14,203,671	14,700,000	+496,329
Forest fire prevention (permanent)	[1] 32,000	32,000	
Restoration of forest lands and improvements (permanent)	[1] 100,000	100,000	
Payment to Minnesota (permanent)	140,619	141,000	+381
Payments to counties, national grasslands (permanent)	462,500	462,500	
Payments to school funds, Arizona and New Mexico (permanent)	112,130	115,000	+2,870
Payments to States, national forests fund (permanent)	35,504,367	36,800,000	+1,295,633
Total	382,053,287	391,248,500	+9,195,213
Deduct permanent appropriations shown in detail above	59,055,287	60,950,500	1,895,213
Total (excluding permanent appropriations)	322,998,000	330,298,000	+7,300,000
Receipts: Forest resource utilization	154,850,000	158,975,000	+4,125,000

[1] In addition, prior year balances are available.
[2] Exclusive of $303,000 transferred to General Services Administration.
[3] Includes proposed supplementals due to increased pay costs (Public Law 89-301) as follows:

Forest protection and utilization:	
Forest land management	$2,135,000
Forest research	610,000
State and private forestry cooperation	45,000
Forest roads and trails	964,000

STATUS OF FINANCING, 1963–66

Chairman HAYDEN. It is estimated that the development program for the national forests budget requirements for fiscal year 1967, excluding permanent appropriations, are $330,298,000—$7,300,000 greater than the amount of the 1966 appropriation.

It may be helpful to place in the record at this time the table entitled "Status of financing, development program for the national forests."

(The table follows:)

Status of financing, development program for the national forests
Cumulative fiscal years 1963–66 [1]

[In thousands of dollars]

	1963–66 planned level	1963–66 available			Difference	Percent financed
		Forest Service appropriation	Public works	Total		
FOREST LAND MANAGEMENT						
National forest protection and management:						
Timber resource management:						
(a) Sales administration and management	117,311	113,419	----------	113,419	−3,892	96.7
(b) Reforestation and stand improvement	125,397	65,327	5,294	70,621	−54,776	56.3
Recreation-public use	203,753	106,634	10,611	117,245	−86,508	57.5
Wildlife habitat management	20,986	14,647	1,637	16,284	−4,702	77.6
Range resource management:						
(a) Management	22,546	20,480	----------	20,480	−2,066	90.8
(b) Revegetation	12,113	10,990	46	11,036	−1,077	91.1
(c) Improvements	16,698	13,188	1,986	15,174	−1,524	90.9
Soil and water management [3]	36,808	23,443	1,206	24,649	−12,159	67.0
Mineral claims, leases, and special uses	17,112	15,249	----------	15,249	−1,863	89.1
Land classification, adjustments, and surveys	25,302	15,914	----------	15,914	−9,388	62.9
Forest fire protection	114,805	92,834	1,187	94,021	−20,784	81.9
Structural improvements for fire and general purposes (construction and maintenance)	61,645	45,065	16,715	61,780	+135	100.2
Total, national forest protection and management	774,476	537,190	38,682	575,872	−198,604	74.4
Insect and disease control:						
White pine blister rust control	16,263	14,337	51	14,388	−1,875	88.5
Other pest control	28,173	32,936	146	33,082	+4,909	117.4
Total, insect and disease control [2]	44,436	47,273	197	47,470	+3,034	106.8
Acquisition of lands, Weeks and special acts [3]	19,190	6,472	----------	6,472	−12,718	33.7
Forest roads and trails (including all related appropriations) (obligating authority) [3]	443,328	323,254	18,719	341,973	−101,355	77.1
Total	1,281,430	914,189	57,598	971,787	−309,643	75.8

[1] Excludes fiscal years 1964–65 supplemental appropriations and obligating authority for Alaska earthquake damages; Montana and Idaho, and Pacific Northwest, flood damages. Includes 1966 Pay Act proposed supplemental.
[2] Includes $9,875,000 for lands not administered by the Forest Service.
[3] Includes fiscal year 1965 supplemental appropriation authorized under the Appalachian Regional Development Act of 1965 as follows: Soil and water management, $1,000,000; acquisition of lands, Weeks Act, $1,000,000; forest roads and trails, $2,500,000.

Forest Service Accomplishments

Chairman Hayden. Mr. Cliff, the committee would like to have an explanation from you of the accomplishments of the Forest Service during the past year and your plans for the coming fiscal year. If you have a written statement you may desire to file it for the record and summarize it.

Mr. Cliff. I have a prepared statement I would like to insert in the record at this point, but I would also like to give verbally some of the highlights.

Chairman Hayden. Very well. Your statement will be made a part of the record at this time.

(The statement follows:)

Assistant Secretary Baker's statement has summarized some of the major considerations included in our 1967 budget request, but I would like to make a few brief opening remarks. First of all, I am pleased to introduce a new member of our team here this morning. Dr. George Jemison is now our Deputy Chief in charge of forest research; as you know, Dr. Harper retired last December. We have had many enthusiastic endorsements of Dr. Jemison since his appointment was announced. I know that you will find him to be exceptionally capable in this new assignment.

Last year—the year of our 60th anniversary—was marked by many record accomplishments. Public use of the resources of the national forest system hit new highs. Forest protection was the best ever. Forestry research opened new doors to help reduce costs of managing all forest lands and make better use of all forest resources. A foundation was laid to strengthen and expand our cooperative forestry activities with States and private landowners. Our programs stimulated the type of long-term economic growth vital to so many rural areas. Our work contributed tremendously to the new national programs of the Great Society, and to that new dimension in conservation—beautification of the landscape.

RECORD FOREST SERVICE YEAR FOR NATIONAL FOREST RESOURCE ACTIVITIES—1965

Some of the records established last year in managing the national forest system were:

Recreation visits to national forests rose from 134 million in 1964 to an estimated record 147 million visits during 1965. This annual increase of approximately 10 percent reflects a continuing upward trend. Capacity of camp and picnic areas was increased to accommodate an additional 30,000 persons at one time, bringing total camping-picnicking capacity to a record 419,179 persons at one time. The capacity of winter sports facilities on national forests also increased dramatically during the year, providing a safe one-time capacity of 269,082 persons.

Fire control.—Intensified protection of national forests from fire also led to a new record. An all-time low of 76,585 acres were burned within national forest protection areas; the average annual burn for the preceding 5 years was 208,974 acres—about 2.7 times greater. We experienced 9,337 fires—well below the annual average of 12,395 fires in the preceding 5 years. We are especially pleased to report that the number of man-caused fires dropped significantly—some 22 percent below the 5-year average of 5,264 man-caused fires.

Tree planting.—Paralleling the record timber harvest was a record year in tree planting on the national forests. The 232,693 acres of national forest land planted or seeded to trees exceeded even the longstanding record of 223,075 acres that was established through the CCC program in 1936.

Timber harvest from national forests set a new record in fiscal 1965. The harvest of 11.2 billion board feet exceeded the cut of any previous year and was 0.2 billion board feet above fiscal 1964, which, as you recall, was itself a record year.

Cash receipts from the sale and use of national forest resources amounted to a record 149,239,440 in fiscal year 1965, an increase of $11 million over the preceding year. About 94 percent—$138.8 million—came from the sale of national forest timber. In addition, through timber sale contracts, purchasers constructed or improved 4,362 miles of road and provided maintenance on more than 20,000 miles of road at an estimated total cost of some $64 million.

Many other impressive examples could be cited in connection with land exchanges; flood and storm damage restoration; engineering; management of watersheds, wildlife habitat, and range resources; and so forth. Last year was a good one on the national forests.

FORESTRY RESEARCH ACCOMPLISHMENTS

In forestry research we have advanced on a broad front during the past year. Notable accomplishments are reported in all major lines of investigation. Some of our troublesome pest control problems are being aided by recent breakthroughs in developing safe chemical insecticides. Also, progress in finding new biological control methods is encouraging.

Our research in forest products utilization has especially emphasized building the economy of rural America. New and improved uses are being found for the abundant but relatively low-value timber in the Appalachians and other low-income areas. New marketing information is helping to stimulate industrial development and to create new jobs. Our research has been a key factor behind the establishment of 45 new or expanded timber processing industrial plants in the Appalachian region in the last 2 years. The nationwide forest survey has produced detailed resource information that has helped to prove the feasibility of expanding wood-using industries in specific areas.

Our watershed research continues to produce the information on which soil stabilization measures and related programs are being based. We have contributed new information on how water yields in the drought-ridden Northeast can be increased significantly through manipulation of the forest. Research on wildlife habitat, forest recreation, quality timber growing, engineering, and so forth is showing how to apply multiple-use forestry practices in a skillful and effective manner.

STATE AND PRIVATE FORESTRY COOPERATION ACHIEVEMENTS

Last year we strengthened our work with States and others to:

a. Protect forests and watershed from fire and pests. Substantial reductions in the number of fires and in the acreage burned resulted from our cooperative efforts.

b. Encourage better management and use of resources. Direct assistance was provided to 108,000 woodland owners and forest products operators in 49 States.

c. Produce and distribute tree seedlings—nearly 550 million last year.

d. Reforest non-Federal lands—more than 1 million acres last year.

e. Protect and develop timber and range values on small watersheds—on 289 projects in 35 States last year.

All of these activities are directly related to improving the economic, social, and general well-being of rural people. For example, about $1 out of every $18 of gross national product stems from some kind of timber-based economic activity. Every dollar's worth of standing timber that is harvested ultimately increases to $25 worth of products delivered to the consumers. This means jobs, family income, and a better life for thousands of people.

And yet, timber is only one of the products of the forest that contributes to the income and employment essential to the revitalization of rural America. The multiple-use principle—time tested on the national forests—is now being encouraged on State and private land in order to develop all capabilities in timber, recreation, wildlife, special forest products, forage and water.

All of us in the Forest Service are proud of the record that I have highlighted for you this morning. We are grateful for the support of this committee that has helped to make these accomplishments possible.

But I cannot leave unsaid our continuing and growing need for adequate program budgets now and in the future. Record levels of use simply cannot be administered efficiently without being reflected by some program increases in terms of manpower and dollars. We appreciate the need for economy and efficiency in our operations. We have been working hard in this direction for a long time. Without such efforts the record accomplishments that I have just cited could not have been attained. But the opportunities for further economies are becoming more and more scarce without sacrificing standards of quality or passing over vitally needed work.

We believe that the budget request before you represents a minimum program—it is well below the level of accomplishment scheduled in the development program for the national forests, for example. This request is one that defers much needed work and it is one that will tax us to the utmost to operate effectively. It represents a level of activity that will permit continued progress in a few important areas where we must continue to move ahead.

Thank you, Mr. Chairman, for this opportunity to present an opening statement. We would like to answer any questions which you and the members of the committee may have for us this morning.

DR. GEORGE JEMISON

Mr. CLIFF. It is a pleasure to appear before this committee with our budget request. First, I would like to present a new Deputy Chief for the Forest Service, Dr. George Jemison, who is now Deputy Chief in

charge of our research program. He replaced Dr. V. L. Harper, who retired at the end of last year.

Chairman HAYDEN. Yes; I remember him.

Mr. CLIFF. I am sure you will find that Dr. Jemison is a very fine man to work with.

Last year was the 60th anniversary of the Forest Service, and it was marked by many record accomplishments. Public use of the resources of the national forest system reached an alltime high of about 147 million recreation visits. We had the best fire control record we have ever had. We had less burned acreage than in any year in our history, 76,585 acres, which is a little more than a third of the average of the 5 preceding years. The number of fires was down slightly. We reforested more area than ever before in any one year.

Senator YOUNG. Mr. Chairman, may I ask a few questions?

Chairman HAYDEN. Certainly.

TREES PLANTED AND TIMBER HARVESTS

Senator YOUNG. How many trees did you plant this year?

Mr. CLIFF. We planted and seeded 232,693 acres last year. About 40,000 of that was direct seeding. The rest was planting. I can't give you the exact number of seedings we planted, but it was something around 150 million trees, as I remember.

Chairman HAYDEN. Those trees will make merchantable timber when?

Mr. CLIFF. That varies with the area in which they are planted. In the South, we start harvesting pulpwood in 12 or 15 years. We can make many first thinnings at that time. Our objective is to carry many of them to saw-timber size and that may take 80 to 100 years to complete the rotation. But periodically we make thinnings and improvement cuts where we may have several intermediate crops in the interval between planting and the final harvest.

The timber harvest was greater than ever before attained, 11.2 billion board feet. Our receipts from the national forest system reached almost $150 million, which is the highest ever attained and it will be greater this coming year.

FORESTRY RESEARCH

In forestry research, we have advanced on a broad front in the last year and made notable achievements in various lines of research, including insect and disease control research. In virtually all the research we are doing, we have made advancements and, as you very well are aware, we have been able to construct some very fine new research laboratories and facilities.

DEDICATION OF NEW RESEARCH LABORATORY IN ARIZONA

We were most happy, Mr. Chairman, that you were able to attend the dedication of the new research laboratory in Tempe, Ariz., last fall. These facilities make it possible to do better research in a desirable scientific environment.

We have strengthened our work on the cooperative State and private forestry programs.

STAFFING RESEARCH LABORATORIES

Senator YOUNG. Do you have enough money to staff these research laboratories like the one in Arizona and my State?

Mr. CLIFF. Not completely. Looking to the future, we try to build the facilities so there can be some future expansion in programs and personnel. In some cases, we have not been able to staff the facilities up to the level we had hoped to be able to staff them currently, but the facilities are there and they are being used.

Senator YOUNG. Do you have any money in this bill to further staff the Forest Service research facilities in Bottineau?

Mr. CLIFF. No, sir. Not to expand the staff.

Senator YOUNG. Did you make any request to the Bureau of the Budget?

Mr. CLIFF. No request was made to the Bureau of the Budget.

Senator YOUNG. Was there any plan for additional staffing?

Mr. CLIFF. Yes. In the future we do plan to expand. Dr. Jemison, will you comment on that?

Senator YOUNG. I hate to interrupt you but I have to go to the Appropriations Subcommittee on Agriculture.

Dr. JEMISON. At Bottineau, as you know, we have completed the facilities. In our plans we anticipate strengthening the program. We have five scientists located at Bottineau now which represents our planned staffing for shelterbelt management research. But we are very short of support personnel and when it is feasible we would like to strengthen this aspect of our program at Bottineau.

Senator YOUNG. How much money would it take?

Dr. JEMISON. It would take $40,000 to bring the support personnel up to a satisfactory level.

Senator YOUNG. That is the same figure we used last year?

Dr. JEMISON. Yes. As you recall, the Senate added $75,000 and the $40,000 was not sustained in the conference.

TIMBER MANAGEMENT RESEARCH, BOTTINEAU, N. DAK.

Senator YOUNG. Would you please place a statement in the record indicating how this needed increase will be used?

Dr. JEMISON. Yes, sir.

(The statement follows:)

An increase of $40,000 would be used to strengthen research on the establishment and culture of shelterbelts in the northern Great Plains. These belts protect the soil from wind erosion, reduce wind damage to crops, control snow drifting, provide shade and shelter for animals, provide food and cover for wildlife, and add to human comfort on the Plains.

The increase would permit acceleration of several phases of shelterbelt research. Intensive study will be made of soil site requirements of shelterbelt trees to guide in the selection of species. The search for outstanding individual shelterbelt trees for further propagation and breeding will be intensified, particularly among conifers because their evergreen habit provides good wind protection through the winter.

The staff at Bottineau now consists of five scientists and two support personnel. To bring the financing of the Bottineau shelterbelt management research up to the level of financing projected in the short-term plan will take $40,000 additional funding. This amount will be used to strengthen the staffing of support personnel.

STATE AND PRIVATE FORESTRY COOPERATION

Mr. CLIFF. Getting back to my statement, I was talking about State and private forestry cooperation. We have proposed a new and strengthened 10-year program for these activities which is now before the Secretary for review and approval. About three-fourths of all the forest land in this country is privately owned and we will have to look to it in the future for most of our forest products.

Our relationships with the States, I am glad to report, are very good. I think they are the best in my recollection. All these activities, as Mr. Baker pointed out, are related to improving the economic and social well-being of rural people and America as a whole. Forestry has a big impact on the national economy. Our studies indicate that one out of every $18 in the gross national product stems from some kind of timber based economic activity. That is an essential and substantial part of the gross national product.

Timber is only one of the things we deal with; the importance of the water, outdoor recreation, and all the other things we deal with can't be quite as easily evaluated as timber but they are very significant.

We are proud of the record that we have made in the past year and we are grateful to you, Mr. Chairman, and to this committee, for the support you have given us to help us attain this. We could not have made this kind of record without paying a great deal of attention to economy and efficiency in administration which is being reflected by some program savings in terms of manpower and dollars. I think this helps to explain the additional amount of work we have been able to accomplish under somewhat limited budgets. The opportunities for further economies become harder to come by as we go through this process, but we are continuing to work at it.

I believe the budget request before you represents a minimum program level that will enable us to meet our major responsibilities and to make some continued progress. This request is one that defers much needed work and we will be taxed to the utmost to operate it efficiently. I think it represents a level of activity, however, that will permit continued progress in the few important activities where we must continue to move ahead.

Thank you, Mr. Chairman.

The members of the staff who are here will be glad to assist me in any questions you might have.

COMPARISON BETWEEN DEVELOPMENT AND PLANNED PROGRAM

Chairman HAYDEN. Mr. Cliff, I believe you should comment on the progress which the Forest Service is making in connection with its development program, comparing that progress with the outline of the planned program which I have placed in the record.

Mr. CLIFF. I will be glad to do that and we will place the complete report in the record.

(The report follows:)

[Dollar amounts in thousands]

	1967 planned level	1967 budget estimate	Difference	Percent financed
Forest land management:				
National forest protection and management:				
Timber resource management:				
Sales administration and management	$35,385	$31,635	−$3,750	89.4
Reforestation and stand improvement	53,399	17,430	−35,969	32.6
Subtotal, timber resource management	88,784	49,065	−39,719	55.3
Recreation-public use	83,826	29,876	−53,950	35.6
Wildlife habitat management	7,623	3,897	−3,726	51.1
Range resource management:				
Management	6,712	5,404	−1,308	80.5
Revegetation	3,484	2,820	−664	80.9
Improvements	5,355	3,395	−1,960	63.4
Subtotal, range resource management	15,551	11,619	−3,932	74.7
Soil and water management	13,687	6,261	−7,426	45.7
Mineral claims, leases, and special uses	4,619	4,004	−615	86.7
Land classification, adjustments, and surveys	10,031	5,805	−4,226	57.9
Forest fire protection	37,844	25,120	−12,724	66.4
Structural improvements for fire and general purposes	18,886	10,909	−7,977	57.8
Total, national forest protection and management	280,851	146,556	−134,295	52.2
Insect and disease control:				
White pine blister rust control	4,706	3,695	−1,011	78.5
Other pest control	7,651	8,676	+1,025	113.4
Total, insect and disease control	[1] 12,357	12,371	+14	100.1
Purchase of lands (Weeks and special acts)	8,239	2,860	−5,379	34.7
Forest roads and trails:				
Federal Highway Act authority (obligating authority)	149,998	97,301	−52,697	64.9
Roads and trails for States (10 percent)	16,600	14,700	−1,900	88.6
Total, forest roads and trails	166,598	112,001	−54,597	67.2
Total, development program for the national forests, 1967	468,045	273,788	−194,257	58.5

[1] Includes $2,784,000 for lands not administered by the Forest Service.

PROGRAM FOR DEVELOPING NATIONAL FORESTS

Mr. CLIFF. You will recall about 4½ years ago, President Kennedy sent a 10-year program to the Congress for the development of the national forests with the idea that this would set goals to work toward and that the program would be financed as the budget situation would permit. We are in the fourth year of that program now and fiscal year 1967 would be the fifth year.

If this budget is approved in all respects as submitted, we will be at 58.5 percent of the planned level of the program in fiscal year 1967.

In fiscal year 1966, we are at 75.8 percent of the planned level.

The program, as you will recall, recommended gradual acceleration of these programs, so we are falling a little behind each year of our projected and recommended level of financing. The tables we will insert in the record will give you the data on where we stand in each one of our functional activities. This varies from function to function. We are further ahead in some activities than in others.

APPROPRIATED FUNDS—APPALACHIA

Chairman HAYDEN. Mr. Cliff, would you also prepare a table for insertion in the hearing record to show funds appropriated for Appalachia? Please prepare this table for the fiscal years 1965, 1966, and 1967 by projects as you have them presented in your 1967 budget estimate, and break down the amounts to show the funds provided for the regular appropriation and those provided as a result of passage of the Appalachian Region Development Act of 1965.

Mr. CLIFF. We will be glad to do that.

(The table follows:)

[In thousands of dollars]

	1965			1966			1967		
	National program total	Normal Appalachian portion	Accelerated Appalachian program	National program total	Normal Appalachian portion	Accelerated Appalachian program	National program total	Normal Appalachian portion	Accelerated Appalachian program
Forest protection and utilization:									
Forest land management	154,606	9,462	250	165,153	10,107	1,750	171,246	10,480	2,310
Forest research	34,289	2,561	235	37,374	2,792	990	33,424	2,497	1,011
State and private forestry cooperation	17,013	1,882	35	17,558	1,942	315	17,575	1,944	322
Subtotal, forest protection and utilization	[1] 205,908	13,905	520	[2] 220,085	14,841	3,055	[3] 222,245	14,921	3,643
Forest roads and trails	[4] 93,822	3,575	250	[4] 100,153	3,816	2,250	[4] 94,746	3,610	2,255
Timber development organization loans and technical assistance						1,000			500
Total	299,730	17,480	770	[5] 320,238	18,657	6,305	316,991	18,531	6,398

[1] Includes transfer of $411,000 to GSA for space, and $700,000 for cooperative range improvements; excludes supplementals for fighting forest fires, Pacific Northwest flood damages, and Appalachian region.

[2] Includes transfer of $303,000 to GSA for space, $700,000 for cooperative range improvements, and increased pay costs.

[4] Includes $700,000 for cooperative range improvements, and increased pay costs; excludes $3,643,000 Appalachian accelerated portion.

[4] Excludes Alaska earthquake damages, Pacific Northwest flood damages, and $2,255,000 Appalachian accelerated portion; includes increased pay costs in 1966 and 1967.

[5] Excludes proposed supplemental for fighting forest fires, $10,000,000.

PACIFIC NORTHWEST FLOOD DAMAGE REPAIRS

Chairman HAYDEN. This committee approved a rather large supplemental for the repair of flood damage in the West and in the Northwest last spring. Will you please report the status of this rehabilitation work?

Mr. CLIFF. We will be happy to do that.

Dr. Baker referred to that briefly and we are proud of the progress we have made. We are ahead of schedule. I will ask Deputy Chief Nelson to comment on that.

Mr. NELSON. At the present, we have completed 6,653 miles of the road repair. There has been 2,833 miles of trail repaired, and we have built 273 bridges, or permanent large culverts. There is still quite a job to do. We still have 308 bridges or major culverts to complete. This does not mean that those have stopped the use of the roads. We had to make temporary repairs around them but a good share of the money that will be spent in the fiscal year 1967 is for the permanent replacements of bridges. We feel progress has been good. In fact a little ahead of schedule.

RECENT FLOODS

Chairman HAYDEN. What has been the effect on Forest Service activities of the more recent floods in the West?

Mr. NELSON. This seems to have been a year of floods all over the West. We had June floods in the Black Hills; we had a bad June flood, a localized flood, that took out a canyon in Utah and we had a number of floods in southern Utah.

I was in one area in the Boise River where an August local flood took out one canyon and moved through a small community. The latest flood situation was in California where we had three floods this past fall. There was damage estimated at $1,650,000 to our road system in southern California. It also damaged some of the campgrounds and other improvements in the neighborhood of $200,000. As far as the roads are concerned, we have allotted what contracting authority we had presently and the local forests are getting roads opened up in that area to be available for fire control. It is a major job and we are reprograming some of our funds and talking to the Budget Bureau now about borrowing contracting authority from the next fiscal year to go ahead with road repair from these floods in Southern California.

IMPACT OF JOB CORPS PROGRAM

Chairman HAYDEN. What effect has your work under the Job Corps program had on the ordinary and regular items in this budget?

Mr. CLIFF. Mr. Chairman, the work we are doing in the Job Corps centers has no appreciable impact on the regular work accomplishments of the Forest Service. We are getting work out of the corpsmen in the vicinity of the camps where they are located. We have 47 Job Corps centers in the national forests. We have over 800 ranger districts in the system, which means less than 6 percent of the ranger districts have a center.

Generally, a center could reach, on the average an equivalent of about 60 percent of the ranger district to do work on it. Therefore, the centers, as they are located, are limited to reach less than 3.5 percent of the national forest land. On the vast part of the national forests we don't get any work at all out of the Job Corps camps.

USES OF CORPSMEN

You will recall we are under a commitment to the Congress that we will not use these corpsmen to reduce local employment. We are using them on work that otherwise wouldn't be done under our regular programs. We are using the corpsmen on the unprogramed backlog of work in the areas where the Job Corps centers are located.

Another point I would like to emphasize, too, is that the major purpose of these Job Corps centers is to train young men and to advance their education so that they can assume a place in community life; 50 percent of the time is devoted to schooling and training and the other half is available for work projects. The work programs are designed also to give the corpsmen additional training.

The accomplishment of work is not as great as might be supposed from the Job Corps centers. The work we are getting is good. It is welcome. It helps where it is being done, but it is not a major factor in our overall program.

Chairman HAYDEN. What has been accomplished in the way of work which is of particular value to the Forest Service?

Mr. CLIFF. I would like to ask Deputy Chief Hendee to give you the details on the work they are doing; it consists of such work as timber stand improvements, recreation improvements, and improvement of other facilities near their camps. They do some work on roads and range improvements—work that can be done by unskilled labor under professional supervision. Now as to the quality of the work, Mr. Hendee will answer that.

TRAINING AND EDUCATING CORPSMEN

Mr. HENDEE. As Mr. Cliff has said, we have used these Job Corps men for doing work on the national forests. We have designed the work program around the kind of activities that will train and develop and make more employable these young corpsmen.

As you know, the environment and the work opportunities on the national forest are very good for teaching them to work. We are able to train and develop and make more employable these young corpsmen. We teach them as much as we can on good working habits. The kind of activities we have are such that we can use them to good advantage on projects that will develop their skills in driving trucks and operating equipment. Almost every activity we have can be used toward developing them as a more useful citizen and help them develop a particular skill they may want to learn.

We have in the neighborhood of 15 to 20 occupational skills needed in the work on the national forests. These provide opportunities for teaching them or at least helping them decide what it is they want to do and where they want to work.

PROGRESS MADE IN LEARNING TO READ

I might add good progress has been made in teaching them to read and write, and to learn a reasonable level of mathematics. Many of these young people enroll with no education to speak of and many of those, in a relatively few months, have made great progress in learning to read. They are being taught a whole world of work and we

feel our particular projects can be of great help in connection with that. So the variety of work helps in the education. Also the modern world has a lot of trucks, cars, heavy equipment, powersaws, and equipment of this sort. We are teaching them in connection with this too.

We are just now reaching the stage where occasional young men are a little further ahead than the average, and they are now ready for employment. We expect in the immediate few months ahead additional young men will be employed. In 6 months to a year, we expect to have larger numbers of these young men who will be ready to take their places as more useful citizens.

Mr. CLIFF. These boys are attaining skills, some of them are gaining enough immediate education and training so that they can now qualify for military service where they have been turned down before. We are now able to place quite a number in jobs outside in private employment where they have developed their skills in the Corps.

DISCIPLINARY PROBLEMS

Chairman HAYDEN. Have you had any severe disciplinary problems such as reported in papers for Bureau of Land Management? If so what are you doing about them?

Mr. CLIFF. Mr. Hendee, will you respond to that?

Mr. HENDEE. Mr. Chairman, we have had over 250 that we have discharged for cause. I am more familiar with the Forest Service but both Interior and the Forest Service have assigned some of the best people to head up the centers. Our center directors are real hand-picked men. The same is true with all of the staff. We have moved promptly whenever we have had an instance where the behavior of corpsmen was such that we had to discipline them. Working with the Job Corps headquarters, we have been able to get necessary discharges of these young men very promptly. We have been able to handle this discipline in a way that has not resulted in serious incidents.

I think everyone must realize, to be successful this program has to get the boys that really need help. We are dealing with young men, both white and colored, and other minority groups, who are lacking in education and skills.

Mr. CLIFF. I would like to add that the number that has required some form of disciplinary action is out of a total of more than 8,000 young men that have been through the camps. That is a rather small percentage of people that we have had some trouble with out of that large number, considering the fact that these are young men who are dropouts, to begin with. In order to get in the Corps, they have to be boys who have dropped out of school or are not in school. Considering the large number of boys that have been in the program, I think this number that have had disciplinary action on is rather small.

PERSONNEL CEILINGS AND FUNDING

Chairman HAYDEN. Have the personnel ceilings assigned to the Forest Service included the personnel required to operate the Job Corps program, and are the salaries of these people paid out of your budget or out of the budget for the Office of Economic Opportunity?

Mr. HENDEE. The money for building and operating the complete Job Corps program is transferred to the Department and the Forest Service from the Office of Economic Opportunity. So the actual money we have for this purpose, plus the cost of salaries and staff, is over and above our regular budget that comes before this committee.

Chairman HAYDEN. Has it been necessary for you to curtail your personnel because of the ceilings imposed, which include the Job Corps people?

Mr. HENDEE. No, sir.

Mr. CLIFF. No, it has not. The ceilings for the Job Corps we get through the Office of Economic Opportunity. It has not had any effect on the employment of our regular Forest Service personnel.

FOREST PROTECTION AND UTILIZATION

1967 BUDGET REQUEST

Chairman HAYDEN. I will place in the record the justifications supplied in support of your budget estimate of $225,188,000 for "Forest protection and utilization." This is an increase of $5,803,000 over the amount appropriated to you last year, including a to-be-requested appropriation of $2,790,000 to meet pay act costs.

(The justifications follow:)

	Forest land management	Forest research	State and private forestry cooperation	Total
Appropriation act, 1966	[1] $162,318,000	$36,764,000	$17,513,000	$216,595,000
Proposed supplemental 1966, for increased pay costs	2,135,000	610,000	45,000	2,790,000
Transferred to "Operating expenses, Public Building Service, General Services Administration" for space rental	−301,000	−2,000		−303,000
Base for 1967	164,152,000	37,372,000	17,558,000	219,082,000
Budget estimate, 1967	172,856,000	34,435,000	17,897,000	225,188,000
Increase	+8,704,000	−2,937,000	+339,000	+6,106,000

In addition, $700,000 is available by transfer from "Cooperative range improvements."

Summary of increases and decreases

	1966 available	Increase or decrease		1967 estimate
		Pay costs	Other	
Forest land management:				
Timber sales administration and management to increase volume of timber cut and sold	$30,809,000	+$209,000	+$617,000	$31,635,000
Provide increased emphasis in development of new recreation facilities in Eastern United States	28,604,000	+149,000	+1,123,000	29,876,000
Conduct hydrologic surveys and prepare plans of management to increase quality of water yield, etc	5,722,000	+29,000	+510,000	6,261,000
Accelerate examination and appraisal of lands involved in exchange transactions, etc	4,345,000	+31,000	+1,429,000	5,805,000
Stabilize air attack program in connection with forest fire prevention	24,454,000	+150,000	+516,000	25,120,000
Additional payments to employees' compensation fund	669,000		+64,000	733,000
Meet costs associated with water development projects built by other agencies	4,770,000	+14,000	+1,632,000	6,416,000
Continue land acquisition program, particularly in Appalachian region	680,000		+1,800,000	2,480,000
All other	64,099,000	+431,000		64,530,000
Total, forest land management	164,152,000	+1,013,000	+7,691,000	172,856,000
Forest research:				
Broaden utilization of Appalachian timber	6,077,000	+43,000	+385,000	6,505,000
Develop improved methods of harvesting and transporting Appalachian timber	416,000	+3,000	+252,000	671,000
Intensify inventories of timber resources of Appalachia	1,939,000	+14,000	+102,000	2,055,000
Research to improve efficiency of marketing timber, logs, lumber, and other forest products of Appalachia	1,491,000	+10,000	+272,000	1,773,000
Reduction for nonrecurring forest research construction projects	4,183,000		−4,183,000	
All other	23,266,000	+165,000		23,431,000
Total, forest research	37,372,000	+235,000	−3,172,000	34,435,000
State and private forestry cooperation:				
Continue at the 1966 level stepped-up program of general forestry assistance tailored to needs of area defined in Appalachian Regional Development Act of 1965	920,000	+6,000	+322,000	1,248,000
All other	16,638,000	+11,000		16,649,000
Total, State and private forestry cooperation	17,558,000	+17,000	+322,000	17,897,000
Total, forest protection and utilization	219,082,000	+1,265,000	+4,841,000	225,188,000

Project statement

Project	1965	1966 (estimated)	Increases and decreases		1967 (estimated)
			Increased pay costs (Public Law 89-301)	Other	
Forest land management:					
National forest protection and management:					
(1) Timber resource management:					
(a) Sales administration and management	$30,891,965	$30,809,000	+$209,000	+$617,000	$31,635,000
(b) Reforestation and stand improvement	15,168,195	17,360,000	+70,000		17,430,000
(2) Recreation-public use	27,029,362	28,604,000	+149,000	+1,123,000	29,876,000
(3) Wildlife habitat management	3,329,922	3,872,000	+25,000		3,897,000
(4) Range resource management:					
(a) Management	5,868,782	5,362,000	+42,000		5,404,000
(b) Revegetation	2,554,466	2,810,000	+10,000		2,820,000
(c) Improvements	3,186,244	3,379,000	+16,000		3,395,000
(5) Soil and water management	8,934,169	5,722,000	+29,000	+510,000	6,261,000
(6) Mineral claims, leases, and special uses	3,917,416	3,976,000	+28,000		4,004,000
(7) Land classification, adjustments, and surveys	4,685,929	[1] 4,345,000	+31,000	+1,429,000	[1] 5,805,000
(8) Forest fire protection	22,367,120	24,454,000	+150,000	+516,000	25,120,000
(9) Structural improvements for fire and general purposes (construction and maintenance)	12,898,951	10,865,000	+44,000		10,909,000
(10) Payments to employees' compensation fund	614,581	669,000		+64,000	733,000
Subtotal	141,447,102	142,227,000	+803,000	+4,259,000	147,289,000
Amount advanced from "Cooperative range improvements"	−700,000	−700,000			−700,000
Subtotal, national forest protection and management	140,747,102	141,527,000	+803,000	+4,259,000	146,589,000
(11) Water resource development related activities	1,229,761	4,770,000	+14,000	+1,632,000	6,416,000
(12) Fighting forest fires	18,309,104	5,000,000			5,000,000
(13) Insect and disease control:					
(a) White pine blister rust control	3,607,087	[2] 3,640,000	+55,000		[2] 3,695,000
(b) Other pest control	6,965,694	[2] 8,535,000	+141,000		[2] 8,676,000
Subtotal, insect and disease control	10,572,781	12,175,000	+196,000		12,371,000
(14) Acquistion of lands (Weeks Act)	1,677,574	680,000		+1,800,000	2,480,000
Total, forest land management	[4] 172,536,322	164,152,000	+1,013,000	+7,691,000	172,856,000

Forest research:					
Forest and range management research:					
(15) Timber management research	7,694,506	8,027,000	+58,000		8,085,000
(16) Watershed management research	3,139,459	3,280,000	+23,000		3,303,000
(17) Range management research	1,247,920	1,258,000	+9,000		1,267,000
(18) Wildlife habitat research	739,948	730,000	+5,000		735,000
(19) Forest recreation research	479,973	516,000	+3,000		519,000
Subtotal, forest and range management research	13,301,806	13,811,000	+98,000		13,909,000
Forest protection research:					
(20) Forest fire research	1,952,220	2,860,000	+20,000		2,880,000
(21) Forest insect research	3,479,977	3,856,000	+27,000		3,883,000
(22) Forest disease research	2,036,402	2,081,000	+15,000		2,096,000
Subtotal, forest protection research	7,468,599	8,797,000	+62,000		8,859,000
Forest products and engineering research:					
(23) Forest products utilization research	5,835,163	6,077,000	+43,000	+385,000	6,505,000
(24) Forest engineering research	755,122	416,000	+3,000	+252,000	671,000
Subtotal, forest products and engineering research	6,590,285	6,493,000	+46,000	+637,000	7,176,000
Forest resource economics research:					
(25) Forest survey	1,977,690	1,939,000	+14,000	+102,000	2,055,000
(26) Forest products marketing research	1,266,691	1,491,000	+10,000	+272,000	1,773,000
(27) Forest economics research	588,251	658,000	+5,000		663,000
Subtotal, forest resource economics research	3,832,632	4,088,000	+29,000	+374,000	4,491,000
(28) Forest research construction	3,867,864	[4] 4,183,000		−4,183,000	
Total, forest research	35,061,186	37,372,000	+235,000	−3,172,000	34,435,000
State and private forestry cooperation:					
(29) Cooperation in forest fire control	12,761,686	12,803,000	+8,000		12,811,000
(30) Cooperation in forest tree planting	301,699	300,000			300,000
(31) Cooperation in forest management and processing	3,016,953	3,535,000	+3,000		3,538,000
(32) General forestry assistance	1,211,956	920,000	+6,000	+322,000	1,248,000
Total, State and private forestry cooperation	17,292,294	17,558,000	+17,000	+322,000	17,897,000
Total, forest protection and utilization	[5] 224,889,802	219,082,000	+1,265,000	+4,841,000	225,188,000
Unobligated balance lapsing	1,682,875				
(33) Total increased pay costs (Public Law 89-301)		(2,932,000)	(+1,265,000)	(+155,0000)	(4,352,000)
Total available or estimate	[7] 226,572,677	219,082,000	+1,265,000	+4,841,000	225,188,000

Footnote on following page.

[1] Includes allocation to the Department of the Interior, Bureau of Land Management: 1966, $255,000; 1967, $285,000.

[2] Includes allocation to the Department of the Interior, Bureau of Land Management: 1966, $349,000; 1967, $386,000.

[3] Includes allocation to the Department of the Interior, Bureau of Land Management: 1966, $732,000; 1967, $763,000.

[4] Excludes obligations of $403,835 incurred in 1965 against funds provided by Deficiency Appropriation Act, Public Law 88-317, approved June 9, 1964. Summary follows:

Obligations, fiscal year 1965	$403,835
Unobligated balance lapsing	246,165
Total appropriated	650,000

[5] Includes $75,000 provided in Supplemental Appropriation Act, 1966 (Public Law 89-301).

[6] Represents obligations as follows:

Obligated fiscal year 1965	$217,643,603
Obligations, fiscal year 1965 per footnote 4 above	403,835
Estimated obligations, fiscal year 1966, per footnote 7 below	7,246,199
Applied costs, fiscal year 1965	214,772,894

The difference of $10,520,743 reflects, primarily, contracts made and orders placed in 1965 over contractual services and equipment received in that year, and portion of funds shown in footnote 7 below to be obligated in 1966.

[7] Includes following provided in 2d Supplemental Appropriation Act, 1965 (Public Law 89-16):

	Pacific Northwest December 1964–January 1965 flood damages	Appalachian region
Forest land management:		
Sales administration and amnagement	$346,000	
Recreation-public use	677,000	
Wildlife habitat management	35,000	
Range resource improvements	44,000	
Soil and water management	2,418,000	$1,000,000
Forest fire protection	270,000	
Structural improvements for fire and general purposes	410,000	
Acquisition of lands, Weeks Act		1,000,000
Total, forest land management	4,200,000	2,000,000
Forest research:		
Forest products utilization research		500,000
Forest engineering research		300,000
Forest survey		125,000
Forest products marketing research		300,000
Total, forest research		1,225,000
State and private forestry cooperation: General forestry assistance		350,000

These amounts have been or will be obligated during the period 1965–66.

JUSTIFICATIONS OF 1967 ESTIMATES

(1) *Timber resource management*

(a) *Sales administration and management, $31,635,000.*—An increase of $826,000 is needed for the following purposes:

(A) $617,000 to permit timber harvesting on the national forests to more nearly meet constantly increasing demands by the wood-using industry for timber.

(B) $209,000 for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

The fiscal year 1966 timber harvesting program of 11.4 billion board feet will be increased by 200 million feet to a total of 11.6 billion in 1967. This program increment reflects the increasing dependence industry is placing upon national forests to supply their roundwood requirements. It is also indicative of industry pressure to expand its raw material sources into heretofore inaccessible and lower quality timber.

There are pressures in the timber resource management program that are becoming increasingly difficult to contain.

There is need for better planning and coordination of timber harvesting with other resources and uses, most particularly with scenery and related recreational requirements. The President's natural beauty program has an impact upon the way much national forest timber is cut.

Second-growth management is becoming increasingly necessary to supply the total requirements of industry. Second-growth management entails higher unit costs for selling and harvesting timber since smaller trees are being handled and there are smaller volumes per acre cutover.

A rising trend in sales business is taking place in the East, stimulated to some extent by the need for increased employment in the Appalachian area. Timber in the eastern national forests is largely second growth.

With nearly one-third of total industrial roundwood requirements being supplied by national forests, the job of administering this disposal program has become intensely complex. Greater use of improved data processing methods is being sought to provide better business conditions and to reduce long-term costs. A newly developed sale contract with improved contractual concepts has been placed in effect. Investigation and study of improved procedures is continuing.

These factors all affect basic costs of doing business. Every effort is being made to reduce costs and improve efficiency. Proposed increases cover only program increases and pay act costs.

The requirements of the burgeoning sales business make it urgent that the proposed program increase be approved to maintain industry momentum. Inadequate financing to meet this increased tempo would lead to a reduction in volume harvested and an artificial timber shortage. Wood-using industries dependent upon national forest timber would be forced to curtail their operations and timber receipts would be reduced significantly.

The proposed program follows:

Sale preparation 12 billion board feet at $0.71 per thousand	$8,500,000
Sale administration 11.6 billion board feet at $1.83 per thousand	21,285,000
Advance sale preparation 2.2 billion board feet at $0.14 per thousand	310,000
Timber inventories and management plans	1,540,000
Total	31,635,000

(b) *Reforestation and timber stand improvement, $17,430,000.*—An increase of $70,000 is needed for increased pay costs provided in the Federal Employees Act of 1965 (79 Stat. 1111).

The overall program is necessary for increasing timber growth and improving timber quality on the national forests to supply raw materials needed by industry, to sustain dependent communities and meet demand of the rapidly growing population for wood and wood products. Reforestation restores natural forest beauty to lands that have been burned over by forest fire or cut over by logging operations. Timber stand improvement enhances natural beauty by restoring normal growth and development to trees in stagnated or suppressed young stands and improves other forest values, including recreation, wildlife habitat, water yield, and so forth, by opening the young stands to access, reducing crown cover and stimulating growth of understory vegetation. The tree improvement program is carried on to produce genetically superior tree seed for the purpose of improving the growth and quality of timber trees and to increase their resistance to diseases and insects.

Reforestation of 3.8 million acres of idle timberland and cultural treatment of 10 million acres of young growth should be completed by 1972 as set forth in the program for development of the national forests if the benefits are to be realized in the projected period of need. Current and future allowable cut of national forest timber is predicated on the assumption that management will be intensified to increase growth in young stands and timber growth will be restored on deforested timberland.

Accomplishment in 4 years through 1966 will be only 17 percent of the 1972 program objective. Accomplishment in each of the remaining 6 years would have to be three times the 1966 program to attain the production objectives.

Progress on accomplishing the reforestation and timber stand improvement objectives in the program for development of the national forests is seriously short of acreage goals for the first 10 years.

(2) *Recreation-public use, $29,876,000*

An increase of $1,272,000 is needed for the following purposes:

(*a*) $1,123,000 will more nearly provide for current operation, cleanup and maintenance of recreation areas and their facilities; to increase somewhat the number of new sites so badly needed and to improve older existing sites so as to accommodate the increasing numbers of visitors who come to use them; to regulate and provide the many new services now being required; to provide for special recreation projects such as the national recreation areas established by recently enacted legislation; and to provide necessary visitor information service.

(*b*) $149,000 for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

The national forest recreation-public use program embraces the following categories of work:

OPERATION AND MAINTENANCE

Cleanup of undeveloped sites, roads, and trails.—There are more than 300,000 miles of roads and trails, 90,000 miles of fishing streams, and 30,000 miles of lake and reservoir shores, within the national forests. These are used by hikers, picnickers, hunters, fishermen, and automobilists, totaling more than 100 millions of visits. The millions of acres immediately bordering these features must be kept free of litter and generally cared for. The sum of $250,000 is needed to cover the approximate cost of this.

Sanitation and cleanup of developed sites.—There are about 9,300 developed sites for camping and picnicking, boating, swimming, etc., on the national forests with a capacity of perhaps 500,000 persons at a time. These must be kept sanitary, free of litter, and guarded to maintain order and safe use. The sum of $6,730,000 is needed for this purpose.

Maintenance of developed sites.—The above-described sites must be maintained by painters, carpenters, danger-tree fellers and equivalent craftsmen to insure the safety of the recreationists and to protect the investment in these substantially developed areas. The sum of $6,045,000 is needed for this task.

Administration of national forest wilderness.—The administration of national forest wilderness and primitive areas to insure their preservation despite heavy visitation has taken on new importance with the enactment of the Wilderness Act of 1964. There are 14,500,000 acres of these areas and they receive about 1 million visits a year. The sum of $500,000 is needed to pay for the initial work of planning, making studies, posting boundaries, and providing information as required by the new law. This level of financing is less than 30 percent of what is estimated as needed to do the job to desirable standards, but is related to reaching that level in three steps rather than all in 1 year.

DEVELOPMENT

Betterment of existing facilities.—A goodly proportion of national forest recreation facilities is from 12 to 30 years old. Here water systems are unreliable and need improvement or replacement; toilets are of a standard difficult to maintain; campgrounds have multiple entrances that limit collection of user fees as required by the new Land and Water Conservation Fund Act of 1965. A major program of betterment of old facilities and modernization of sites is urgently needed. The sum of $5 million is needed for this. This is less than required to bring existing facilities up to desirable standards, but in view of other high priority demands is the portion of the total assigned to this activity.

Construction of new camping, picnicking, swimming, boating, observation, etc., sites.—These facilities are the ones that receive the brunt of the family use, and which are so heavily overtaxed with the resultant damage or danger to soil, vegetation, water purity, privacy, and the overall pleasurable experience of the family outing. The sum of $8,814,000 is allotted to building 440 additional sites. Some of these will be family units accommodating camps and picnickers, others will be boat launching ramps, swimming beaches, wayside rests at vista points, and other special interest places. This sum is $725,000 less than was available for the purpose last year, the reduction being made to provide money to pay the increased costs of cleanup, maintenance, water purity control, etc., created by increasing visitations.

Construction of special major projects.—Because of unusual requirements certain projects, as a nationally significant canoe area, and some national recreation areas require special development. The sum of $1,137,000 is allotted to these. Typical of these areas are the boundary waters canoe area, Spruce Knob-Seneca Rocks, and Shasta-Trinity-Whiskeytown National Recreation Areas.

VISITOR INFORMATION SERVICE

An essential aspect of the administration of the recreation use of the national forests is the vital and gradually maturing program of visitor information services.

The visitor information services provide information, education, and interpretation to the national forest visitions. It makes them aware of the many benefits of forest lands and appreciative of the need to protect and use these lands wisely. The visitors' experience in the forest becomes more meaningful. Their understanding of the American outdoors takes on greater dimension and depth. The visitor information services facilities also enhance the tourist businesses of local communities near the national forest.

The program is expanding at a rate that does not cause excessive impact on other Forest Service management responsibilities. Now in the fifth field season, the program is geared to some limited enlargement to more nearly meet Forest Service objective of using many simple facilities over a greater portion of the national forest system to provide interpretation of resource management, history, conservation, wilderness, and natural history to increasing numbers of visitors.

The proposed fiscal year 1967 budget is $1,400,000, of which $960,000 is for operation and maintenance of present facilities and for services. It includes special interpretive programs such as evening programs at campgrounds, naturalists serving visitors at visitor centers in or near the forest and on wilderness trails.

Development is planned as follows:

(a) Visitor centers and major facilities—

1. Lewis and Clark interpretive complex (Lolo and Clearwater National Forests, Idaho). Construct Three Devils information station, Lolo information station, and the historical facility ($130,000).

2. Cradle of Forestry in America (national forests in North Carolina). Construction of buildings present at time of first forestry school in America ($86,000).

3. Spruce Knob interpretive facility (Monongahela National Forest, W. Va.). Construct appropriate visitor facility at highest point in West Virginia ($55,000).

4. Taylor Creek stream profile (Eldorado National Forest, Calif.). A facility to interpret watershed and fisheries management at Lake Tahoe visitor center ($60,000).

(b) Guided and self-guided facilities.—Trails, auto tours, visitor orientation facilities, in or near recreation complexes. Sixty-eight small and generally simple facilities will be developed at a cost of $109,000. Examples: Land O' Lakes Trail (Grand Mesa-Uncompahgre National Forests, Colo.), Lost Trail Pass auto tour (Salmon National Forest, Idaho), Dardanelles Overlook (Stanislaus National Forest, Calif.).

(3) Wildlife habitat management, $3,897,000

An increase of $25,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

The more than 186 million acres of national forests and national grasslands produce one-third of the Nation's crop of big game animals and a substantial portion of small game and other forms of wildlife. These forests give rise to

more than 80,000 miles of fishing streams, comprising a major part of the cold-water streams of the country. Hunting and fishing on these lands increased by more than 2 million visits in 1964, and the same upward trend is expected to continue.

Productive habitat is the key to wildlife production. Wildlife habitat can be improved by planned coordination with other resources and activities, by direct cultural practices, and through physical improvements. Under the proposed 1967 budget it is estimated that the following wildlife work will be accomplished:

Improving wildlife food and cover, acres	58,000
Providing new water facilities, units	800
Installing fish stream improvements, miles	450
Constructing lake improvements, acres	3,000

(4) *Range resource management*

(a) *Management, $5,404,000.*—An increase of $42,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

These funds will finance administration of the range resource, including work in range allotment analysis, current work in reevaluation of grazing fees, initial phases of economic evaluation of range management and improvement practices and part of the added administrative costs of providing grazing resource use to economically disadvantaged and minority groups in southern national forests. This level of financing is $1,440,000 below the schedule proposed in the development program for the national forests for fiscal year 1967.

Acceleration of analysis work is needed to provide a basis for effective and coordinated resource management of grazed lands, including wilderness and other areas used by recreationists and their pack and saddle stock. Determination of economic feasibility of various range management and development programs for the national forest and national grassland areas used by 20,000 dependent ranchers should be a part of Forest Service programs. Necessary work toward reevaluation of the user charge for livestock grazing as directed by the Bureau of the Budget should be completed in time to meet the 1968 timetable for new grazing fees. Stepping up of Forest Service work to foster sound conservation procedures on Federal and associated private land throughout the Nation through cooperatives is needed. Financing to the level proposed by the development program would enable the Forest Service to cover these tasks.

(b) *Range revegetation, $2,820,000.*—An increase of $10,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

As a result of overuse of the public grazing lands before and during the early period following their incorporation into the national forests, the Forest Service has been faced with the long-term problem of rehabilitating depleted ranges. Improvement objectives include revegetation of 4 million acres of rangeland during the 10-year period beginning in 1963. The work includes replacing undesirable vegetation with plants of economic and esthetic value, and seeding repleted lands which have little or no vegetative cover. Significant benefits to soil condition, watershed, wildlife and recreation are being realized, in addition to grazing.

The productive potential for forage growth on important segments of the national forests will be realized through use of funds appropriated for range revegetation. Using knowledge from research and long administrative experience, grasses and other forage and soil cover plants will be established. Undesirable plants will be controlled.

Although the funds requested will aid materially toward solution of range and associated resource problems through provision of better vegetation cover, additional funds to the level of the development program for the national forests would allow revegetation work to be started on control of undesirable plants that have invaded wilderness and other resource areas accessible to recreationists and other users. These plants would be replaced by plants of economic and esthetic value in harmony with the natural environment. Existing revegetated areas would be maintained to the degree possible.

(c) *Range improvements, $3,395,000.*—An increase of $16,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Grazing resources within the national forests and national grasslands are being administered for sustained forage and livestock production consistent with other land uses. Intensive methods of range and livestock management are being implemented, including deferment of use in the spring and rotation of live-

stock between different parts of the range. These range management practices require development of physical structures such as fences and animal watering places.

Funds requested will be used to construct range improvement facilities. However, they will not adequately provide for all construction needs or for necessary maintenance of the existing 54,000 miles of fence and 38,000 watering places as a part of sustaining proper resource use and protecting present investments. Additional watering places, fence construction and other necessary range improvements are needed to gain control and management of livestock grazed by disadvantaged and minority groups in the South, and by farm families in other rural communities throughout the Nation. Range fences, esthetically constructed where necessary to enhance the beauty of pastoral landscapes frequented by recreationists, would provide for proper livestock management.

(5) Soil and water management, $6,261,000

An increase of $539,000 is needed for the following purposes:

(*a*) $510,000 to meet increased demands for scientific management of municipal supply and other high value national forest watersheds, to provide the water required for national forest multiple use programs, and to maintain the program of water quality improvement through restoration of surface disturbed areas.

(*b*) $29,000 for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Soil and water funds are used to conduct a watershed management program concerned primarily with inventory, protection, and management of the soil and water resources within the national forest system.

The soils program is based on a program of standard soil surveys to provide the information needed to gear resource and development activities to the capabilities of the wide variety of soils found in national forest areas. These surveys are fully coordinated with and become a part of the National Cooperative Soil Survey being conducted by the Soil Conservation Service. The standard survey is supplemented by reconnaissance level surveys to meet selected management needs over large areas. A soil management service provides localized soils information for a specific project such as selection of a nursery site, locating roads through fragile soil mantles or designing a watershed rehabilitation project.

The water resource program is concerned with preventing or correcting water pollution, providing the water necessary for attainment of national forest purposes, and increasing the amount and usability of water flowing from national forest land to serve the needs of dependent domestic, agricultural, and industrial water users. Hydrologic surveys and analyses are made on selected watersheds as a basis for prescriptions which will increase the quantity or improve the timing of national forest water yields. A system of barometer watersheds is being established as a means of adapting research findings to operational water yield improvement programs and to serve as a sampling system to establish the interrelationship of resource management and development practices on the quantity and quality of water yields. Specialized surveys and restoration plans are made for deteriorated watersheds as a preliminary to watershed restoration work. Watershed restoration is done to halt accelerated erosion, restore site productivity, and to improve water quality. Individual operations such as timber harvest areas, roads, mining operation, and recreation areas are studied by watershed scientists to make sure these activities are conducted in a manner to prevent serious erosion or deterioration of water resource values.

(6) Mineral claims, leases, and special uses, $4,004,000

An increase of $28,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

This program provides for supervision, administration, regulation, and control of the special land uses and mineral disposal on national forest lands.

The work involves mineral examination of mining claims included in patent applications and occupancy trespass action, determination of surface rights under Public Law 84–167, mineral leasing, mineral reservation and outstanding rights administration, and special uses (other than recreation). Occupancy and use of national forest land for development and disposal of minerals are necessary and desirable as a part of sound multiple use mnagement. However, strict and adequate control of occupancy and mineral operations is necessary to protect forest resources from damage and to assure the highest use of the land consistent with good management of all other resources.

Mineral examination of applications for patents for mining claims must be kept current. The detection and elimination of unauthorized use of mining claims which constitutes trespass and interferes with the orderly administration of the national forests is an important activity and must be aggressively handled. Approximately 5,300 cases of occupancy occurring on mining claims should be reviewed within the next 7 years to determine whether the use being made of the claim is authorized under the mining laws. These occupancies include all types of residential use (permanent, seasonal, and transient) where a cabin or similar structure exists on a mining claim. Failure to aggressively pursue such cases further complicates the problem, as it encourages disregard of the mining laws. The Church-Johnson Act (Public Law 87–851) for the relief of mining claimants has also increased the mineral examination and occupancy activity on mining claims.

There are close to 17,500 active mineral permits and leases in force, covering several million acres of land. Rentals and royalties are in excess of $16 million per year. The work must be kept current to protect the public's interest. Between 7,000 and 7,300 mineral applications must be reviewed comprehensively and processed annually. The volume of mineral leases has steadily increased from 5,200 in 1951 to an estimated 17,500 in 1966. In addition, some 140 mineral reservations are being actively operated, covering 98,000 acres on which the owner retained the mineral rights when the land was purchased by the Government. The public values in the surface of the land must be fully protected.

Recently developed electric generating plants using coal along with new methods of mining have caused a big increase in coal mining operations. New methods of processing and upgrading of iron ore and taconite will make economic the removal of many low-grade deposits. These factors have caused a step-up in leasing and in the mining of privately owned minerals under lands acquired by the Forest Service. Much of this activity is in areas now experiencing economic depressions where underground coal and iron mining have steadily declined with a resulting decrease in employment. Development of the mineral resource is important in providing livelihood and bringing about an expanded economy in these areas.

Advanced technology and modernization of mining machinery now permits mineral exploration and development on many areas and for many deposits not formerly considered operable. An estimated 300,000 acres of national forest and national grassland in the Idaho-Utah-Wyoming area are underlain with phosphate. Geologic faulting makes surface mining the only practicable method to remove many of these deposits. An estimated 25,000 to 40,000 acres may be involved.

Adequate control must be maintained over exploration and development under mineral lease and necessary guidance and assistance given operators under mineral reservations and outstanding rights to protect the other forest resources, such as water, recreation, and timber; to provide for their effective utilization; and to restore mined lands to productivity for surface management, resource development, and use.

Special use permits (other than recreation) for the use of national forest lands have increased. There are approximately 37,100 permits and easements covering 4,700,000 acres of land and 56,000 miles of rights-of-way. These permits must be properly supervised and failure to administer them could result in serious damage to the national forests and a direct monetary loss to the Government.

Competition for television, radio electronic, and similar uses for sites continues to increase. These uses require mountain peaks for advantageous coverage and many of these sites occur in the national forests.

(7) *Land classification, adjustments, and surveys, $5,805,000*

An increase of $1,460,000 is needed for the following purposes:

(*a*) $1,429,000 to accelerate examination and appraisal of lands involved in exchange transactions for consolidating lands administered by Forest Service; to provide for a more efficient land ownership and status record for land protection and use control; to provide for more timely land line location and marking to facilitate management and reduce time-consuming and costly losses in connection with trespass; to study and classify lands with respect to their suitability for inclusion or exclusion from the national forests, national grasslands, and other land areas administered by the Forest Service and carry out resultant programs; to accelerate procurement of mapping aerial photography and the production, field checking, and compilation of map manuscripts.

(*b*) $31,000 for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

This program provides for the study and classification of lands as to their suitability for inclusion or exclusion from the national forests, national grasslands, and other land areas administered by the Forest Service; adjustments of land ownership in these areas through exchange, donation, purchase, and transfer; establishment of property lines; maintenance of accurate ownership and status records for all lands administered by the Forest Service and the reproduction of essential administrative maps. These functions are basic to the Forest Service land management program. Ownership patterns are a first consideration in planning and installing improvements and land treatment measures and in carrying out protection work.

Land classification.—Accomplished on a soundly planned basis, major additions to lands subject to national forest programs and refinements of boundaries of existing national forest units tie in directly with effective and economical public programs for improved rural economies, increased forest resources, reduced stream pollution, adequate outdoor recreation space, and maintenance or enhancement of the scenic and aesthetic values of rural lands. The land classification function is to analyze and report upon resource suitabilities, opportunities, needs, and feasibilities for national forest programs and to recommend suitable action programs. It will be increasingly called upon and affected by the Congress' objectives for Appalachia, by population pressures on lands and changes in land uses which may justify extensions or modifications of the national forest system, by programs for enhancement of rural resources, and by potentials afforded for public land use in the termination of military reservations. Major reservoir construction programs that have or will result in new public recreation opportunities adjacent to national forest units and rapidly changing situations with respect to transportation and public desires require analysis of opportunities to obtain more effective and economical administration of public resource management programs through adjustments of land ownership or jurisdiction.

The proposed increase includes $20,000 for this function to be used to explore the need and desirability of larger national forest programs in the Appalachian regions, including the Potomac Basin, the Ozark region and in the northern Lake States; for accelerated interagency transfer programs at water resource developments and in the public domain to increase public land management efficiency; for more intensified planning of land acquisition and disposal programs in national forests for greater effectiveness of operations; and for intensive review of the location and extent of existing national forest system units.

Land exchange and ownership adjustments

(a) *Land exchange.*—An urgent need exists for a crash program to increase Forest Service land exchanges with adjoining State, county, and private landowners. Significant short-range and long-range cost avoidance in managing the multiple resources of the national forest system will result. The using public will materially benefit from consolidation exchanges which provide access for timber harvest, new recreation development areas, opening of additional lands for hunting and fishing, and better protection of key and critical watersheds.

Selected examples of estimated cost avoidance that will result during the next 10 years from the fiscal year 1965 exchange program are:

	Units	Estimated cost avoidance, 10 years
1. Reduction of property lines and corners.....miles	1,028	$1,215,680
2. Reduction in road construction needs.....do	105	3,150,000
3. Reduction in road rights-of-way needed.....cases	252	169,000
4. Reduction in use permits and occupancy trespass.....do	156	600,000
Total		5,134,680

Material increases in income receipts to the U.S. Treasury can result through well-designed exchanges. The solving of longstanding problems of road access can make heretofore inaccessible mature timber stands available for harvest to the mutual benefit of the United States and operating timber com-

panies in need of increased log supplies. For example, a large land exchange (approved in fiscal year 1964) in California, now nearing completion, makes available sawtimber worth over $6 million. As a part of this exchange, conveyances of interests in the privately owned road system serving the area was negotiated, as was a donation of key recreation lands covering 50 percent of the shoreline of a major reservoir having high value for recreation purposes. This same land exchange decreases property lines in need of location and maintenance by 215 miles with an immediate cost avoidance of $150,000, and reduced multiple use road development costs by $2 million.

Following is the work planned with the 1967 budget as proposed:

	Acres
Examine lands for exchange (450,000 acres offered; 400,000 acres selected)	850,000
Complete land exchange appraisals and negotiations (275,000 acres offered; 275,000 acres selected)	550,000

(*b*) *Land status records.*—An increase is needed to reduce the period of time estimated to complete the job of providing accurate up-to-date land status records. Work to date is continuing to unearth significant errors in old records and land ownership. The proposed rate of financing projected through fiscal year 1970 should make it possible to have the job 50 percent finished at that time.

The conversion of existing status records consists of: (1) Accurately compiling basic information on ownerships, title encumbrances, and restrictions on use of the land in the 17,000 townships (nearly 226 million gross acres) in the national forest system; (2) producing usable status records for the 1,100 field units managing the Government lands and interests in other lands within the system; and (3) currently maintaining these records. These jobs are performed by a central status unit in each of the 10 regional offices. With status records on which they can rely, Forest Service land managers can confidently make multiple use decisions, and Government ownership can be asserted without injustice to others.

With the proposed budget, we would expect to complete 1,650 townships in fiscal year 1967. This will result in having completed status records for approximately 38 national forest or national grassland units and 10 smaller units since work began in 1962.

(*c*) *Landline location.*—Corner markers on property boundaries between Forest Service administered lands and lands of others are disappearing at the rate of 10,000 annually because of the ravages of time and lack of maintenance. Over 1,100,000 corners marking some 280,000 miles of propertyline are involved. Current financing is barely adequate to keep up with losses. The result is that the Forest Service is faced with a 25- to 35-year project and the expense of resolving over 100 land claims and apparent trespass cases annually. The proposed financing is a forward step in accelerating vital landline location work. Projected through fiscal year 1970, it should be possible to complete 12 percent of the job by that time.

Prior to fiscal year 1958 there was no provision for project maintenance of property corner markers and property lines. Funds were made available in fiscal year 1958 to begin this work. The job is fivefold: (1) a search for all property corners to determine their existence and condition; (2) verification of found corners as the true markers based on original survey notes, and remonumentation of those in unsatisfactory condition; (3) cadastral surveys to install markers in their true position when no corners are found or evidence is unsatisfactory; (4) marking and posting the property line between authentic corner markers; and (5) perpetuating the markers and maintaining the posted lines.

The Bureau of Land Management (BLM) is responsible for verification, remonumentation, and needed cadastral surveys on 160 million acres of public domain administered by the Forest Service. This involves 780,000 corners. As a part of their regular program, BLM has annually furnished some services for this work. However, Forest Service corner search activities are revealing that 40–50 percent of the corners on these reserved public domain lands have been lost. Remonumentation requires cadastral surveys. Because of this high loss, $250,000 in additional funds was appropriated in fiscal year 1966 to the Forest Service for transfer to the BLM to supplement their regular services and accelerate this work. The fiscal year 1967 budget request for this work, as a part of the regular appropriation, is $275,000 to continue efforts to reduce losses and effect significant savings to the Government.

Cadastral survey and remonumentation work on the 26 million acres of acquired Government land in the national forest system is performed by State-licensed surveyors. They are paid from appropriated funds. The increase requested for fiscal year 1967 will also assure continuation of Forest Service efforts on acquired land in corner search, remonumentation, cadastral surveys, and marking and posting.

Work proposed for fiscal year 1967:

Field search for property corners	26,000
Corners monumented or remonumented	[1] 12,000
Identify, survey, and post landlines (miles)	1,500
Maintain landlines (miles)	1,500

[1] 8,500 of these corners are on land reserved from the public domain where it is the function of the Bureau of Land Management to do the actual monumenting. This is done with assistance of the Forest Service.

It is estimated that during calendar year 1965 field search will be made for 21,000 corners and 8,000 corners will be monumented or remonumented.

It costs approximately $60 per corner for search and remonumentation where there is remaining acceptable evidence.

It costs approximatel $600 per corner to reestablish a corner by survey after all evidence is lost.

MAPPING

Adequate maps are essential for multiple-use planning and for the special recordation of resource information. Accurate contour maps are of great value in planning transportation systems and planning timber sales. At present contour maps adequate for these uses are available on only 41 percent of the approximately 617,000 square miles in the national forest system. It is necessary that the Forest Service maintain a mapping program to meet Forest Service priorities for use.

Reliable planimetric maps meeting the requirements for accelerated management activities are now available for about 56 percent of total requirements for administering the national forests and grasslands. General purpose maps are available for approximately 46 percent.

The funds requested for fiscal year 1967 are needed to procure mapping aerial photography, establish horizontal and vertical control, and produce map manuscripts for an equivalent of 3,800 square miles of contour maps; produce and make field checks of map manuscripts for an equivalent of 13,000 square miles of planimetric maps; and compile map manuscripts for photographic reproduction of 15 forest maps to a scale of one-half inch equals 1 mile.

(8) *Forest fire protection, $25,120,000*

An increase of $666,000 is needed for the following purposes:

(*a*) $516,000 to stabilize the air attack program.

(*b*) $150,000 for increased pay act costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Air operations	$516,000

Aircraft continues to provide one of the best means for prompt and effective initial fire attack. Most of the aircraft are obtained from contract operators. Increased funds will be used to assure availability of services from commercial operators as required and to stabilize initial air attack operations. This will include seasonal guarantees for aerial attack. There is need to speed up development and testing of new techniques in air detection and suppression for increased effectiveness.

Wildfire running through the forest or grassland causes serious damage and destruction. Property losses are immediate and readily apparent. Loss of timber, recreation areas, homes, and range improvements amount to many millions of dollars each year. Loss of human life and pain and suffering from wildfires defy measurement in terms of dollars and cents. Not so easy to see and measure are the indirect effects from wildfire. The planned, orderly management of the national forests and grasslands is upset by the occurrence of wildfire. Local economies may be thrown out of balance for years. Panoramic views of natural beauty may not be restored for generations—if at all. Fire scars in vital watershed areas adversely affect water quality for years. In addition, millions of dollars are spent each year for fire suppression.

The overall objective of fire control is to hold fire losses (cost plus damage) to a level commensurate with values protected. This important job must be done efficiently, economically, and safely. The Forest Service completed a periodic review of its fire control plans in 1965. Current data were used to determine management objectives, reassess resource values, and inventory fire risk hazards. Current techniques in air attack, new equipment and accessories, and other state of the art capabilities were considered in determining needs of adequate fire protection. General findings of the review show resource values are rising, man-caused fires are increasing, and management objectives require fire control objectives to be more stringent than ever before. Fire protection must be strengthened to meet this impact.

(9) Structural improvements for fire and general purposes, $10,909,000

An increase of $44,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Many ranger district headquarters and field projects are located in remote areas or small communities where adequate housing is not available. Unless adequate housing is provided, it is not possible to headquarter needed personnel at these work locations. Program costs are increased excessively and the job of managing the lands and serving the public suffers severely. There is also a great need for additional fire control structures such as aerial bases, service buildings, and offices in outlying locations.

Adequate communications facilities are mandatory for national forest protection and administration. Obsolete telephone systems are being converted to radio networks. Inadequate radio systems are being improved to meet communications needs.

Landing fields, helispots, and heliports are highly essential to the effectiveness of the fire control program and multiple-use management of the national forests in making the best use of aerial operations and air equipment. They greatly facilitate rapid initial attack on forest fires, thereby increasing the chance for early control at small size which would result in a reduction of both suppression costs and resource losses. Construction and reconstruction of airport facilities, such as airports, airfields, heliports, and helispots are urgently needed.

Maintenance of the existing facilities is steadily increasing as new facilities are constructed and as the system grows older.

The following work is needed to be performed in fiscal year 1967:

Construction:	
50 dwellings and barracks	$1,150,000
20 fire lookouts	197,000
40 service and storage buildings	920,000
20 office buildings	700,000
300 airstrips and helispots	280,000
Site acquisition	100,000
Communication facilities	1,050,000
Construct major structure:	
Plan Missoula Equipment Development Center	85,000
Finish Redmond Airbase	200,000
San Dimas Equipment Development Center	70,000
Subtotal, construction	4,752,000
Betterment:	
Betterment of existing structures, site improvements, landscaping	607,000
Betterment of water and sewer systems	500,000
Maintenance: Maintenance of existing improvements	5,050,000
Total	10,909,000

NOTE.—Since preparation of these explanatory notes, the Forest Service has proposed to reduce the amount of funds spent for construction of airstrips and helispots from $280,000 to $231,840, and in addition, withhold construction of the San Dimas Equipment Development Center, estimated at $70,000. These savings are proposed to be used to construct an aircraft maintenance shop estimated to cost $118,160 at Troutdale, Oreg. These facilities are needed to insure maintenance and repair of 15 airplanes and 1 helicopter which are primarily needed for fire control purposes and will be constructed on land recently acquired from the Corps of Engineers.

Existing facilities represent a hazard to both aircraft and personnel and maintenance of aircraft is extremely costly.

(10) Payments to employees' compensation fund, $733,000

An increase of $64,000 for Bureau of Employees' Compensation is required to reimburse the employees' compensation fund, Department of Labor, in accordance with Public Law 86-767 (5 U.S.C. 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 1967 payment will be $733,381. The payment for 1966 will be $688,586.

(11) Water resource development related activities, $6,416,000

An increase of $1,646,000 is needed for the following purposes:

(a) The sum of $1,632,000 to meet Forest Service responsibilities resulting from increased installation of hydroelectric power, flood control, reclamation, and similar water conservation projects by other agencies. This demand results not only from recently completed projects, but also the unprecedented number of new or planned starts, particularly in the West and in Appalachia. The construction agencies initiate the projects and the schedule of performance; the Forest Service then must comply by cooperating in the planning, development, and management of these waters and related resource developments associated with national forest system lands. As a responsible land management agency with professional capability and an organization in place, the Forest Service can effect economy during the planning, construction, and management phases. The increase is less than needed to meet the objectives of bringing the Forest Service programs current with those of the construction agencies by 1970. However, the Forest Service will apply the fiscal year 1967 increase of funds toward redeeming its responsibilities by making impact surveys, providing public access, use and management facilities, and for performing other essential reservoir related activities.

(b) The sum of $14,000 for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

EXAMPLES OF RECENT ACCOMPLISHMENTS

Impact surveys and construction liaison.—Impact surveys are those substantive surveys which delineate the effect, define the mitigating measures and enhancement opportunities of water resource developments upon the protection, administration, and management of the national forests and national grasslands. Based on survey facts, the report documents items which are essential to the attainment of multiple use objectives when national forest system lands are related to the project. To be effective, the surveys and reports must be concurrent with the construction agency's preliminary planning and must, without fail, precede licensing or authorization.

Liaison with the construction agency is necessary during the construction period 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.

Among the projects for which the Forest Service made impact surveys and provided liaison during fiscal year 1965 are: Spruce Park, Glacier View, Lower Canyon, Penny Cliffs, Libby, Ruedi, San Juan-Chama, Cabin Creek, Fruitland Mesa, San Miguel, Glen Canyon, Central Utah, Upper American River, Oroville, Pacific Northwest-Pacific Southwest Intertie, Baker, High Mountain Sheep, Allegheny, Rowlesburg, Royal Glen, Gathright, Flanagan, Pound, Cave Run, Laurel, French Broad, Lee Creek, and Middle Fork Anderson.

Public access, use, and management facilities.—Where the Forest Service has jurisdictional responsibility it must provide the necessary facilities to make water development projects accessible for safe public use and enjoyment. Increases for fiscal year 1967 would be used to provide facilities required to partially meet the initial demand.

Among the completed projects now urgently requiring facilities during fiscal year 1967 are Flaming Gorge in Utah, Shasta-Trinity in California, Blue Ridge in Arizona, Hungry Horse in Montana, and Hills Creek in Oregon.

Over 10 percent of fiscal year 1965 funds allocated to the Forest Service for regular recreation programs was allocated to provide facilities at such major projects as Allegheny in Pennsylvania, Flaming Gorge in Utah, Sam Rayburn in Texas, Parker Canyon in Arizona, and Shasta-Trinity in California. However, facilities installed at Flaming Gorge and Shasta-Trinity have fallen far short of meeting the initial demand. A sizable backlog of required work must be

completed in accordance with public need and agreements with the Bureau of Reclamation and National Park Service.

Tremendous recreation pressures are expected to be generated as the Sam Rayburn and Allegheny Reservoirs fill. Formal agreements with the Corps of Engineers require that additional funds be programed for facilities at these two reservoirs.

Facilities are also required for Cave Run in Kentucky, Chocolocco in Alabama, and Toledo Bend in Texas, which are presently under construction.

Soil stabilization and cover improvement.—Increases are required in this activity to improve soil and water conditions on tributary watershed lands. The prevention of erosion and improvement of soil cover will improve the quality of water and enhance and prolong the life of the water resource development. Land treatment is required to protect the multimillion-dollar investments in water resource developments.

During fiscal year 1965, a meager amount of work was accomplished through the use of regular soil and water rehabilitation funds for land treatment on national forest lands tributary to Joe's Valley and Shasta Reservoirs.

(*12*) *Fighting forest fires, $5 million*

No program increase is proposed for fiscal year 1967.

This program provides for forest firefighting on the National Forests and Grasslands. It permits employment of emergency forces when weather conditions are above normal. The costs of the regular fire protection organization are paid from the national forest protection appropriation. When critical fire conditions occur, it has been found advantageous to build up temporary forces in the most threatened areas. Long experience shows material savings are made by having a strengthened force ready to discover and attack fast-spreading fires. Damage and suppression costs are thus materially reduced over what might be expected from normal crew strength and normal procedures.

The calendar year 1964 fire season.—The fire season was characterized by critical conditions in California during the late summer and early fall. In contrast, the Pacific Northwest had a favorable June through September. There were extremes from very wet in western Washington to very dry in eastern Washington. The Southwest followed the pattern of variations of fire weather locally, but generally had a dry fall period.

Weather conditions east of the Mississippi were nearer to normal, but many areas had serious rainfall deficiencies. There was one period of extreme fire danger during the fall in the Eastern and Central States. Special regulations were imposed and special precautions were taken during this period to prevent as many man-caused fires as possible.

Number of fires down.—Fire occurrence on the national forests decreased from the 5-year average of 12,370 to 9,749. Burned area also decreased from the 5-year average of 230,065 acres to 183,154. National burned area increased over 1963 because of the large fires in California and Nevada. The number of man-caused fires increased steadily from 1957 to 1963 after a modern-day low of 3,305 man-cause fires in 1957. Special efforts made in 1964 helped to change this trend. It is encouraging to note that man-caused fires were down to 5,132 in 1964, compared with 6,269 during 1963.

Major fires.—There were 61 fires that exceeded 300 acres in size in 1964. This compares favorably with a 5-year average of 90 such fires. One especially large and damaging fire started on the Los Padres National Forest near Santa Barbara, Calif., on September 22, 1964. It was controlled on October 1 after burning 63,000 acres. Natural resource and property damage inside the Forest Service protection boundary was more than $17 million.

Fatalities.—Five persons were killed while fighting forest fires on the national forests in 1964. Two contract air tanker pilots lost their lives dropping chemical retardants on fires. One of these occurred in California and the other in Arizona. A helicopter crashed and the pilot was killed in Washington. He was returning to his home base after delivering firefighters to a remote area. One firefighter died from burns on the Coyote fire in California and another was killed in Colorado from being struck by the tail rotor of a helicopter as he was preparing to be transported to a remote location.

The 1965 fire season was below normal in most areas through October. Weather conditions were generally favorable. Moisture deficiencies persisted in the Northeast and South, but there were no large fires—8,617 fires burned 58,598 acres through October. This compares very favorably with the 5-year average of 11,758 fires and 201,977 acres burned during the same period. Man-caused fires were down from the 5-year average of 4,643 to 3,349.

Fatalities.—Seven men were killed in fire control activities during 1965. A pilot and smokejumper spotter died when their Twin Beech aircraft crashed in a mountainous area while dropping supplies and tools to smokejumpers in Idaho. Another pilot and observer were killed in Oregon when their plane crashed on a routine flight. A firefighter died from complications several weeks after being hospitalized as the result of a hard landing in a helicopter. Two other firefighters died on the fireline—one from a heart attack and the other from being hit with a rolling rock.

(13) Insect and disease control, $12,371,000

An increase of $196,000 is needed for the increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

The objective of this program is to reduce damage and loss caused by insects and diseases to levels commensurate with uses and values involved on all forest lands irrespective of ownership. Control work is accomplished in cooperation with other Federal and non-Federal agencies. Authorization is contained in two Federal laws—the Lea Act of 1940 which deals specifically with the introduced white pine blister rust disease, and the Forest Pest Control Act of 1947 which deals with forest insects and all other tree diseases. Both acts contain provisions for Federal cost sharing on non-Federal land.

Following are the 1966 objectives for the white pine blister rust control and the other pest control programs:

Disease control:		
1. White pine blister rust control:		
(*a*) Perform maintenance surveys	acres	1,940,000
(*b*) Eradicate ribes bushes	do	220,000
(*c*) Apply antibiotic fungicides	tree	17,000,000
2. Oak wilt control:		
(a) Surveys of oak forests to locate infected trees	acres	47,000,000
(*b*) Destroy or treat infested trees	trees	5,000
3. Dwarfmistletoe control:		
(*a*) Intensive surveys on pine stands to locate infected trees	acres	250,000
(*b*) Control disease	do	5,000
4. Other disease surveys	do	128,000
Insect control:		
1. Bark beetle control: Treat infested trees, cull logs, stumps, and slash	units	1,155,000
2. Defoliator control: Aerial application of insecticides	acres	825,000
3. Plantation insect control: Aerial or ground treatment	do	25,000

NOTE.—The above program for 1966 will be modified for fiscal year 1967. The use of antibiotic fungicides as a control measure has not shown the degree of lasting effects expected. Until such time as research has further studied these materials, the control measures used will be spraying with other chemicals and hand eradication measures.

(14) Acquisitions of lands (Weeks Act), $2,480,000

An increase of $1,800,000 is needed to complete the acquisition of the major property (40,000 acres) within the Redbird purchase unit, Kentucky. This property is the key to success in this part of the Appalachian program. Such acquisitions permit more efficient management, protection, and administration of water, wildlife, and other forest resources.

An increase in acquisition of key inholdings within the national forests and national forest purchase units becomes increasingly urgent. The Department's development program for the national forests recognized the need to ultimately acquire some 7 million acres of private inholdings in need of land rehabilitation. Included in the program are lands depleted by repeated fires, poor logging practices, clearing and cultivation of steep and erodible mountain lands, and disturbed mineral exploitation areas. Many of the lands in need of rehabilitation are located in economically depressed areas and/or are within a working radius of Job Corps Centers. Their acquisition will provide additional lands which will contribute to a healthful working environment for the corpsmen.

The objective of the present 10-year program (1963–72) is to purchase 967,000 acres of key inholdings of land for national forest purposes. These are lands valuable for watershed and timber production purposes and having only secondary value for recreation. Lands primarily valuable for recreation purposes are not included.

(15) Timber management research, $8,085,000

An increase of $58,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Timber management research develops cheaper and more effective methods of establishing, managing, and improving forests for the production of timber and timber-related products, in harmony with other forest uses. The core of this research is determining the proper culture for over a hundred different commercial timber species in the United States. This silvicultural research includes seed production, seeding, planting, thinning, pruning, and stand regeneration measures. It involves the control of brush and other competing vegetation, and the protection of the new stand from animals. Other phases of the program deal with soil and site improvement for timber production, and the development of improved strains of trees through selection and breeding of superior types.

Timber management research also provides forest managers with information on the yield of forests in terms of various products such as lumber, plywood, poles, piling, and pulpwood, and the influence of cultural practices on the yield and quality of the stand. The program also 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.

This production-oriented research is backstopped by fundamental research on the physiological growth requirements of forest trees, on variation and inheritance in tree characteristics that have economic value, and on new approaches to difficult measurement problems involved in the management of forest properties.

In all of this research the aim is to meet the Nation's need for production of timber and related forest crops, and to perpetuate forest stands for multiple use. In view of the inroads on forest lands being made by urban expansion, highways, parks, and other developments, these future needs will not be met at reasonable cost unless technological progress in forest management is increased. Cheaper and better methods must be found to reforest deforested acres, to keep existing forest lands continuously productive, to increase their value for industrial and other uses, and to establish and maintain tree cover for natural beauty and related purposes.

(16) Watershed management research, $3,303,000

An increase of $23,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Watershed management investigations are aimed at development of methods and techniques for managing forest and related range watersheds to: (*a*) increase water yields or improve the timing of water yields under a variety of climatic, soil, geologic, vegetative, and topographic conditions by changing the pattern, density or type of forest cover; (*b*) give adequate protection to soil and water resources while forest and related rangelands are being used for timber production, grazing of domestic livestock and big game, wildlife habitat and forest recreation; (*c*) rehabilitate forest and related rangeland watersheds that constitute serious sources of damaging flood runoff and sediments; and (*d*) aid forest soil development and improvement.

Between half and three-fourths of the water flow of the United States originates in forests, associated rangelands, and alpine regions which form the headwaters of all major river systems. Generally accepted estimates of water demand indicate a doubling by 1980, and the most logical place to look for additional supplies of good quality water is in these headwater regions. However, there is ever-increasing demand to use these lands for other products and services, and the manner of their management can make the difference between beneficial, well-regulated, sustained streamflow of good quality or erratic and silt-laden flow of destructive character.

(17) Range management research, $1,267,000

An increase of $9,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Range management research aims to find the best and most practical means to manage, improve, and maintain the productivity of forest and related lands used for grazing domestic livestock. It encompasses a variety of activities including: (*a*) determination of management systems, grazing intensities, and proper coordination with other uses for the many different range types and conditions; (*b*) development of range improvement measures such as conversion of low-value

vegetation to desirable forage plants through prescribed burning; (*c*) determination of characteristics, responses, and requirements of range vegetation; and (*d*) rating and classification of range condition and trend through studies of plant ecology, physiology, and taxonomy.

In the United States grazing is the largest single use of land and as such constitutes a substantial portion of the agricultural economy. About half the total land area of the contiguous 48 States, some 940 million acres, is grazed by domestic livestock, and all of it is important for its wildlife values. These lands furnish forage for about one-half of the beef cattle and three-fourths of the sheep for at least 6 month of the year. Rangelands are also important watersheds which supply a substantial portion of the Nation's water, and they provide a wide variety of recreation opportunities.

Well-managed ranges supporting vigorous stands of vegetation are interesting and beautiful, but vast areas have been damaged by past grazing practices to the point, that forage, watershed, and recreation values have been seriously impaired. In the West, these lands pose many problems because of the variable and often droughty climate, highly erodible soils, and vegetation that will not withstand close grazing use. In the South, integration of grazing with timber production poses a particularly complex problem but also an important opportunity. Here there is increasing interest by private forest landowners in grazing use as a source of annual income while waiting for timber stands to reach harvestable age. Furthermore, use by wildlife on all lands has to be carefully correlated with livestock grazing. Methods of management and improvement practices must be found to allow continuous forage production in keeping with other uses and values.

(*18*) *Wildlife habitat research, $735,000*

An increase of $5,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Wildlife habitat research is concerned with the development of management and improvement practices for supporting optimum populations of game and fish in harmony with other uses and values. Each kind of animal has specific habitat requirements that must be balanced against requirements for production of water, timber, and forage for livestock. Special practices are developed for increasing game food and cover by seeding, planting, burning, spraying, and fertilizing. As a basis for successful integration of wildlife, livestock, and timber production, the nature and degree of competition between wildlife and livestock are determined for various types of forest and rangelands, as well as effects of silvicultural and timber harvesting practices on food and cover plants and reciprocal effects of forage production and wildlife grazing on timber reproduction and growth. Research on fish habitat improvement includes studies of regulating shade and water temperatures through manipulation of streamside vegetation, creation of gravel spawning beds, and stabilization of channels.

The Nation's forest and related rangelands provide the main habitat for an estimated 10 million big-game animals as well as for countless numbers of other species of wildlife. These lands, too, are important fish habitat. All are a source of interest and beauty. Demands by hunters, fishermen, and nature enthusiasts are ever increasing. National forests alone contain over 80,000 miles of fishing streams and nearly 2 million acres of lakes. Although habitat conditions on some areas are suitable for supporting high wildlife and fish populations, the capacity of most forest and related rangelands can be materially increased. Some of the low-producing areas, often an ugly picture of land abuse, are the result of damage from poor logging practices, fire, or overuse by livestock or big game, whereas others are due to the development of vegetation that is naturally unproductive for wildlife. Range improvement practices, such as seeding and plant control by prescribed burning or use of chemical herbicides, may have beneficial or adverse effects on habitat, depending on the wildlife species involved. Deterioration of riparian vegetation and accelerated soil erosion have resulted in unfavorable water temperatures, excessive stream siltation, ruined spawning beds, unstable channels, and exposed banks. Consequently, many streams flowing through these lands are below their potential for fish production. Information on ways and means to manage and increase habitat productivity is needed by small woodland owners, as well as large forest industry landholders and public land administrators. Wildlife resources are ever increasing in monetary value to private landowners through sale or lease of hunting and fishing privileges. The wildlife habitat research program involves active cooperation with Federal (particularly the Fish and Wildlife Service) and State fish and game agencies and educational institutions.

(19) Forest recreation research, $519,000

An increase of $3,000 is needed for increased pay costs provided in the Federal Employes Salary Act of 1965 (79 Stat. 1111).

Forest recreation research involves investigations of the impacts of people on forest resources and determines how the great variety of outdoor activities can best be fitted into timber, water, range, and wildlife habitat management. The information obtained is used by recreation planners to insure sound development of programs and facilities for recreation in all of its forms and by forest managers to get the fullest use out of the forest resource for which they are responsible. Research is also concerned with finding how private landowners can develop and manage their forest properties as profitable commercial recreation enterprises.

Recreation research is contributing to retention of natural beauty in managed forests by identifying for the forest manager the key factors in the landscape that must be developed to get the greatest overall values from a multiple-use forest.

Illustrative of the questions being answered by recreation research scientists are these: How can heavily used areas be restored and maintained so they may be continually enjoyed? How can necessary recreation facilities be blended and harmonized so as not to detract from the natural setting? Progressive changes in natural vegetation can profoundly alter the landscape. What management measures will help maintain the most desirable plant and animal communities? Beauty and enjoyment are closely related. Some recreation uses are not compatible with others. How can these be separated and each enjoyed?

In 1930, the national forests received about 5 million visits. This year the number may exceed 150 million. Other public and privately owned forest recreation areas are receiving similar increases—and additional millions of Americans can be expected to come to the forests for their recreation enjoyment. This burgeoning use has created new and greater opportunities for private income and employment, as well as management problems that cannot be effectively solved without supporting studies that are soundly organized and carried out. Forest recreation must be coordinated with increasing demands for water, timber products, wildlife, forage, and other forest resources. Especially in economically depressed rural areas there are opportunities for income-producing recreation for small farm-woodland owners. Forest recreation research is aimed at answering all of these questions.

(20) Forest fire research, $2,880,000

An increase of $20,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Forest fire research develops the basic knowledge, techniques, and methods for control of forest fires, needed by State, private, and Federal forest protection agencies throughout the United States. These agencies annually combat some 100,000 forest fires. The research includes investigation of fuels and fire behavior; physics and chemistry of combustion; environmental variables such as lightning storms which influence ignition and rate of fire spread and intensity; methods for prevention, detection, and suppression of fires; techniques for hazard reduction; and methods for prescribed use of fire in forest management. Some phases of the research require highly sophisticated laboratory equipment and techniques. Others involve field studies dependent on intricate systems of instrumentation.

Forest fires annually cause enormous losses of commercial timber, scenic beauty, wildlife, range, and outdoor recreation resources. Improved property and human lives are endangered by the continued expansion of residential areas into the forest. Heavy recreational use increases the possibility of fire starting as a result of human carelessness. For these reasons there is continuing pressure for more effective means of preventing fire occurrence, for more prompt mobilization of resources for attack, for better equipment and tactics for fire suppression, and for information on measures that can be employed in advance to reduce the possibility of widespread conflagrations.

(21) Forest insect research, $3,883,000

An increase of $27,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Research on forest insects is directed toward the prevention and control of destructive insect attack on forests and forest products. Damage by insects enters into all phases of forest management from the seed to the mature forest.

The development of effective and economical methods of direct and indirect control is dependent upon thorough knowledge of life histories and habits of forest insects, including the interrelationships between the insects and their environments. Control of forest insects by indirect methods such as the use of native or introduced parasites, predators, and diseases of insects; by silvicultural practices designed to prevent the buildup of insect epidemics; and by radiation and chemosterilization techniques, offers promise and is being given major emphasis in the research program. Investigations on direct control methods involve mechanical and chemical methods, including development of safer chemical insecticides and systemics.

Included among the many insects under investigation are: (1) those that kill trees outright, such as the bark beetles which cause heavy losses in the West and South; (2) a wide variety of species that feed on the foliage of trees and either kill them outright or reduce their vigor and growth, such as the spruce budworm and gypsy moth; (3) species that damage or destroy the flowers, seeds, and cones of trees; (4) borers that tunnel into the wood and reduce its value through degrade; (5) borers such as termites that damage or destroy valuable forest products, such as logs, lumber, and pulpwood; and (6) various species that damage or destroy young trees in forest plantations, such as the European pine shoot moth. No part of the country is immune to the ravages of these insects, and no year passes without one or more of them occurring in epidemic form.

Insects are responsible for tremendous losses to forest, shade and roadside trees, to forest products, and to woody plants on game ranges and recreation areas. The enormity of the loss is difficult to grasp. For example, during an average year insects kill enough commerical sawtimber alone to build over a half million average-size homes. They also exact a heavy toll among trees of smaller size, killing at least a billion cubic feet and reducing the growth of surviving trees by three-quarters of a billion cubic feet. Great as these normal losses are, they become far greater during periods of epidemics which occur frequently and unpredictably. Losses are not confined to timber values alone. Sites are impaired, watersheds are damaged, fire dangers are increased, wildlife habitats are changed, and the beauty and serenity of parks and recreational areas are reduced or destroyed. Products of the forest, including logs, lumber, and pulpwood are attacked by a wide variety of insects and the losses they cause are also extreme, both before and after they have been processed and placed in structures. These losses of the Nation's forest resources grow less tolerable by the year, as the values at stake continue to increase.

(22) *Forest disease research, $2,096,000*

An increase of $15,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Research on diseases in forests and forest tree nurseries, and on decays and stains of forest products provides basic information on the causes of diseases and on practicable and effective methods of combating them. Thorough understanding of a disease must include the identity of the pathogen, its preferred hosts, life history, and knowledge of the environmental conditions that lead to epidemic outbreaks. The development of disease controls through direct chemical or mechanical methods or through indirect manipulation of the host is a necessary function of research. Losses continue on wood products after their fabrication and research must learn how to prevent fungus infection in products and how to use treated or naturally durable wood to greater advantage through the use of improved designs and improved protectants.

Research on disease control provides the means by which basic information on disease is coupled to application of controls in the field. Controls may be obtained or improved through development of cultural practices favorable to forest trees and unfavorable to pathogens, selecting and breeding trees for genetic resistance, or discovery of safer and more efficient methods and materials for control. Research has shown the value of fire prevention, reducing logging wounds, and lowering rotation ages in reducing disease losses. It has shown that careful site selection and close attention to climatic influences can be of considerable importance to the future health of future stands. Biologic and economic studies of dwarfmistletoes have made it possible to integrate control with other timber stand improvement measures to improve forest yields. Studies on the direct application of chemical sprays and soil fumigants have greatly reduced the losses from foliage diseases and root rots in forest tree nurseries.

Improvement of disease survey techniques including timely recognition of potentially dangerous pathogens in foreign lands is an important part of the disease research effort. Disease-causing organisms that may be excluded by effective quarantines must be known so as to avoid another disastrous introduction such as the chestnut blight and to prevent additional costly control programs similar to those currently underway for the Dutch elm disease and white pine blister rust.

The Nation loses billions of board feet of timber each year to disease organisms in spite of the substantial progress in lessening their impact on the forest. Some diseases are intensified as the result of planting programs, particularly diseases occurring below ground and where a single tree species has been planted over extensive areas. Population pressures are bringing new areas of concern; i.e., air pollution damage to trees, the hazards of dead and dying trees in recreation areas, and the impact of disease epidemics on roadside beauty and other esthetic values.

The program for 1967 will emphasize research on the physiological basis for disease and the understanding of the causal agents, their interactions, and the environmental conditions affecting their development. Work will continue on the effect of antibiotics on the blister rust fungus, the prevention of decay in wood and wood products, further research on the native rusts and dwarfmistletoes, and the causes of serious root rot problems of forest trees.

(23) *Forest products utilization research, $6,505,000*

An increase of $428,000 is needed for the following purposes:

(*a*) $385,000 to broaden the utilization of Appalachian timber through defining more precisely the quality and character of the wood in logs and trees, advancing the development of fiber products from hardwoods, expanding the chemical use of wood residues with fertilizer, and improving the use of hardwoods in solid wood products.

(*b*) $43,000 for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

The aim of the forest products utilization research program, which is carried on through the regional forest and range experiment stations and the National Forest Products Laboratory, is to contribute to the solution of national and regional utilization problems. Because of the nature and broad distribution of the forest resource, research to improve its utilization provides exceptional benefit to distressed and underdeveloped areas that are often characterized by an overabundance of low quality wood. This area of research is specifically focused on reducing unused woods and mill residues to a minimum by finding uses for present and potential residues; on developing new products; on improving the serviceability and lowering the costs of existing products; and on developing new utilization outlets for thinnings and unpopular and little used species of timber; in short, its aim is to make the whole timber crop on farms and other forest lands go further and give better service in a wide variety of uses for lumber, paper, chemicals, and other products derived from wood.

The timber-using industry is an important part of our present economy. In 1960 the total value of shipments from timber-based primary manufacturing industries amounted to over $10 billion. About 6 percent of the gross national product originated in timber-based industries. One out of every twenty people employed in the United States worked in these industries. A raw material base for a greatly expanded industry is available in little used species, in low value timber, and in logging and milling residues. Research in forest products utilization is needed not only to give stability to the present industry but also to develop a technical basis for new industries.

(24) *Forest engineering, $671,000*

An increase of $255,000 is needed for the following purposes:

(*a*) $252,000 to develop improved methods of harvesting and transporting Appalachian timber, with resulting reduction in unit costs.

(*b*) $3,000 for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Forest engineering research involves developing engineered systems and techniques for forest resource production, protection, and utilization that will improve the efficiency of operations. It is concerned with better engineered performance and mechanization in the more complex aspects of multiple-use practices. Multiple-use requirements dictate that new and sometimes revolutionary systems be developed to facilitate protection and maximum utilization of forest resources under intensive management practices.

Vastly improved transport and harvesting methods are needed to assure protection of soil and water resources, to harmonize timber harvesting with other

multiple-use requirements such as recreation, and to avoid loss of timber-growing areas to road rights-of-way. Industrial research in engineering has been confined to specific equipment for scattered unrelated projects with relatively limited objectives in contrast to research on coordinated systems required by multiple-use considerations and for maximum economy. The Forest Service's engineering program is designed to fill this latter need. The relative inaccessibility of many national forest lands and their high values for recreation, watersheds, wildlife, and timber require strong engineering advances.

It is estimated that in Oregon and Washington alone there are at least 28 billion board feet of timber, characterized by low volumes per acre, steep terrain, and costly road access which will require special harvesting and removal techniques, such as by balloons or other aerial systems and machines specially developed to lessen the need for high-cost roads. In Alaska, there are an estimated 61 billion board feet of timber which cannot be successfully logged with conventional systems, which are costly to the operators and damaging to the soil, water, and scenic values. Special logging systems and equipment for economical timber harvesting and cultural operations on small woodland ownerships are urgently needed. Specialized equipment and methods are needed to update antiquated naval stores harvesting operations. In eastern hardwoods where some 74 percent of the total volume is considered low grade and culls, vastly cheaper harvesting methods must be developed if such low quality timber is to be removed economically and the sites replanted to better species. Sharply reduced regeneration costs are needed to accelerate the job of replanting 50 million acres of idle or poorly stocked commercial forest land.

(25) *Forest survey, $2,055,000*

An increase of $116,000 is needed for the following purposes:

(*a*) $102,000 to intensify inventories of the timber resources of Appalachia, making current and more localized information available to support resource development.

(*b*) $14,000 for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

The forest survey provides a continuing inventory of the area, location, and condition of forest lands, amounts, and quality of timber volumes available, rates of timber growth, timber cut and mortality, ownership of forest land and timber, and trends in timber consumption. The forest resources of the Nation, comprising some 758 million acres, vary greatly in productivity and availability for industrial use and show widely divergent trends in growth and depletion. Federal, State, and local forestry agencies need up-to-date knowledge of the changing trends in timber supplies to provide an evaluation of the effectiveness of and needs for forestry programs. Also, because of increasing pressures generated by the various uses of forest land, and rapidly changing resource and industrial conditions, forest industries rely more and more upon the forest survey for resource information essential to business decisions regarding land acquisition, wood procurement programs, and the feasibility and location of new or expanded industrial plants.

(26) *Forest products marketing research, $1,773,000*

An increase of $282,000 is needed for the following purposes:

(*a*) $272,000 for research to improve the efficiency of marketing timber, logs, lumber, dimension, pulpwood, and other forest products of Appalachia as an aid to more complete utilization of available resources.

(*b*) $10,000 for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

The increasing availability of timber in the United States, coupled with growing needs for improved employment opportunities in many rural areas, emphasizes the need to expand wood markets and wood-using industries. Lagging consumption of some products such as lumber illustrates the need for a fuller understanding of current wood-use patterns and the factors that favor or limit demand for wood products in various markets. Strengthening the timber economy requires improvement of marketing systems and market outlets for major classes of wood products.

Forest products marketing research includes studies to evaluate trends in use of wood products and competing materials in construction, manufacturing, and shipping; and to determine factors that influence these trends. In the construction field, for example, research seeks ways to strengthen markets for laminated products, millwork, and components for light-frame structures. Such

studies provide direct guides for production and marketing adjustments in forest industries, as well as a needed basis for periodic appraisals of the Nation's timber situation and outlook. Other research evaluates opportunities to increase efficiency in harvesting, processing, distribution, and use of important timber products to reduce costs and promote greater consumption of wood materials. Also included is research to improve appraisal and sale of public timber. This includes studies of better methods of determining conversion costs, product values, and net returns.

Strengthened markets for wood products will increase returns to millions of forest landowners and employees and operators of wood-using plants, and enlarge the contribution of timber to the economy of the Nation and to many local areas where timber is a principal source of employment and income. Improved marketing systems will also improve services to consumers of wood products.

(27) *Forest economic research, $663,000*

An increase of $5,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

This program of research applies to both national forests and other public lands and to the major part of the Nation's forest lands that are owned by some 4.5 million farmers and other private, nonindustrial landowners.

Demands on the Nation's forest lands for production of timber, outdoor recreation, and other goods and services are intensifying steadily. Problems of achieving allocation of capital for resource developments are becoming correspondingly more complex. Timber-growing opportunities vary widely throughout the United States by site, type, ownership, market condition, and land-use alternatives. Owners differ greatly in their response to forest investment opportunities and to assistance programs of forestry agencies. Such complexity combined with increasing resources demands has increased the need for economic evaluations to aid in the prudent allocation of funds and effort to forest protection and management, timber harvesting, and land-use alternatives.

The research includes studies in the important timber regions to evaluate costs and benefits realizable from expenditures for tree planting and seeding, timber stand improvement, thinnings, salvage, prelogging, fire and pest control, advance access road development on national forest and other lands, and other technical forestry practices. Special emphasis is given to improve supplies of quality hardwoods that are in increasingly short support and to the development of western softwood timber supplies.

Related studies seek to determine how public assistance programs directed to the 4.5 million private nonindustrial owners of forest land can be made more effective in increasing owner incomes and resource productivity on the vast area of their forest holdings. Other studies are directed to developing principles and guides for alterantive multiple-use management plans. These include the development of computer-oriented planning systems to increase the efficiency of land management for timber, recreation, wildlife, water, or other goods and services on public, farm, and other private ownerships.

(28) *Forest research construction, none*

A decrease of $4,183,000 is proposed for fiscal year 1967.

The 1966 appropriation provided for the following nonrecurring items:

Construction:	
Morgantown, W. Va	$468,000
New Haven, Conn	850,000
Fort Collins, Colo	1,280,000
Missoula, Mont	425,000
Houghton, Mich	390,000
Ames, Iowa	200,000
Olustee, Fla	250,000
Sewanee, Tenn	190,000
Design and specifications:	
Athens, Ga	75,000
Olympia, Wash	35,000
State College, Miss	20,000
Total	4,183,000

EXAMPLES OF RECENT ACCOMPLISHMENTS

Construction is underway on the addition to the Forest Products Laboratory at Madison, Wis., funded in fiscal year 1965. Facilities funded in fiscal year 1965 for chemical pesticide screening at Berkeley, Calif., are completed.

Contracts have been let for construction of seven laboratories and one greenhouse-headhouse for which appropriations were made in fiscal year 1966.

Laboratory planning included in the fiscal year 1965 appropriation is on schedule, and plans for the four laboratories will be completed so that construction can begin as soon as funds are provided.

Laboratory planning for the three locations included in the fiscal year 1966 appropriation is on schedule. Detailed design and cost estimates will be available for laboratories at Olympia, Wash., and State College, Miss., by March 1, 1966. Planning for the Athens, Ga., laboratory was funded later in the year and architectural work is in the initial stages with completion estimated for the first of calendar year 1967.

Research on the complex problems associated with present-day, multiple-use forest and range management requires the skill of highly trained scientists. To capitalize on their advanced training, these scientists must work in an efficient environment combining good basic facilities with modern equipment. Recent improvement in forestry research facilities through construction is summarized in the following tabulation:

Current status of the construction projected in "A National Forestry Research Program," fiscal years 1963–72 (August 1965)[1]

Locations where facilities are adequate; no construction required	13
Locations where facilities have been added by recent construction; no further construction required	17
Locations where laboratory needs have been partially met by recent 1st stage of construction planned; further construction required	24
Locations where facilities are inadequate; no construction provided to date; construction required	26
Total	80

[1] Includes construction funded in the fiscal year 1966 appropriation.

(29) *Cooperation in forest fire control, $12,811,000*

An increase of $8,000 is needed for the increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

These funds are needed to reduce fire losses and prevent conflagration fires.

Protection from fire is a basic necessity for the development and use of all forest resources—water, timber, special forest products, wildlife forage, recreation, and natural beauty. Dependent upon these resources are individual landowner and operator incomes, community development, and better living for both rural and urban consumers, residents, and visitors.

A recent survey by the Forest Service indicates an increased national need for timber of good quality before the year 2000. Increasing population and greater use of all forest resources are dependent upon better protection from fire. The Department of Agriculture therefore is preparing a program for State and private forest lands in which fire protection will be a major part. This program involving the team action of eight agencies in the Department sets up goals for the period 1967 to 1976 for forest protection development and use.

The goal over a 10-year period is to intensify fire protection on commercial forest land to the point where the average annual burn will be reduced to 1 million acres. Other wildlands will also receive intensified protection so that losses on these lands will be reduced to tolerable limits. Ten years hence the total protected area is expected to rise to 600 million acres.

Current and past fire protection efforts by the State foresters have not brought about a reduction in the number of man-caused fires despite the work of the advertising council's Smokey Bear campaign and others. In the West especially, the number of fires and area burned continue to increase. Incendiarism, particularly in the South, is not yet under control. Fire prevention and suppression strength is not now sufficient to utilize fully the new but more expensive technical innovations and techniques that show promise of being especially effective.

Emphasis on these needs will become possible and specific action is planned in the 10-year program for State and private forest lands. It will include:

1. Emphasis on fire prevention and the employment of additional technical specialists to cope more adequately with this "people" problem.

2. Expansion of the use of aircraft and helicopters for fire detection and suppression.

3. Full utilization of fire danger measurements as a basis for determining needed strength of force to prevent large disastrous fires and to control potentially catastrophic fires quickly when they do occur and needed funds for augmenting these forces during critical periods.

4. Assisting the Western States to fulfill their responsibility for adequately protecting an estimated 50 million acres of State and private land intermingled with or adjacent to public domain lands. These State and private lands are now protected by the Bureau of Land Management with funds appropriated for protection of the public lands. That agency can no longer do this and the States must assume the protection job.

5. Special attention to fire protection needs in Alaska. That State will eventually obtain title to more than 100 million acres of public domain and other Federal lands. Fire protection has in the past been provided through appropriation to the responsible agency, primarily the Bureau of Land Management. In fiscal year 1964 State expenditures for fire protection were $229,540 to protect the 9,250,000 acres already placed under State administration. The State faces the need to plan for and to create administrative and protective forces to assume fully the fire protection job and to handle the increased fire hazards and risks that will accompany population growth and resource development and use.

Cooperative forest fire control, C–M 2

	State and private funds expended, fiscal year 1965	Federal allotments, fiscal year 1965	Federal allotments,[1] fiscal year 1966
Alabama	$1,041,578	$397,500	$383,890
Alaska	192,150	53,500	47,000
Arkansas	1,249,234	383,300	391,080
California	21,275,462	1,112,000	1,073,080
Colorado	115,754	48,200	47,000
Connecticut	400,306	85,300	88,120
Delaware	14,794	13,500	15,500
Florida	4,304,235	573,100	560,530
Georgia	3,114,974	575,400	558,940
Hawaii	36,564	35,000	35,000
Idaho	508,468	206,100	210,630
Illinois	196,435	68,100	73,390
Indiana	166,733	52,000	55,950
Iowa	64,000	47,000	47,000
Kansas	114,700	47,000	47,000
Kentucky	881,185	246,400	243,090
Louisiana	2,016,992	477,100	460,400
Maine	1,089,141	330,300	318,740
Maryland	577,327	149,800	145,130
Massachusetts	665,888	133,500	148,310
Michigan	1,995,237	483,500	490,460
Minnesota	597,170	302,900	300,210
Mississippi	1,650,316	477,200	466,330
Missouri	1,011,803	279,300	315,860
Montana	406,430	154,150	150,640
Nebraska	89,980	47,000	47,000
Nevada	368,377	67,400	76,130
New Hampshire	262,292	93,000	89,740
New Jersey	620,150	133,200	143,980
New Mexico	172,276	47,000	47,000
New York	1,715,203	289,700	298,880
North Carolina	1,728,032	451,900	452,650
North Dakota	11,031	13,000	43,250
Ohio	427,323	125,100	127,870
Oklahoma	169,687	168,800	162,900
Oregon	2,591,477	545,700	525,150
Pennsylvania	1,195,161	273,200	305,700
Rhode Island	135,806	47,000	47,000
South Carolina	1,575,748	408,000	420,680
South Dakota	73,226	47,000	47,000
Tennessee	1,267,949	375,300	373,250
Texas	851,998	338,100	334,170
Utah	144,621	47,500	49,740
Vermont	81,345	47,000	47,000
Virginia	1,379,474	363,600	368,920
Washington	2,838,308	555,000	539,840
West Virginia	423,815	167,200	161,350
Wisconsin	1,774,303	423,800	412,520
Wyoming	72,747	48,000	47,000
Administration, inspection, prevention and special services to States		904,350	961,000
Grand total	63,657,205	12,758,000	12,803,000

[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.

(30) Cooperation in forest tree planting (C–M 4), $300,000

No program increase is proposed for fiscal year 1967.

The Forest Service cooperates with the States through financial assistance and technical and other services in the production, acquisition, and distribution of tree planting stock and seed for forest and wind-barrier plantings and seedings. This program is authorized under section 4 of the Clarke-McNary Act of 1924.

The conservation needs inventory of 1958 indicates a need for 70 million acres of tree planting on private, State, and municipal land. The current rate of reforestation is around 1 million acres annually. At the current forestation rate, it will take about 70 years to accomplish this forestation. The rate of reforestation needs to be at least doubled or possibly tripled to put this 70 million acres in productive condition to meet the need for a wide variety of uses including timber production, wildlife, watershed, recreation, and special forest products. Federal leadership and financial participation is necessary

to restore these unproductive lands to productivity and meet the Nation's timber resources needs and strengthen the basis for stronger local economic stability. Tree planting stock will be needed also to plant land converted from cropland use under the Food and Agricultural Act of 1962 and the resource conservation development and rural renewal areas programs. The war on poverty will need trees for planting in impoverished rural counties to provide employment and develop the woodlands in these areas. The 1967 objective is to assist the States in production of high quality seedlings for distribution to private landowners for reforestation and shelterbelt planting. This planting stock will, in many ways, aid in the President's beautification program. This program complements private forestation programs that depend upon planting stock for reforestation and shelterbelt plantings.

(*31*) *Cooperation in forest management and processing, $3,538,000*

An increase of $3,000 is needed for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

This program operates under authority of the Cooperative Forest Management Act of 1950, as amended. The act authorizes the Secretary of Agriculture to cooperate with the State foresters for the purpose of providing technical services to private forest landowners and operators and processors of primary forest products. Forty-nine States and Puerto Rico participate in this program on a 50–50 matching basis. Services are provided by State employees. The major objective of the program is to increase the money and other income opportunities of the Nation's 4.5 million private woodland owners. These income opportunities include annual or recurring cash income; capital gains from increases in value of the forest land as the stands are improved, the timber grows, and multiple uses expand; and the pleasures and satisfactions derived by the forest landowner and the community from the beautification of the countryside, and expanded recreation and other multiple uses. This is accomplished by assisting them to improve management and utilization of their forest resources for timber, water, forage, recreation, fish, game, special products, and esthetic purposes.

On-the-ground assistance to landowners provided through the State forestry agencies includes such activities as making forest resource inventories; planning for multiple-use management and beautification of the countryside; tree planting and seeding; improving timber stands; protecting forests from fire, pests, and animals; and harvesting and marketing forest products.

Small private ownerships account for more than half of the Nation's commercial forest land and produce about half of its forest products. The owners of these lands and many local communities must look to them for income and employment. Timber-based industries must look to them for present and future supplies of the raw materials.

Assistance also is provided loggers and operators of small plants processing primary forest products. This assistance is in connection with harveting equipment and methods, marketing, and plant layout and operation.

Many of the primary processors of the products of the forest land in small ownerships have small locally owned and controlled establishments. These plants are extremely important to the local economy and the forest landowner in providing a ready market for the products of the forest. It is important that these plants produce a good salable product and do so at a profit.

Other uses also have assumed major importance. These forest lands have an important and rapidly increasing role in providing a base for development of outdoor recreation and improving natural beauty. Outdoor recreation enterprises offer woodland owners opportunities for profit from their forest lands, in addition to their growing timber and producing other forest crops. Private forests are important to the domestic and industrial water supply. This importance too is rapidly increasing. Fish and game, forage and special products now have an important place in small forest management.

The program is coordinated with other programs and agencies aiming to improve economic and esthetic opportunities on private forest lands. Among these are the American Forest Products Industries' tree farm program, cooperative extension services, agricultural conservation program, soil conservation districts, rural community development service, resource conservation and development projects, and Public Law 566 small watersheds program.

Intensive and complex management and operations now needed requires knowledge and skills not ordinarily possessed by owners of small forests and

the operators of small forest product processing plants. The advice and assistance of professionally trained experts are needed. The program makes available such assistance through State-employed professional foresters trained in forest management and wood processing who work with individual landowners and primary processors.

(32) General forestry assistance, $1,248,000

An increase of $328,000 is needed for the following purposes:

(a) Appalachian program, $322,000.—This item would make it possible to continue at the 1966 level a stepped-up program of general forestry assistance tailored to the needs of the area defined in the Appalachian Regional Development Act of 1965, without reducing the basic technical forestry assistance programs in this region. Appalachian program funds would be used to employ 25 to 30 State service foresters to give technical assistance to forest landowners in Appalachia to improve the growth and quality of their timber and to develop and utilize their land to best advantages for other compatible uses including its esthetic values for the enjoyment of the owners and others. There are about 1 million woodland owners who own approximately 67 million acres growing Appalachian hardwood species. These funds will also be used to provide technical assistance in the field of forest product utilization and marketing for landowners, loggers, operators of small sawmills, other plants processing forest products, forestry-based cooperatives and associations, and others whose livelihood depends upon multiple-use management of these woods. This assistance will directly and indirectly benefit the forest product industries, other related businesses and individuals throughout the Appalachian area and the Nation, especially those who manufacture and use products from Appalachian hardwoods. Most of these Appalachian woodlands owners have poorly stocked stands that are in immediate need of technical forestry assistance. Also assistance in utilization and marketing will help landowners and the associated 4,000 industries dependent upon this basic renewable forest resource to increase employment, raise social standards, establish a continuing prosperous forest economy, and help utilize to a fuller capacity the multiple-use resources, timber, water, wildlife, recreation, esthetic landscape, and special products of the Appalachian area. The Forest Service will use these funds to provide program guidance, training, and special technical advice; and to reimburse the cooperating States for a part or all of the agreed upon costs of carrying out a stepped-up program of technical forestry assistance for the Appalachian region.

The total appropriation of $1,248,000 for fiscal year 1967 will make it possible to give technical assistance in management and utilization to over 6,000 landowners, loggers, and processors of forest products, to serve about 600 State and local rural areas development groups, and to help bring about improved forest management on more than 51 million acres of private, State, local and public, and non-Forest Service Federal lands.

(b) $6,000 for increased pay costs provided in the Federal Employees Salary Act of 1965 (79 Stat. 1111).

Objective of regular program.—The Forest Service through its general forestry assistance program provides technical services to expand markets for forest products in support of rural areas development and to improve forest management, harvesting, processing, and utilization practices. The results of these services help improve economic conditions and employment in economically distressed rural areas.

General forestry assistance personnel provide specialized professional forestry assistance to States, counties, other Federal agencies, forestry associations and organizations, economic development groups, and to private owners of forest properties and forestry-based industries who do not otherwise have technical personnel available to interpret and apply research findings. The Forest Service performs forest management work in the Virgin Islands and cooperates with defense agencies to provide emergency supplies of timber and other forest products.

General forestry assistance funds are used to finance much of the cost of Forest Service State and private forestry activities in departmental and other national programs such as the following:

1. Rural areas development.
2. Food and Agriculture Act of 1962 (rural renewal, R.C. & D.).
3. Manpower Development and Training Act of 1962.
4. Vocational Education Act of 1963.
5. Economic Opportunity Act of 1964.

6. Appalachian Regional Development Act of 1965.
7. Land and Water Conservation Act of 1964.
8. Proposed Northern Great Lakes and other regional programs.
9. Public Works and Economic Development Act.

Objective of Appalachian program.—The Forest Service through cooperative agreements with State Foresters is providing increased forest management services to landowners and increased technical services to primary processors of forest products and rural area development groups.

INCREASED PAY COSTS

Chairman HAYDEN. How much of the fiscal year 1967 budget is requested to meet the increased costs of the Federal Employees Salary Act of 1965?

Mr. HENDEE. $1,681,000.

TIMBER RESOURCE MANAGEMENT

Chairman HAYDEN. For timber resource management you are asking $31,635,000, an increase of $826,000 over last year's appropriation. Of this amount, $617,000 is to permit increased timber harvesting on the national forests, which you estimate will be an additional 200 million board feet. In this connection, last year you increased your timber harvest by a like amount, but you had approximately $80,000 less for this purpose than you had in 1965. Why is this?

Mr. CLIFF. I will ask Mr. Greeley to respond to that question.

Mr. GREELEY. The figures as you have cited them are as the budget had them last year and as the budget presents them this year we do plan an increase in our harvest by 200 million board feet. Part of the increase we have asked for, at the rate of $1.83 a thousand, is the sales cost, as reported in the notes. This would go for financing this increased cut of 200 million board feet. In the budget we anticipate the balance we are asking for would be required to meet the somewhat increased cost of sales administration, with the emphasis on antipollution and natural beauty. We are concentrating on coordinating our timber activities with these other things. We expect to encounter higher unit cost of sales, as we get in more sales that involve this sort of thing.

This was our thinking at the time we prepared this budget, but this is only part of the story because our cut for the first half of this current fiscal year between last July 1 and January 1 is running substantially ahead of what the cut ran for the first half of the preceding fiscal year. So it now looks as though for fiscal year 1966 our cut level will be at 11.6 or 11.7 billion board feet and the demand is continuing to be brisk and the market is continuing high so that next year, instead of being at the 11.6 billion our budget anticipated, it is likely it will be higher than that.

We are now anticipating we will be hard pressed for sales administration funds to keep up with what we have on the market in order to get the current demand of the forest increase.

ORAL VERSUS SEALED BIDDING

Chairman HAYDEN. Last year there was a question of oral versus sealed bidding. What is the status of that situation now?

Mr. GREELEY. Senator Hayden, we are involved in attempting to make some further studies of this general subject. You will recall that this committee in the Senate appropriation report last year, took cognizance of this sealed versus oral bidding and urged there be no abrupt change made. Actually, we have not made any change in our practices. Some of our regions are still on oral auction bids. We continue to use sealed bids in the East and some parts of the West. There are other studies that we are directed to make by the Budget Bureau to see if there is any basis we have not yet discovered to find which way it ought to be.

In every study we have made we find there are advantages to both the Government and the industry by not having a fixed system, but having some flexibility in the way we do it. We do not consider this subject closed. We have done a lot of work but not reached any definitive conclusions.

TREE NURSERIES

Chairman HAYDEN. How many tree nurseries are operated by the Forest Service at this time?

Mr. GREELEY. We have 14.

Chairman HAYDEN. You can place a list of them in the record indicating the funds required for each in fiscal year 1967.

Mr. GREELEY. We will place it in the record.

(The listing follows:)

Following are the 14 Forest Service nurseries which will be in operation during fiscal year 1967. The funds listed opposite each nursery are for the additional capital investment needed to increase production of trees for the planting proposed and to improve efficiency of nursery operations.

Funds for operating the nurseries are not set out as a separate item in the budget request because Forest Service nurseries are financed by the working capital fund. The nurseries supply trees to planting projects at cost of production. This cost is included in the budget item, "Reforestation and stand improvement."

Nursery	Location	Capital investment	Amount
Coeur d'Alene	Coeur d'Alene, Idaho		0
Savenac	Haugan, Mont		0
Bessey	Halsey, Nebr		0
Mount Sopris	Basalt, Colo	6-foot cyclone type fence to prevent damage in the nursery by domestic livestock and deer.	$20,000
Lucky Peak	Boise, Idaho		0
Mount Shasta	McCloud, Calif	Improve powerline, reinsulate cold-storage building.	12,750
Placerville	Placerville, Calif		0
Humboldt	Arcata, Calif	Install irrigation system and surface administrative area.	39,500
Wind River	Carson, Wash	Clear 20 acres and install irrigation system, install dust exhaust in seed extractory, construst restroom for field laborers.	54,700
Bend	Bend, Oreg		0
Ashe	Brooklyn, Miss		0
Chittenden	Wellston, Mich	New tree packing plant and cold storage for trees.	155,000
		Replace the old domestic and fire protestion water systems.	25,000
Toumey	Watersmeet, Mich	Cost of increasing production by 5,000,000 trees (this is excess cost over what will be financed by working capital fund).	27,000
Eveleth	Eveleth, Minn	Development on the new nursey extension—soil fumigation and road construction.	7,300
Total for nurseries in fiscal year 1967.			341,250

INCREASE FOR RECREATION-PUBLIC USE

Chairman HAYDEN. One of your larger increases requested is $1,123,000 for recreation-public use. Would you please summarize for the committee your plans for the total amount asked for this purpose?

Mr. CLIFF. Mr. Greeley will handle that, too.

Mr. GREELEY. I think you are aware from your knowledge of national forests affairs in the Southwest, the recreational use of national forests is continuing to boom. As the comments of Secretary Baker and Chief Cliff show, continuing new records are being set in this field. We are continuing to be hard pressed to do the planning, to do the policing, to do the maintenance, and to do the construction work needed to keep up with the tremendous increases taking place in recreational use.

We have budgeted the total amount of money that has been set up for several different activities. Of course, it is necessary to police and maintain the existing recreational activities. We have started a program of visitor information services and facilities and will keep that going. We will spend some of these funds for cleanup of sites that are not even developed sites, places where overflow campers and picnickers go when they find the facilities provided are already overcrowded. We will spend some of these funds to improve the standards of existing facilities and some for the construction of new facilities, but we are not going to spend as much on construction of new facilities as we planned to spend last year.

We will be into our second full year of collecting fees under the Land and Water Conservation Fund Act in the fiscal year 1967. We made fee collections of significant amount in fiscal year 1966 under the new act, and we have gotten some experience under our belts. We testified and talked about this before the committee last year. Part of the recreation-public use funds will go for meeting administration costs, purchase of devices for ticket sales, and the like, and for meeting obligations placed on the Forest Service under the Land and Forest Service Conservation Act.

In addition, we are facing increasingly serious problems in the area of adequate sanitation and water supply systems. We intend to use a substantial amount of money that is listed for construction by providing better and more adequate water systems and sanitation. What we can do this year is a small part of what we need to do to bring the sanitation and water supply systems up to a standard adequate to protect the using public.

Chairman HAYDEN. Could you use more money?

Mr. GREELEY. Well, I heard the Chief comment on this the other day by saying if we had a key to the Treasury, of course, we could use more money, but we have a budget ceiling to work against this year.

We do have, Senator, an activity we are called on to finance this year. The Congress last year established a new category of recreation units, called national recreation areas. The Whiskeytown-Shasta-Trinity Area was established, and the Spruce Knob-Seneca Rocks National Recreation Area was authorized, and these areas will require special attention. We have funds for this type of activity set up in this year's budget.

WILDERNESS AREAS

Mr. CLIFF. Mr. Greeley made a good statement, but I didn't hear him mention the big job we have on our hands in administering the Wilderness Act. That has a significant impact on our recreation program. We have to follow the dictates of Congress and reclassify within 10 years the 37 primitive areas that remain unclassified as wilderness. We have a growing job of administering these areas on the ground, developing regulations and administrative instructions. This activity, too, has to be financed out of this recreation allotment.

SUMMER HOME PERMITS

Chairman HAYDEN. During the past year, the Secretary of the Interior has announced a policy of withdrawing all special uses for sum-

mer home sites on Interior public lands. What is the policy of the Forest Service in this respect and what problems are you encountering on this type of use?

Mr. CLIFF. Mr. Chairman, we have about 19,000 summer home permits on national forests. Over the years, we have tried to locate these in areas we thought would not be needed for public use.

Most of them are quite well located and we don't anticipate we will have any problems with them and we don't intend to discontinue them. This is an important form of recreation use and it serves a great number of people. However, we are finding in some places we misjudged or did not anticipate the future demands and we have some of these summer homes located in areas which are now becoming in demand for public use. They occupy favorable sites on lakeshores, stream frontages, and other places we need for public development, so we are terminating some of these permits. We have already terminated several hundred in the past decade or so. We have a number under notice that they will be terminated. We try to give the permittees advance notice of as much as 10 or 15 years, so they can fully amortize their investment and we have some of those pending.

Looking to the future, I am sure we will have to terminate some additional ones; in total will amount to not more than about, I would guess, 7 or 8 percent of the total as far as we can foresee now.

We are going to continue our summer homes as we have, in most cases, but we are eliminating some where there is an urgent need to do so. I can tell you it is not an easy job to terminate and establish a summer home; it is a difficult, onerous task, but it has to be done in some cases.

Senator BIBLE. May I break in at this point for one question?

Senator HAYDEN. Certainly, sir.

FEDERAL FORESTRY PROGRAMS

Senator BIBLE. First, Mr. Chairman, I would appreciate including in the record, certain documents I have furnished to Mr. Eaton.

(The documents follow:)

EFFECT ON NEVADA DIVISION OF FORESTRY, JANUARY 1966

What Federal programs:

1. Cooperative fire protection (Clarke-McNary, sec. 2): Technical and financial assistance to States for protection of State and privately owned forest and watershed lands.

2. Forest planting cooperation (Clarke-McNary, sec. 4): Technical and financial assistance to States for growing seedling trees for forest and windbreak planting on private lands.

3. Cooperative forest management (Clarke-McNary Act of 1950): Financial assistance to States for providing technical assistance to private forest and woodland landowners.

Funds expended in total Nevada Division of Forestry program, 1965–66:

Federal funds:

Cooperative fire protection	$76,130
Forest planting cooperation	12,000
Cooperative forest management	19,623
Total (29 percent)	107,753

State funds:	
Forest protection	$83,337
Fire suppression	30,000
Pest control	5,000
Total (33 percent)	118,337
County funds (Clark, Douglas, Elko, Ormsby and Washoe) (25 percent)	91,000
Honor camp receipts (7 percent)	25,000
Tree receipts (2 percent)	7,000
Miscellaneous and reserves (4 percent)	16,000
Total	365,090

Is this doing the job?

	Acres
1. Fire protection:	
Total State and privately owned qualifying lands in Nevada	5,112,000
State and privately owned lands presently within State protection districts	2,680,000
Remaining qualifying State and privately owned lands receiving little or no protection	2,432,000

1964 fire season:

State protection districts: Number of fires, 158; acres burned, 1964, 57,000.

Other qualifying lands: Number of fires unknown; acres burned, 1964, over 70,000.

2. Forest planting cooperation: In 1964–65 Nevada shipped 102,000 seedling trees primarily for windbreak purposes. About two-thirds were for farms and ranches within a 100-mile radius of the State tree nursery in Reno. We are not now able to properly service the balance of the State.
3. Cooperative forest management: In 1964–65 Nevada Division of Forestry technicians serviced 125 requests for assistance from private forest landowners and farmers and ranchers interested in windbreaks. We believe that Federal funds presently being contributed for this purpose are adequate for the present scope of this program in Nevada.

LETTER FROM DR. C. M. SKAU

UNIVERSITY OF NEVADA,
January 28, 1966.

Hon. ALAN BIBLE,
U.S. Senate,
Washington, D.C.

DEAR SENATOR BIBLE: Continuing our previous correspondence, I would like to inform you of specific progress in forest research resulting from the McIntire-Stennis cooperative forestry research program (Public Law 87–788), and also, and perhaps more importantly, to inform you of new developments in the field of natural resources at the college of agriculture. Passage of Public Law 87–788 has done much to stimulate these additional developments.

Concerning forest research under Public Law 87–788, I would refer you to the bracketed information on pages 12 and 13 of the enclosed article.

Regarding new developments, we have expanded instruction so that renewable natural resources is now one of the five majors offered in the college of agriculture. Within this major there are five options—forestry, game management, range science, recreation area management, and watershed management. Each option offers a full 4-year professional program. Approximately 45 students enrolled in renewable natural resources in its first year. When this program is more widely known we except enrollment to reach approximately 100. This should produce a sufficient number of graduate resource managers to meet

Nevada's annual requirements as estimated by the Governor's resource advisory council. We are happy to report that Mr. Ivan Sack, recently retired supervisor of the Toiyabe National Forest, and Mr. Henry Norton, recently retired forester for Feather River Lumber Co., are now on the teaching staff.

A new renewable natural resources building will be completed by the end of this year to house renewable natural resources staff and members of various Federal agencies connected with resource management and pest control research. The limited amount of Federal facilities funds received by the Nevada Experiment Station under Public Law 88–74 are assisting in the pest-control portion of this building.

In research, new projects have begun along the entire natural resource front. In general, research is aimed at:

1. Obtaining elementary resource data. A good example is the identification and classification of plant and soil types demand data for water-based recreation activities in Nevada. This project involved on-site data gathering from most of the important reservoirs and lakes in Nevada last year.
2. Rehabilitation of forest and range lands. The McIntire-Stennis projects are a case in point. (Also see pp. 8–11 of enclosed article.)
3. Improving productivity through better management practices. An illustration is the development of techniques for estimating forage production and utilization by deer (see pp. 6–7 of enclosure). Also in this category is a study in Eastgate Basin, sponsored by the Bureau of Land Management, to determine the best method of converting sagebrush to grass with the idea of minimizing erosion and increasing forage yield.
4. Developing basic research relationships, such as; (a) seasonal nutrient levels in forage and fatty tissue in deer, (b) radiant heat load and seedling survival.

A concerted effort has also been made to build communication and cooperation with the general public and with natural resource groups. We can point to the following accomplishments:

1. A substantial and closely coordinated, cooperative research program in watershed management with the U.S. Forest Service, Intermountain Forest and Range Experiment Station. A recent development is illustrated on pages 8–11 of the enclosure.
2. Orientation of research to pressing management problems of the Nevada Division of Forestry, Nevada Fish and Game Commission, Nevada Park Commission, U.S. Forest Service and the Bureau of Land Management. Several of these projects have been mentioned.
3. Strengthening educational programs; for example:
   (*a*) Providing evening courses, such as "Scope and Problems of Outdoor Recreation," to facilitate participation by natural resource oriented personnel.
   (*b*) Providing short-course programs, such as "Site Classification and Interpretation Based on Ecological Resource Analysis," for the Bureau of Land Management.
   (*c*) Receiving initial teaching support in game and watershed management from Nevada Fish and Game Commission and Intermountain Forest and Range Experiment Station.
   (*d*) A program of student summer employment by county, State, Federal, and private agencies.
   (*e*) A cooperative agreement with Toiyabe National Forest is being drated to permit use of Dog Valley for field instruction and demonstration.
4. Providing technical assistance to public and private groups; for example:
   (*a*) Meetings with private groups interested in recreational developments at Smokey Valley and Lahontan Reservoir have taken place and will continue.
   (*b*) College of Agriculture staff are drawing up detailed management recommendations for rehabilitating a recently logged tract near Marlette Lake at the request of the Nevada Division of Forestry. This tract was recently acquired by the State of Nevada.

I hope this letter has been of service. It is written in the spirit of gratitude for your strong support for enlightened natural resource legislation. Full realization of our potential in Nevada depends on appropriations in accordance with the authorization of the McIntire-Stennis Act.

Sincerely,

Dr. C. M. Skau,
Associate Professor.

WHEELER PEAK ROAD AND BRISTLECONE PINES, EASTERN NEVADA (GREAT BASIN NATIONAL PARK), PROPOSED

Senator BIBLE. Secondly, Mr. Cliff, I think you know what this problem is. In the Wheeler Peak area in eastern Nevada, there exists one of the best stands of bristlecone pines in the world. Those trees are estimated by the experts to be some 4,900 years old. I have received complaints from my State that the Forest Service gave its permission some time ago to a research student to cut one of these trees. In addition, the Forest Service for some time has been putting in what is known as the Wheeler Peak Road, and the people who are protesting the cutting of the one tree are also fearful that construction work on this road will result in destruction of more of these ancient trees.

As background, the area under discussion is within the boundaries of the proposed Great Basin National Park which is awaiting authorizing legislation. I have received complaints that the terminus of the Wheeler Peak Road will be located in the heart of the last remaining block of roadless wilderness within the proposed boundaries of the national park.

I am well aware that there is an unfortunate interagency rivalry over various recreational developments—I think this is particularly true in the Wheeler Peak area—I say this with complete candor—the Forest Service showed no interest until the National Park Service showed interest. The moment the Park Service started showing interest, the Forest Service pulled out all stops and went full speed ahead to beat the National Park Service in developing this area. Notwithstanding that, and, on balance, I think these men in the Forest Service do an excellent job. I am certain they would not harm a valuable natural resource to try to block the National Park Service or get in there first.

I would like some thoughts on this from you, Mr. Cliff.

CONSERVATION OF BRISTLECONE PINES IN WHEELER PEAK AREA

First, I should like to include in the record an article which appeared in the Ely Daily Times, dated February 23, 1965, and Reno Evening Gazette, dated February 24, 1966, which sets forth the charges that have been made. A copy of these articles has been furnished the Forest Service. I would request that Mr. Cliff reply to the articles at this time and I would particularly like Mr. Cliff to give us assurances that these bristlecone pines will not be further harmed through its activities, and, second, that the Wheeler Peak Road is in harmony with the proposed national park and with good natural resource conservation policy.

(The articles follow:)

[From the Ely Daily Times, Feb. 23, 1966]

RECREATION GROUP CHARGES DESTRUCTION OF GREAT BASIN—NEVADA SENATORS ASKED TO HALT "FEVERISH ROADBUILDING" WORK

The U.S. Forest Service today was accused of contributing to the destruction of the area in White Pine County proposed for a Great Basin National Park by a director of the Nevada Outdoor Recreation Association, Inc.

George Kell, the acting survey director of the association, said the Forest Service destruction has resulted "apparently because it does not wish to surrender the jurisdiction of the land in question to a rival governmental agency—the National Park Service."

Kell also charged that the Forest Service participated in the "annihilation of a 4,900-year-old bristlecone pine in White Pine County which may have been the world's oldest living thing."

Kell said the association today also wired Nevada Senators Alan Bible and Howard Cannon to initiate immediate action designed to:

"(1) Halt further ruination of the bristlecone pine stands located in the proposed Great Basin National Park.

"(2) Enjoin the Forest Service from further feverish roadbuilding activity in the area until it is determined whether or not this area is to be included in America's family of national parks."

Kell, a Sparks resident, said his organization was "shocked and dismayed" that the Forest Service had given an Eastern university graduate student permission in 1964 "to chainsaw a bristlecone specimen, which, according to a scientific paper recently circulated, 'began growing about 4,000 years ago.'"

He said his organization also had information that the Forest Service recently awarded another roadbuilding contract in the Great Basin area, which, when completed, would open extremely fragile areas of the proposed park "to motorized hordes."

Kell said that most of the wood from the destroyed tree has been removed from the point near 1,361-foot Mount Wheeler where it was growing.

Sections now are found in various Forest Service offices in the State, and the slab is prominently displayed in the lobby of an Ely casino-hotel.

The bristlecone destroyed was 252 inches in circumference—with a dead crown 17 feet high and a living shoot 17 feet high, Kell said.

The trees are one of the major features in the status for the White Pine County Park, Kell noted.

Kell said the Forest Service has spent approximately $200,000 in "feverish" roadbuilding in the proposed park during the past few years, and last November awarded a 2.5-mile contract which would extend the road into an area ecologically very fragile.

"This is the type country," Kell said, "which should be obtainable only by horseback or backpacking. It cannot stand concentrated use resulting from easy access."

He added, "the terminus of this proposed new stretch of road would be located in the heart of the last remaining block of roadless wilderness within proposed boundaries of the national park. This area of roughly 20,000 acres includes Wheeler Peak and the glacerial circ, Baker Peak, Stella and Baker Lakes, and the upper reaches of Mill, Lehman, and Baker Creeks."

Kell said roadbuilding equipment now is "poised in the area, ready to further assault this beautiful wilderness once the snow melts."

Kell said the Forest Service recently completed 9.5 miles of roads in the "heart" of proposed Great Basin.

"It is interesting to note," he said, "that this road construction did not begin until momentum began building in Congress for the establishment of Nevada's first national park."

"Further the Forest Service is doing everything it can to keep the National Park Service from acquiring lands which they now administer," Kell said.

He added, "This doesn't seem to carry out a policy of active cooperation of all governmental departments which are concerned with outdoor recreation."

Kell said all Nevadans interested in preventing further destruction by "bulldozer and chainsaw," of the area should contact their congressional representatives immediately, urging quick action "in saving for posterity this prime example of Great Basin topography."

[From the Reno Evening Gazette, Feb. 24, 1966]

NATIONAL PARK AREA DESTRUCTION CHARGED, DENIED

Charges of "contributing to the destruction" of the area proposed for the Great Basin National Park were aimed at the U.S. Forest Service Wednesday.

They came from George Kell, of the Nevada Outdoor Recreation Association. Kell, in a release, stated the service "apparently does not wish to surrender jurisdiction for the land in question to a rival governmental agency—the National Park Service.

"We are not attempting to block this legislation in any way," was Robert A. Rowen's answer. He is the supervisor of the Humboldt National Forest, which is proposed in national legislation for the park.

Kell also charged the service is "participating in the annihilation of a 4,900-year-old bristlecone pine."

He said a graduate student was allowed to "chain saw a spectrum" and that pieces of it are in various Forest Service offices and an Ely hotel.

Rowen said a graduate student was granted permission to saw the tree to do a scientific study. The only way to determine its age, Rowan explained was to cut it down. Regular boring would not suffice.

The stem of the tree was salvaged and placed in Forest Service offices for public interest. One slab was given to Kennecott Copper Co. They prepared it and displayed it in an Ely hotel for the public, Rowen said.

Kell claims the Forest Service is engaged in "feverish roadbuilding activity—which would open extremely fragile areas of the proposed park to motorized hordes."

"We are continuing our program for the area. It is a matter of public information," Rowen stated. The Forest Service is continuing to develop roads. campgrounds, and trails as long as they are designated to manage it.

Another of Kell's allegations was that "road construction did not begin until momentum began building in Congress" for park establishment.

Rowen said the Service would continue with its administration responsibilities and developments until "if and when administration is given to the Department of the Interior" for a park.

The Forest Service has long-range programs, Rowen said. It has recently published a program for the next 5 years in the Humboldt area.

"Our official position is that of the Secretary of Agriculture's. He has not been opposed to a park."

Two bills are pending in Congress to create a national park in the area. Senators Alan Bible and Howard Cannon have introduced one for 123,000 acres. Representative Walter S. Baring's proposal in the House of Representatives calls for a 53,000-acre park.

Because of differences in size asked for in the two bills, an impasse has been reached.

Bible, Cannon, and Interior Secretary Stuart Udall say Baring's bill is not of national park stature, because it is too small and does not include park-type features.

Baring, the House Interior and Insular Affairs Committee, and eastern Nevada land users say the land would be "locked-up" and refuse to accept a multiple-use clause because it is against Park Service policy and would never be put into effect.

Bible and Cannon said they are willing to come down in size. Baring said his bill is a compromise already.

STUDY OF BRISTLECONE PINES

Mr. CLIFF. I can give you those assurances. I am not sure whether the material that you have asked be put in the record includes the letter which you received under date of March 1 from Regional Forester Iverson.

Senator BIBLE. No, the material I put in the record does not include that. I purposely didn't include it because I wanted you to respond to my question. If what Floyd Iverson tells me is also your answer to my question, that is what you should say.

Mr. CLIFF. I would like to include that letter in the record. The letter explains exactly what happened and what our plans are for the Wheeler Peak area and with the approval of the committee I would like to have that included in the record.

(The letter follows:)

U.S. DEPARTMENT OF AGRICULTURE,
FOREST SERVICE, INTERMOUNTAIN REGION,
Ogden, Utah, March 1, 1966.

Hon. ALAN BIBLE,
U.S. Senate,
Washington, D.C.

DEAR ALAN: I have your letter asking for a reply to Mr. George Kell's telegram to you of February 23. Mr. Kell represents the Nevada Outdoor Recreation Association.

Naturally we are quite concerned about the statements that Mr. Kell has made, both in his wire to you and in some recent newspaper stories in Nevada. I am sure you are aware of the official position of the Department of Agriculture in regard to the several proposals of legislation to create a Great Basin National Park now before Congress. As Secretary Freeman pointed out in his letter to Senator Henry M. Jackson on May 21, 1965:

"Approximately 95 percent of the lands comprising the proposed national park are national forest lands which have been under the jurisdiction and management of this Department for more than 50 years. We believe the public's interest has been served by such management. We also believe such interest would continue to be served if these lands would be continued to be administered as a part of the national forest. However, we have heretofore made it clear that we did not object to the creation of a national park on these lands. Concurrence of this Department in the proposed establishment of the Great Basin National Park is in harmony with the policy agreements jointly announced by the Secretaries of Interior and Agriculture in January 1963."

As you may know, last November 8 and 9 Congressman Baring requested Congressman Rivers of Alaska, chairman of the Subcommittee on National Parks, to go to Ely and hold informal discussions with individuals and groups concerned with the proposed Great Basin National Park. As a part of this trip, the Forest Service was requested to conduct the Congressman on an aerial and ground tour of the Wheeler Peak Scenic Area. During this tour and the informal hearings the following day, the Forest Service was requested by Congressman Rivers to present an accomplishment report of our activities in the Wheeler Peak area and a 5-year development and operating program for the Snake division of the Humboldt National Forest. A statement, including plans for road construction, was made by Supervisor Bob Rowen of the Humboldt National Forest. For your information I am enclosing a copy of this accomplishment report and 5-year development plan.

Of particular concern to me and my staff are the implications in Mr. Kell's statements that the Forest Service is annihilating bristlecone pine stands in the Wheeler Park area. As you know, the Forest Service has had a longtime interest in the Wheeler Peak area and the bristlecone pine stands which are a part of it. For this reason a scenic area was established in 1959 which provided regulatory protection for these trees and other scenic features of the area. This area is not wilderness under the act of 1964, but we plan to have about 80 percent remain only accessible by horseback or by foot.

Because of the intense interest in the true age of bristlecone pines both here and in California, permission was given in 1964 to Mr. Donald R. Currey, instructor of geography, University of North Carolina, to cut one of the large bristlecone pine trees in the cirque below Wheeler Park. Mr. Currey was making an intensive study of the age of bristlecone pines. The careful selection and resultant cross sectioning of this tree was permitted in order to complete a tree-ring cronology study of the bristlecone trees of the Wheeler Peak area. The cutting of this tree was necessary to establish increment boring techniques. These techniques will be used to determine the age of other bristlecones by boring with a special device which does not damage a living tree.

The tree selected was cut from a stand which includes approximately 300 acres of bristlecone pines. The stand contains many bristlecone pine trees—some of which are larger than the one cut and some of which may be older than 4,900 years. The cutting of this tree and subsequent analysis has provided data of scientific importance.

You and I have discussed from time to time construction of the Lehman Creek Road, including the 2.5-mile section which Mr. Kell refers to in his telegram. Development of this road has considerable local interest to make the scenic area and its attractions more accessible to the public. Because of the terrain and need for special precautions in road construction, I have personally reviewed the plans on the ground.

The contract to complete this 2.5-mile section of the Lehman Creek Road has been awarded. The road will terminate at an attractive campground site in Lehman Creek. The ecology of the campground site is similar to many other camping areas which have been successfully used for camping purposes without undue impact on the flora and fauna of the area.

I hope that this information will be helpful to you in replying to Mr. Kell's telegram. If we can be of further assistance, please let us know—although I expect to call at your office some time next week while I am in Washington.

Sincerely yours,

(S) FLOYD IVERSON,
Regional Forester.

Forest Service accomplishment report, Snake division, Humboldt National Forest, 1961–65

	Number	Cost
Public camping:		
Family units (constructed or rehabilitated)	61	$68,400
House trailer units maintenance	12	15,000
Information services		2,000
Roads:		
Lehman Creek Rd. (constructed) miles	9.9	278,000
Lehman Creek Rd.[1] do	2.5	67,500
Wheeler Peak Campground Rd.[1] do	1.1	29,500
Bituminous road surfaced do	4.9	63,000
Road maintenance do		16,000
Trails:		
Baker Creek Trail (reconstructed) Stella Lake to snowfield do	8.5 3.5	27,000
Wheeler Peak Campground to Stella Lake and Wheeler Peak Saddle[1] do	2.2	16,000
Upper parking area to Stella Lake[1] do	1.0	7,700
Total		590,000

[1] Currently being changed—advertised for bid.

Future 5-year development and operating program for the Snake Division-Humboldt National Forest

Capital improvements:	
Roads—Complete and pave Lehman and Baker Creek Roads; gravel Snake Creek Road	$995,000
Trails—Complete system in Lehman and Baker Creek drainages	130,500
Campgrounds—Construct 4 campgrounds (120 units) and 2 primitive camps	255,300
Administrative facilities—Office-dwelling, warehouse	130,000
Interpretive facilities—Signs, exhibits, nature trails	20,000
Resource improvements—For livestock range, wildlife, timber, and watershed	230,000
	1,760,800

Operations	1967	1968	1669	1970	1971	Total
Administration and maintenance	$49,000	$52,000	$72,000	$84,000	$87,000	$344,000
Total expenditures:						
Capital improvements						1,760,800
Operations						344,000
Total						2,104,800
Personnel:						
Full time	4	4	4	4	4	
Seasonal	3	4	9	11	12	

This is a proposed 5-year development and operating plan for the Snake Division of the Humboldt National Forest. It includes the area now designated as the Wheeler Peak Scenic Area as well as adjacent national forest lands. This program will be put into effect as rapidly as finances are made available from each fiscal year appropriation.

CONCURRENCE OF DEPARTMENT OF AGRICULTURE IN ESTABLISHMENT OF GREAT BASIN NATIONAL PARK

Senator BIBLE. I have no objection to its being in the record. It is responsive and if your answer as Chief of the Forest Service is the same as the answer I have from Floyd Iverson as Regional Forester of the Forest Service, to have that in the record is at least partly responsive to the question I have.

Mr. CLIFF. I would like to point out also that the Secretary of Agriculture has reported on the pending legislation and indicated the concurrence of the Department of Agriculture in the proposed establishment of the Great Basin National Park. He pointed out further this is in harmony with the agreements that he and Secretary Udall jointly announced in 1963. So we are not opposing the establishment of the Great Basin National Park.

WHEELER PARK ROAD

This area, as you know, has been under the administration of the Forest Service for more than 50 years. It did lack development for many years. The legislation has been pending for 4 or 5 years now. We see no reason why the orderly development of the area should be just put on ice and not go forward at all until Congress finally acts. The road we are building is a main road that goes into the edge of the Wheeler Peak Scenic Area. It will terminate at a very desirable place for a campground and public recreation area which would be the entry part to the Wheeler Peak Scenic Area. Regardless of what the editorial and the newspaper has said, most of this area will remain accessible only by foot and horseback. Over 80 percent of this area will remain accessible only by those means. The work we are doing in no way, in my opinion, would interfere or detract from the kind of development that would go on if this was made a national park.

As to the bristlecone pine——

Senator BIBLE. Before you get to the bristlecone pine, the building of this road, would this be in harmony with a national park as well as the presently designated Forest Service scenic area?

Mr. CLIFF. I am sure it would. Plans for this road have been known for a number of years. I think you have been aware of the plans for this road.

RUBY MOUNTAIN RANGE

Senator BIBLE. That is right.

What I have been trying to explain to you people in the Forest Service is that we have a noncontroversial area, this is sometimes hard to get, over in the Rubys, where we are trying to open up the area and everybody wants it there. It is hard to get you going there; you want to go into the Great Basin, where it is controversial. I want to get some of the money to open up the Ruby Mountain area which you know is one of the great scenic places in the West. I wish you would stay over in that area where they love you. It would make my life easier.

Mr. CLIFF. As you know, we have spent a great deal of money in the Rubys.

Senator BIBLE. You can spend more there and less in the Great Basin.

Mr. CLIFF. I am sure if we started building roads in the back country of the Rubys, you would hear about that from people who want to conserve that area.

Senator BIBLE. I am only speaking of the road you planned and designed. This is something you say you have to have to get up into the back area; we see eyeball to eyeball on that. This is a road you

recommended; not one I recommended. All I might say is that I wish you would continue to pour money into that area where you are not in trouble.

Mr. NELSON. Senator Bible, we are spending money and making good progress on the Lamoille Canyon road in the Ruby Mountains of Nevada. Since we talked, in this committee hearing a year ago, we have done the following: first, the road has been removed from the forest highway system by agreement of the State of Nevada, Bureau of Public Roads, and Forest Service. This made it clearly eligible for work using our road and trail development funds. Second, we have done the engineering design work. And, third, we prepared bids for contracting 5.3 miles on the south end. Bids for this section will be opened this spring at which time we propose to make an award to start construction. We still have right-of-way problems to be worked out for the north section of the road.

BRISTLECONE PINES

Mr. CLIFF. I am sure what we are doing in the Wheeler Peak area is not in conflict with good recreation development practices. Anything that we do there can be picked up and used by the Park Service if the area is made a national park. The road is being designed very carefully, the roadside treatment is being very well handled, and it is being designed with full appreciation for the preservation of scenic values.

As I said, over 80 percent of this land will remain roadless and be accessible only by foot or horseback.

Senator BIBLE. In completing the building of this road, I am frank to recognize whether the Forest Service or the Park Service operates this, you have to have roads. It can't be entirely roadless. Will there be some bristlecone pines in the middle of your proposed highway?

Mr. CLIFF. Mr. Nelson, will you answer that?

Mr. NELSON. There will not be.

Mr. CLIFF. We are just as interested in preserving the old bristlecone pines as anybody. We have an area in the White Mountains on the border of Nevada and California where we have set aside a large area for the preservation of the bristlecone pine and it is our intention to take care of these in Wheeler Peak area.

Senator BIBLE. Just one further question on the building of the road. My understanding is, as you continue to build the road, in accordance with the plans you have for opening up the Great Basin area, you will not cut any bristlecone pines?

Mr. CLIFF. There are no bristlecone pines in that area which will be removed, according to my understanding.

Senator BIBLE. My understanding was that you didn't need to cut the bristlecone pines. You could have core drilled or done what you wanted, but you took the tree and cut it down, distributed it in the form of paperweights, put it in hotels, things of that nature and we no longer have a bristlecone pine that was 4,900 years old.

Mr. CLIFF. We have a lot that are that same age and perhaps older. This one pine tree was cut down under a scientific permit by an instructor of geography at the University of North Carolina in 1964. It was done for scientific purposes. What was done with the wood

after he made his ring counts and analyzed the way these ring structures were built up, I do not know.

It is possible some of this wood was utilized for the purposes you indicate. It would have been wasteful not to put it to some use. I am not prepared to defend whether it was used for paperweights.

CUTTING VIS-A-VIS CORE-DRILLING PINE

Senator BIBLE. Defend why you cut it down when it could have been core drilled. It could have been core drilled or some other method could have been used to determine the life of the bristlecone pine.

Mr. CLIFF. I understand the man studying this wanted to investigate the stump, exposing all the growth rings, so he could interpret better the core drillings he took on other trees and it was done for that purpose. This particular tree was located in a stand of over 300 acres of bristlecone pines and some of them I am told were larger and apparently older than this one. The loss of this one tree seems to have stirred up a lot of sentiment.

Senator BIBLE. I think that is an understatement.

Mr. CLIFF. Frankly, it is my belief that the use of one tree for scientific purposes and studying the significance of these trees was justified. I am not prepared to question the validity of the action of the scientist. At the time our people felt it was justified. They gave this man a permit to cut one tree, it was done, a scientific study was made of it and it was designed to add to our general knowledge of these wonderful old trees, their age, significance of growth in relation to the climate and history.

Senator BIBLE. Is this a standard practice? Do you do this in other stands of bristlecone pines, if you get a request from scientists to saw down a bristlecone pine? Have you done this elsewhere?

Mr. CLIFF. I don't know of any instances elsewhere. As you know, the bristlecone pine is not uncommon. It occurs in many places. It is not a vanishing species; it grows in many places in the West. The loss of one tree is not crucial in my estimation.

Senator BIBLE. You say you have a stand of 300 acres? How many other pines are there as old as this one which was 4,900 years old and which was cut down?

Mr. CLIFF. I don't know how many per acre, but I imagine in that kind of place there would be a dozen to 20 or more trees per acre.

Senator BIBLE. Per acre multiplied by 300?

Mr. CLIFF. I don't know. I can only make a very broad guess, but I imagine there are several thousand trees there.

Senator BIBLE. Several thousand bristlecone pines remaining?

Mr. CLIFF. Yes.

Senator BIBLE. Thank you. I wanted that for the record.

Mr. CLIFF. I can get further information from people who are intimately acquainted with that. There are several thousand, I am sure.

Senator BIBLE. Several thousand remaining where they took this one down?

Mr. CLIFF. Yes. And many more elsewhere in that Snake Range.

Senator BIBLE. I am confining my question to 300 acres. My question is, approximately how many bristlecone pines are on the 300 acres? You say several thousand?

Mr. CLIFF. That would be my guess.

That is all the comment I have on that.

Senator BIBLE. I think that is a full explanation. Because of the furor raised, I wanted a full explanation from the Forest Service, and I think your explanation together with that of Mr. Iverson is quite complete.

Chairman HAYDEN. If you get further information on that, please place it in the record.

Senator BIBLE. I am not suggesting there is any need to try to have a tree count in 300 acres. I don't think it is necessary. I am willing to rely on your estimate.

SPRUCE KNOB-SENECA ROCKS, WEST VIRGINIA

Chairman HAYDEN. One of the major construction projects which you indicate, is related to the development at Spruce Knob-Seneca Rocks in West Virginia. Just what do you plan here?

Mr. CLIFF. I will ask Mr. Greeley to respond to that.

Mr. GREELEY. The budget which is before the committee contains $129,000 to initiate work at Spruce Knob-Seneca Rocks National Recreation Area. This will involve planning and making of surveys, it will involve a start on installation of facilities at camp and picnic grounds, vista points and the like. We will start some construction of a camp and picnic area near the South Branch Gorge.

TROUT POND AREA

Chairman HAYDEN. Fifty thousand dollars for recreation planning of the Trout Pond area was provided last year. What have you accomplished with this?

Mr. NELSON. That money was used to enter into an architectural and engineering contract to design a suitable dam, prepare construction plans and adequate cost estimates. Much of the work has now been completed in connection with this contract and we are completing our overall plans and cost estimates. We have also been using some of this fund to make the recreation feasibility plans in relation to the Trout Lake, which is a proposed lake adjacent to Trout Pond and often referred to as the Trout Pond project.

TICKET-DISPENSING MACHINES

Chairman HAYDEN. How well do the automatic ticket-dispensing machines work which you have installed at some of your recreation areas?

Mr. GREELEY. I will answer that. We have had good experience with this. We had had some experience prior to this year, because before the land and water conservation fund activities came upon us, we had had somewhat over a hundred campgrounds in the West where we had some experience in using these machines. We placed about a thousand of these ticket-vending machines in use last year. This is an effective way of handling the job that otherwise would require an employee to do. It is a cost-saving and efficiency item. We expect to place in operation additional machines this year. We found there was public acceptance. The people are willing to use them.

We had anticipated we would have a problem making change. This is not a big problem. People have become accustomed to the idea and

somehow they include, along with the salt and pepper to go camping, some half dollars.

GRAZING FEES

Chairman HAYDEN. What are your grazing fees for the latest available year?

Mr. GREELEY. For fiscal year 1965, our total grazing receipts, including both national forests and national grasslands, were $3,519,000.

Chairman HAYDEN. In your justification statement, it is asserted that reevaluation of user charges for livestock grazing should be completed in time to meet the 1968 timetable for new grazing fees. Would you please explain this?

Mr. GREELEY. Yes, sir. The Department of Agriculture has been working as a member of an interagency committee with the Department of the Interior and the Department of Defense in an effort to develop some factual basis for determining what the grazing fees ought to be if there is a decision to change them from what they are now. Within the last few months, the Bureau of the Budget has decided to participate in this. There has been a series of debates on this grazing fee problem, so 1968 has been determined as the time to use a new basis for determining fees. That is the target date this committee has decided it could meet. I would like to comment that we are committed in the Forest Service to discuss any changes in the livestock fees with the livestock industry before they are put in effect. That is a commitment we must honor and want to honor.

Senator BIBLE. We are constantly in problems on grazing fees with Bureau of Land Management and that agency points to Congress and says the Bureau of Land Management people should raise their grazing fees because the Forest Service grazing fees are higher. Generally, the answer is the forage within the permitted area of Forest Service is of a better grade. Could you furnish for the record the criteria you use in reaching your grazing fees that you charge? I would like to have it furnished for the record.

Mr. GREELEY. May I make a brief statement?

Senator BIBLE. Certainly.

Mr. GREELEY. One of the things frequently overlooked when comparisons are made between lands managed by the Bureau of Land Management and lands managed by the Forest Service, is that in the Bureau of Land Management, there is a flat fee. In the Forest Service there is a range of fees. When people make the statement the Forest Service fees are higher than Bureau of Land Management fees, this is oversimplification. On the average our fees are higher but we do have some ranges which are of poor quality or high cost operating ranges. In 1966, the Forest Service fee will be as low as 10 cents a head, 10 cents per animal per month. The range of fees goes from 10 cents to a high of $1.64 per animal unit.

Senator BIBLE. How do you determine that range? Is it based on AUM's?

Mr. GREELEY. No; on appraisals of individual ranges made 20 years ago. This is the part I would like to cover by statement.

DETERMINATION OF FEES

Senator BIBLE. I wish you would supply it for the record. It seems to me as a matter of fairness and good principle, that Government land, whether administered by the Bureau of Land Management or Forest Service should carry the same fee, for like quality land.

(The information follows:)

The Chief of the Forest Service determines fees to be charged for grazing on the national forests and national grasslands under authority granted him by the Secretary of Agriculture and within guidelines provided by Bureau of the Budget directives. The grazing fee system presently used by the Forest Service employs base fees for cattle and sheep developed from studies of lease rates on private grazing lands, State lands, and other Federal grazing lands. Currently there are 19 different base fee rates for cattle and 17 for sheep on the western national forests. In terms of allotments or grazing units where different base rates are applied, there are 174 base fee areas for cattle and 143 for sheep.

Annual fees are determined by formulas which relate the base fees to the relationship between the previous year's average price for beef cattle or lambs in the Western States and prices in established base periods. Thus, Forest Service grazing fees vary from one area to another and fluctuate from year to year in relation to livestock prices.

On the national forests, 1966 fees for cattle will range from $0.10 to $1.64 per animal month. The median fee will be about $0.56 per animal month. One-half of the fees will be above 56 cents; the other half, below. Sheep fees will range from $0.04 to $0.39 per sheep-month. The median fee for sheep will be approximately $0.11 per sheep-month. One-half of the sheep fees will be below 11 cents; one-half, above.

On the national grasslands, cattle fees will range from $0.51 to $1.68 per cow-month, with a median fee of about $0.85. Sheep fees on the national grasslands are one-fifth of those for cattle.

INTERDEPARTMENTAL REPORT

Mr. GREELEY. This is a task the Interdepartmental Committee has set itself to accomplish. The principle you just stated makes sense to us. There should be at least agreement in the principle.

Senator BIBLE. It would seem to me to make good commonsense. When will the interdepartmental report be complete?

Mr. GREELEY. We are working to get that done during fiscal year 1967.

Senator BIBLE. When is that, a year from now?

Mr. GREELEY. We have a target date to have it by 9 months from now.

Senator BIBLE. I appreciate that information.

Pardon my interruptions, Mr. Chairman, but I think this is important because the livestock people think there is a variation and the fact you are studying and trying to recognize the differences, is a step in the right direction.

REVEGETATION

Chairman HAYDEN. How many acres do you have yet to revegetate of the 4 million for which this work was planned during the 10-year period beginning in 1963?

Mr. GREELEY. Senator Hayden, our 10-year program for the national forest, which we discussed earlier, had a figure of 4 million acres in need of revegetation. We have done about 25 percent and there still remains about 3 million acres of that 4 million acres in need of treatment for revegetation.

COOPERATIVE AGREEMENT WITH SALT RIVER PROJECT

Chairman HAYDEN. I would like to ask about the agreement between the Forest Service and the Salt River project of Arizona, pertaining to watershed management practices on the Salt and Verde Rivers in that State. What were you able to accomplish with the funds available to you for this activity in fiscal year 1966 thus far?

Mr. CLIFF. Mr. Greenley will answer that from the administrative standpoint and from the research standpoint Dr. Jemison will handle it.

Mr. GREELEY. This has been a busy year, but we have made substantial progress and there is now a seven-man crew of scientists working full time on hydrologic surveys and analyses to provide basic information needed for water yield treatment prescriptions for individual watersheds. Today they have surveyed seven watersheds, totaling about a quarter million acres and this is a carefully done survey. We have also done treatment work on the Salt Creek area. Treatment work has been initiated on one pine and two juniper watersheds. In addition, there has been continued work on previously treated watersheds, and we have also done some construction and betterment of physical improvements needed for the conduct of this project. The major element of progress outside of Beaver Creek was the initial treatment of Brushy Basin, which is one on the other side of the area. The areas with deep soil have been planted with perennial grasses to aid in preventing resprouting of the brush.

During the past several years, Senator, you have been interested in knowing how the work in Beaver Creek can contribute to water supply problems and other portions of the arid west. I remember we discussed this before. I think you do know, but I would comment again that the national forest land in 11 Western States occupies about 20 percent of the land area, but produces over 50 percent of the water yield. Here's where the opportunities lie for increasing usable supply.

We are well launched in a program that we refer to as a barometer watershed program which will permit us to apply and to adapt research knowledge to other watersheds partly to use the information picked up at Beaver Creek and partly to use water supply and water quality information picked up in other research projects, and relate it to other specific projects in the West where we can measure those and determine the impact. These projects are the Lake Creek area in Colorado, one in the headwaters of the North Platte River in Wyoming, one in Utah, Big Creek, Sierra National Forest in California, the upper reaches of the Santa Ynez River in California, and the headwaters of the Umatilla in the Umatilla National Forest in Eastern Oregon, and I should add that treatment programs are underway on each of these with the execption of the Umatilla and one other.

We do have a small one in the Black Hills country in South Dakota. This is by nature a reply to a question you asked when we appeared before you last year.

Chairman HAYDEN. I am advised that the Salt River project will have available up to $400,000 in fiscal year 1967 to contribute to its cooperative project. How much of this sum will the Forest Service be able to match under its present budget?

Mr. GREELEY. During fiscal year 1966 we expect to spend about $120,000 for hydrologic analyses and water yield improvement prescriptions. In addition, we have allocated $200,000 to this project for treatment programs. It seems to us, and we so consider it, that the entire $320,000 for fiscal year 1966 will be expenditures which constitute a direct program of contribution to the treatment program. That is our matching for this year, and for next year it will be very close to the same level.

LAND CLASSIFICATION, ADJUSTMENTS, AND SURVEYS

Chairman HAYDEN. For land classification, adjustment, and surveys, you propose a program increase of $1,429,000 to a total of $5,805,000. Would you please detail the needs for this fund both in your regular program and in the Appalachia program?

Mr. CLIFF. Mr. Nelson will answer the question.

Mr. NELSON. Most of that increase would be used to strengthen our land exchange program and about 81 percent will be in the Western United States where we have a pattern of intermingled land, as you know. There will be a small part of the increased funds used to strengthen our land status program and landline programs, running of landlines and setting of corners.

The land exchange, land status, and landline program will be alloted in connection with our regular program and not have any particular relationship to the Appalachia program. We will use $22,000 of the increase for land classification studies. This will be related to the Appalachia program.

Most of the $22,000 would be used in connection with studies of the Potomac Basin, as recommended by the interim report of the Potomac interagency task force. There will be some allocation to the George Washington and Monongahela National Forests to study need for change in land status, recreation, and small reservoir improvements in the national forest of the Potomac, and this will be related to Appalachia. In connection with the land exchange where we expect to use most of our funds, one of the reasons we have asked for this increase, which will about double our land exchange program, is the land exchange program has some real fine cost benefits. Because of that the Bureau of the Budget and the Secretary's office have favored authorization of this increase. I have prepared a chart showing our programs and the increase in land we would acquire by exchange. We expect to acquire by exchange in fiscal year 1967 about 550,000 acres. The bars on the chart indicate the cost of avoidance over a 10-year period. This cost avoidance is based in four different items that we can clearly put a price on. They are indicated on page 1131 for the 1965 program which resulted in a $5 million cost avoidance. Exchanges lessen the number of lines we have to run and surveys and corners we have to put in. It lessens the amount of roads that we have to build, lessens the number of rights-of-way we have to acquire over private land and it lessens the number of special use permits we administer and occupancy trespass cases we have. It is a type of program that has some real cost avoidance benefits.

As you know, Senator Hayden, we have made some real progress in your State of Arizona. We have acquired much of the Aztec land

through the exchange process. We recently approved a new land exchange, and we are working on another, both of which will result in adding more of the intermingled Aztec lands to the national forests. We are working on exchanges for lands needed for expansion of some of the communities like Pine Top, Payson, Heber, and Sedona. Last week we approved an exchange for 75 acres at Sedona needed for community expansion. I think you have had correspondence about that area. The problem seems to have been worked out by the local board of supervisors and forest supervisor.

AIR TANKER SERVICE CONTRACT

Chairman HAYDEN. Last year in committee we discussed a problem that you were experiencing with your contracts for air tanker service for firefighting. As a result of this discussion, Congress appropriated an additional $500,000 for this purpose. I know that you are requesting a further addition of $516,000 in fiscal year 1967. Would you please advise the committee of the accomplishments with the $500,000 made available last year and indicate what additional you hope to gain with more funds in the coming year?

Mr. NELSON. It was this committee that put that $500,000 in last year and made it possible for us to enter this new system of contracting which allows us to have the more qualified aircraft operator and pilots. We believe, during this last year where we had about half our contracts under that new system which had a bearing on the fine fire record, which both Mr. Cliff and Mr. Baker mentioned. It was used for the purpose we indicated in the air tanker contract and the $500,000 we're asking for this year will allow us to use it with all our air tanker contracts.

Last year we estimated it would be $1 million for that contract. In connection with that, I might say this isn't necessarily all new money, because it has the effect of offsetting the forest firefighting funds. When we have a contract, we guarantee the operator so much money and he flies on that money for so many fires. Otherwise, we would be paying him from forest firefighting funds.

The area we will cover later is probably only half of what it was a year ago. This has been only one factor that helped to reduce the expenditures.

FIRE CENTER, BOISE, IDAHO

Chairman HAYDEN. I note that you are planning to establish a joint fire center with the Department of the Interior at Boise, Idaho. Can you tell the committee what this is about and how much you expect it to cost?

Mr. NELSON. Mr. Chairman, we do plan to join with the Interior Department, and particularly, the Bureau of Land Management to establish a joint fire center at Boise, Idaho. The center will be similar to some of the successful fire centers we have in the West at the present time, like the one at Missoula, Mont.; Redding, Calif.; and Silver City, N. Mex.; and we have felt for some time that we need a base at Boise, which is centrally located for our heavy firefighting situation. It includes Utah, Nevada, and western Wyoming, and in what we call region 4. The Bureau of Reclamation had a similar problem and we got together after that big Nevada fire a year ago. Instead of each going separate ways, we found it very desirable to go with them. The

Bureau of Land Management has, I believe, $100,000 to take care of engineering, planning, and contract design work. We don't know until that is done what the total cost will be, but we believe it will be in the neighborhood of $2 million. The Bureau of Land Management will have that because they plan to make a training base out of it as well.

We plan to use it for Idaho City and for other essential fire equipment, dispatching, and so forth.

Water Resource Development Related Activities

Chairman Hayden. For the information of the committee, please break down the projects on which you expect to expend $6,416,000 under the heading "Water resource development related activities." This is an increase of $1,646,000 over the amount appropriated last year.

Mr. Greeley. Senator Hayden, this activity covers three major categories, impact surveys, liaison with construction agencies, and activities to stabilize soil and provide for improved cover near reservoirs. The other major activity is the construction of facilities for public use and public access. This total of $6,416,000 will provide a million and a half dollars for the activity of impact surveys and liaison with construction surveys and $216,000 for soil stabilization.

The rest, $4,700,000 will go into projects of various kinds at reservoirs for public use and public access and for management activities.

Planned Allocation of Development Activities

I think it would be best to submit for the record at this point a list of the facilities, at which construction activities are planned rather than try to do that here.

Chairman Hayden. That may be done.

(The information follows:)

Public use, access, and management facilities [1]

Region	Forest	Project	Total
1	Kaniksu	Cabinet Gorge	$50,000
	Flathead	Hungry Horse	184,000
	Kootenai	Libby	130,000
2	White River and San Isabel	Fryingpan-Arkansas	90,000
3	Sitgreaves	Mogollon Rim	100,000
4	Ashley	Flaming Gorge	542,000
	Manti-LaSal	Joes Valley	75,000
5	Shasta-Trinity	Whiskeytown-Shasta-Trinity	737,000
6	Deschutes	Round Butte	87,000
	Willamette	Hills Creek	52,000
	Snoqualmie	Sultan Basin	246,000
	Wallowa-Whitman	Mason	111,000
8	Texas	Sam Rayburn	375,000
	Texas	Toledo Bend	375,000
	Mississippi	Chewalla	100,000
9	Hoosier	Monroe	231,000
	Do	Middle Fork Anderson	100,000
	Shawnee	Lake of Egypt	100,000
	Allegheny	Allegheny	1,000,000
	White Mountain	Basin Brook	15,000
	Total		[2] 4,700,000

[1] Typical components are sanitation facilities, parking areas, boat ramps, picnic and camp facilities, including tables and fireplaces, safe drinking water, and the necessary work center facilities needed to manage visitors to the project area. Operation and maintenance of these areas after installation, such as the Shasta-Trinity project, is provided for as a part of the regular recreation line item.

[2] Balance of funds are for impact surveys, construction liaison, soil stabilization, cover improvement, and related work.

ADVANTAGES OF MULTIPLE-USE OPPORTUNITIES

Mr. GREELEY. Last year we started a new line item for this activity because we have been running behind in meeting obligations of the Forest Service because of construction of dams and reservoirs on national forest lands where somebody else controls the timing and makes the decision about where it is going to be. It may be another agency such as the Bureau of Reclamation, or a State agency, the State of California, for instance. A rather definite and quite elaborate State water plan which involves water storage facilities built on national forest land is planned for the State of California. If we are to take advantage of the multiple-use opportunities which each of these reservoirs provides at the completion of these reservoir projects, we have to be able to do our work at the time the construction work is being done by such other agencies. We really are only just getting a good start on this activity at this time.

NORTH CASCADES, WASHINGTON, STUDY

Chairman HAYDEN. Recently there has been considerable discussion and publicity about the management of the national forests in the North Cascades in the State of Washington. What is the position of the Secretary and the Forest Service with regard to this area which has been studied?

Mr. CLIFF. Mr. Chairman, I would like to respond to that. There has been a study completed by a team made up of two representatives of the Department of Agriculture, one of whom was Mr. Greeley of the Forest Service. There were two representatives of the Department of the Interior and the committee was chaired by Dr. Edward C. Crafts, the Director of the Bureau of Outdoor Recreation. He is also in the Department of the Interior.

RECOMMENDATIONS MADE OF AREAS STUDIED

They studied the whole North Cascades country, which included parts of four national forests and one national park. The study report was just recently issued. The study team agreed on a large number of recommendations affecting areas within the North Cascades territory, but there was lack of agreement on the question of whether there should be a national park in the north end of the North Cascades. The chairman of the study team recommended that a national park be established between the Glacier Peak wilderness area and the Canadian boundary, taking out part of the North Cascades primitive area, the Pickett Range country.

The two representatives of the Department of Agriculture disagreed with this recommendation. It was their feeling that the Forest Service should continue to manage this area and in lieu of a national park, that the primitive area be managed as a wilderness area and that there be established a national recreation area between the Glacier Peak wilderness area and North Cascades primitive area.

The National Park Service member of the team recommended that there be a national park but recommended that it be located at a somewhat different place than the chairman of the study team recommended. There are actually three different recommendations.

This report was released in Seattle a little over a month ago. There was a press conference arranged by Senator Jackson. Secretary Freeman and Secretary Udall were present. Neither of the Secretaries expressed his position on this study team report.

It was agreed that there would be some hearings on the various proposals after which the two departments would be given an opportunity to review the hearing record and then Senator Jackson announced that he would ask the administration to prepare suggested legislation. There is no legislation pending as yet and the Department of Agriculture has not taken an official position on any proposed legislation. The Agriculture study team members' position I have explained to you.

FIGHTING FOREST FIRES

CHAIRMAN HAYDEN. You request your usual $5 million for fighting forest fires. How much supplemental appropriation will you ask for fiscal year 1966?

Mr. NELSON. $7,500,000.

LAND ACQUISITION

Chairman HAYDEN. For acquisition of lands under the Weeks Act you propose an appropriation of $2,480,000, that is $1,800,000 greater than the amount provided in fiscal year 1966. You indicate that the increase is needed to complete acquisitions, within the Redbird Purchase Unit, Kentucky, a part of the Appalachian development program. As I recall, $1 million was appropriated for initiation of this purchase in the supplemental appropriation bill for fiscal year 1965 and as a supplemental for fiscal 1966. What progress have you made in this purchase?

REDBIRD PURCHASE UNIT, KENTUCKY

Mr. NELSON. The progress is excellent. In mid-February we signed a contract for purchase of 22,000 acres within that Redbird Purchase Unit. We have an option at the present time for 38,000 acres that we would propose to purchase with fiscal year 1967 money. We are near the option stage in negotiations for another tract of 11,000 acres.

These three purchases would give us a total of 71,000 acres, an excellent nucleus for a ranger district. This would allow us to move forward with a program of management of the land. We have had volunteer offers from 35 landowners regarding some 17,000 acres in additional tracts available for purchase. We won't be able to purchase all those under this program.

You will recall the Land and Water Conservation Act prohibits the use of that fund in the Redbird Purchase Unit because it was not a part of the national forest system on January 1, 1965. These Weeks law funds are the only ones available to purchase land in the Redbird Purchase Unit.

I might point out this purchase unit is in eastern Kentucky, close to the Cumberland National Forest. It will be operated by the Cumberland National Forest with the supervising staff we have available. It was not originally conceived as part of the Appalachia program. It evolved before the present Appalachia program. It was established as a result of some very serious flooding in the eastern Kentucky area,

and as you recall, that part of the country has had serious floods a number of times.

The Governor of Kentucky during the last flood situation noticed those floods in the rivers of that part of Kentucky seemed to be worse than in the rivers coming from the national forest areas under the management of the Forest Service for a number of years. He asked and determined in his own mind that it would be better to have lands managed by the National Forest Service. He came to President Kennedy and asked if we would not take some of the lands in eastern Kentucky and place them in the national forest. We made a study and picked out this area, the Redbird area, which includes the headwaters of the Kentucky and headwaters of Redbird Rivers. We went before the National Forest Reservation Commission, made up of three Secretaries of Departments and four Members from the Congress. We put the question to them and they established the Redbird purchase unit.

At the same time, the Appalachia program was being studied and this fit in with the objectives of the Appalachia program. Funds for starting the purchase of land were included in the supplemental appropriations with the Appalachia program.

WEEKS ACT PURCHASES, 1965–66

Chairman HAYDEN. Would you please place in the record a statement indicating the Weeks Act purchases during the past 2 fiscal years, showing the number of acres, the forests to which they were added, and the amount which was expended for them?

Mr. CLIFF. We will be glad to do that.

(The information follows:)

Forest and State	Number of options accepted	Acres	Obligation
Cumberland, Ky	7	1,404	$36,218
Green Mountain, Vt	2	462	13,110
Jefferson, Va	11	1,851	79,084
Monongahela, W. Va	1	42	2,100
Chattahoochee, Ga	1	119	4,000
Cherokee, Tenn	1	112	2,007
Holly Springs, Miss	1	79	3,554
Ouachita, Ark	3	214	6,958
Ouachita, Okla	9	2,032	94,471
Ozark, Ark	24	3,984	94,662
Sumter, S.C	4	185	13,085
Chequamegon, Wis	1	1,174	3,944
Chippewa, Minn	4	1,668	11,697
Clark, Mo	8	1,296	116,455
Hiawatha, Mich	2	169	9,102
Hoosier, Ind	8	1,397	30,840
Huron, Mich	1	400	32,500
Manistee, Mich	4	101	2,458
Mark Twain, Mo	7	675	16,010
Ottawa, Mich	2	43	1,250
Shawnee, Ill	13	1,121	25,397
Wayne, Ohio	22	1,986	40,763
Total	136	20,514	639,665
Surveys and related acquisition cost			[1] 59,183
Total obligation			698,848

[1] A substantial part on lands to be acquired in fiscal year 1966.

Forest and State	Number of cases	Acres	Obligation
George Washington, Va	6	900	$20,000
Jefferson, Va	7	5,150	125,000
Green Mountain, Vt	5	350	5,000
Cherokee, Tenn	1	1,500	25,000
Ozark, Ark	14	17,150	70,000
Nantahala-Pisgah, N.C	2	95	7,600
Sumter, S.C	1	10	600
Ouachita, Ark. and Okla	5	160	16,800
Redbird, P. U., Ky	3	22,760	778,726
Hoosier, Ind	30	2,200	50,000
Wayne, Ohio	20	2,800	50,000
Shawnee, Ill	40	2,000	85,000
Clark, Mo	75	2,000	35,000
Mark Twain, Mo	30	1,000	25,000
Manistee-Huron, Mich	60	2,200	55,000
Hiawatha, Mich	25	1,500	35,000
Ottawa, Mich	1	2,000	60,000
Monongahela, W. Va	10	4,000	200,000
Nicolet-Chequamegon, Wis	1	500	15,000
Total	336	68,275	1,658,726

NOTE.—Surveys and related acquisition costs are included within the total estimated obligation.

FOREST RESEARCH

Chairman HAYDEN. Your forest research program for the coming fiscal year, exclusive of forest research construction, would amount to $34,435,000. This is a program increase of just over $1 million, all of which will be placed in the Appalachian area. Would you please discuss your proposed research program, touching on your main programs aside from the ones which you will carry on pursuant to the objectives of the Appalachian Regional Development Act? Of course the committee would also want to know what you are planning to do in the Appalachian area.

Mr. CLIFF. This is where Dr. Jemison is going to testify before this committee for the first time, and he will answer the questions on our forest research program.

Dr. JEMISON. As Mr. Baker mentioned, in his opening remarks, the items for Appalachia that show up in our budget as increases will provide the same amounts of money as were available in fiscal year 1966 as a result of a supplemental appropriation for this program passed in fiscal year 1965. The increases will enable us to continue these programs at the same levels as in fiscal year 1966. All of the research activities are in direct support of the basic objectives of the Appalachia legislation. We have work underway in four principal areas, all of which are aimed at utilizing the forest products of the Appalachian States, to better support the economy of the region and provide a fuller use of timber resources for expanded employment.

The first activity deals with developing improved and new uses of the somewhat low grade timber that grows in the region. In these efforts we are making very good progress, which I will return to in a moment.

The second activity deals with improving the marketing opportunities for the kind of forest products produced in region.

A third activity deals with intensifying the forest survey through which we inventory the timber resources. By intensifying the survey we can determine the feasibility for expanded industry or new industry.

The fourth project relates to developing engineering systems for harvesting and transporting timber to lower the unit production costs.

We have made substantial progress on all four fronts in Appalachia. I would like to show you two pictures which illustrate some of the work we are doing.

Mr. Dickerman will hold up a picture of some typical low-quality Appalachian hardwood logs. There are 12 logs shown here, and if they were processed into ordinary uses such as pallets, crossties, or rough dunnage, they would yield a product value of only $27. However, we have found through our research that if these low-grade logs are sawed and dried under a restraining process which prevents warping and splitting, this material can be made into attractive wall paneling or hardwood flooring as illustrated here. The value of those same logs, if processed in this way, is $97, or more than three times the value if used in the ordinary fashion. This is only one of many things we have been able to do in the utilization field in Appalachia.

Our marketing research program has also moved ahead very rapidly. It is not right to claim 100-percent credit for all new industry or expanded industry coming into a region. But we have had some part to play in the development of about 40 new or expanded industries based on the use of forest products as a result of our marketing research activities.

To illustrate, there has recently been established a small industry supplying highway guard-rail material made out of low-quality Appalachian hardwoods. This is employing 25 people.

Status of Forest Research Financing Schedules

Chairman Hayden. What is the status of the national forest research program financing schedule as compared to this budget?

Dr. Jemison. You will recall that Secretary Freeman sent to the Congress in early 1964 a national forestry research program. This program had some financial goals for the 10-year period ahead. It was not contemplated there would be any particular schedule of financing over the 10-year period. However, if you take where we are in this budget for fiscal year 1967, the midyear point in the 10 years, and see the progress made toward reaching these goals, instead of being halfway there, we are now roughly a quarter of the way.

Columbus and Delaware, Ohio, Reorganization

Chairman Hayden. What effects on research programs and space requirements are you experiencing as a result of your reorganization at Columbus and Delaware, Ohio?

Dr. Jemison. We have completed the consolidation of what was the Central States Forest Experiment Station with the two adjacent experimental stations. The consolidation contemplated the continuation of all the research activities without any change so this part of the program is unchanged. The effect of the consolidation has been to reduce our administrative support costs and the administrative personnel at the headquarters location.

Now we still have in Columbus, Ohio, a number of research people. When we get additional facilities in nearby Delaware, Ohio, some of them will be moved there. The Forest Service also expects to move a number of insect and disease control people to Delaware when facilities can be provided at that location.

Other Research Consolidations

Chairman Hayden. Would you please explain to the committee the other consolidations which you have effected in your research projects and your research locations in the past year, and indicate whether any additional consolidations either of research projects or of research laboratories is planned or desirable?

Dr. Jemison. We think we have made excellent progress, Mr. Chairman, in consolidating research at fewer locations. In fiscal year 1966, for example, we have closed the work at five locations and moved it to places where we had other programs. In fiscal years 1964 and 1965 we made 13 such consolidations. As a matter of fact, since 1959 we have closed out our work at 30 locations. We believe we have made good and steady progress toward reaching the bare minimum number of locations. At present we have work at 80. Now there may be some opportunity in the future to make further consolidations although we have gone quite a ways. We expect to give this matter continuing attention.

Beaver Creek Project

Chairman Hayden. Would you please place in the record a table showing the amount which you propose to expend under your 1967 budget for administration and for research on the Beaver Creek project?

Dr. Jemison. We will be happy to submit that for the record.

(The table follows:)

Project location	Fiscal year 1966	Fiscal year 1967
Administrative program:		
Beaver Creek-Coconino	$209,175	$116,294
Spruce Fir-Apache	23,453	17,453
Salt Verde action program	268,034	374,732
Total	500,662	508,479
Research:		
Beaver Creek economic evaluation, Flagstaff	151,000	152,000
Watershed research, Tempe	330,000	332,000
Controlled use of fire, Flagstaff	76,000	77,000
Total	557,000	561,000

Arizona Water Resource Committee Proposal

Chairman Hayden. The Arizona Water Resource Committee has proposed to the committee that an increase of $50,000 be made to the data collection and analysis project at Beaver Creek, $60,000 for extending analyses and evaluations of watershed treatment opportunities to other areas, and $60,000 for additional studies of prescribed fire. Are such increases provided for in this budget to accomplish the necessary work? Is there a need for such increases?

Dr. Jemison. Mr. Chairman, the increases you referred to are not provided for in the 1967 budget requests. The $50,000 increase you

mentioned for data collection and analysis on the Beaver Creek project would speed the handling of what is now a very major activity. As you will recall, we began work in Beaver Creek with a calibration of a number of watershed areas that later could be subjected to various land-treatment processes. Following this period of calibration we have entered into a program of land treatment. Now we are getting to a point where there is a major job of collecting and analyzing data so the final evaluations can be made on Beaver Creek. At such time as it might be feasible to add $50,000 for this purpose it could be effectively used.

The $60,000 you mentioned would be necessary before we could get into interpreteting the results of the Beaver Creek work for other watersheds such as the Barometer watersheds Mr. Greeley described. This evaluation and interpretive work is a necessary part of our future plans and at such time as these funds are available they could be effectively used. Last year this committee provided $60,000 to strengthen our fire research work which is also aimed at solving some of the problems associated with increasing water yield in Arizona and other Southwestern and adjacent States. We believe when it is possible to do so, the fire research program should be expanded but not at the $60,000 level you mentioned. We think an additional $30,000 would put this project on an effective operating basis.

Balloon Logging

Chairman Hayden. What is the status of your research on balloon logging?

Dr. Jemison. We have come up with a very exciting possibility in our balloon-logging research. We have completed engineering feasibility studies and are sure from the technical standpoint that balloon logging is entirely feasible. We have done considerable work to determine whether or not it is economically feasible. We know we are within the ball park from the cost standpoint.

Some of the things yet to be done include finding a better system of rigging balloons, a better ground system for handling and moving the equipment. We need studies of the best configuration of balloons, deicing equipment, improvement in fabrics, cheaper gas, and better designed safety devices. We think this is an extremely fine program and we have high hopes it will pay off.

Chairman Hayden. How much has been allotted for this research during fiscal year 1966?

Dr. Jemison. Our whole aerial engineering project has $42,000 of which about half, or $21,000, is specifically for balloon-logging research.

Chairman Hayden. How much is planned for balloon-logging research in 1967?

Dr. Jemison. The same amount, $21,000.

Chairman Hayden. In this research, what private industry contribution is there, both by way of equipment and money?

Dr. Jemison. Private industry has been a very substantial contributor to this whole activity. There have been four private companies which have done engineering and design work on balloon configuration. They have contributed to the field testing and have consulted on pilot testing of balloon logging. I would hesitate to put down

exact dollar values of all these contributions, but I would suppose it would be in the neighborhood of several hundred thousand dollars.

Chairman HAYDEN. Do you make any special arrangements with logging companies to experiment with balloon logging?

Dr. JEMISON. We have a three-cornered agreement now underway among one of the national forests in Oregon, a private logging company, and our own research group to carry on some field tests of balloon logging.

Chairman HAYDEN. What kind of arrangements do you make with balloon manufacturers?

Dr. JEMISON. We have had cooperative arrangements under which balloon manufacturers have been working closely with us on the design of balloons and also on the feasibility studies of using balloons in timber harvesting.

SPECIAL PRICES ON BALLOONS

Chairman HAYDEN. Do these manufacturers give special prices on the balloons, or do they perhaps furnish them at no cost?

Dr. JEMISON. The Forest Service has not purchased any balloons. There have been three experimental models made available through the manufacturers. These have been provided to us by the logging company which is our cooperator. I believe the company bought the balloons. Our best estimate is $60,000 for a small balloon and $75,000 for a larger one. These are experimental models so the costs are not production cost figures.

Chairman HAYDEN. What specifically is the Forest Service appropriation to be used for?

Dr. JEMISON. We expect to continue studies we have underway on the specific design of the balloon logging system. This coming summer we will get into some further pilot tests of balloon logging. We expect to use the $21,000 very effectively but progress will be somewhat slow.

HELICOPTER LOGGING

Chairman HAYDEN. Is there any logging done with helicopters?

Dr. JEMISON. To my knowledge, no logging is being done by helicopters. We have in the past and others have made some rough tests of helicopter logging. Our own work has been more or less confined to studies of dragging logs by helicopter both over land and over water and in developing pickup devices. We have not followed up on the helicopter-logging idea because it seems far less promising at this stage of development than balloon logging.

Chairman HAYDEN. Do you provide for helicopter-logging research in your new year's budget?

Dr. JEMISON. There is no provision for this in our 1967 budget.

BOUNDARY WATERS CANOE AREA, MINN.

Chairman HAYDEN. Last year unbudgeted funds were provided for recreation research in the Boundary Waters Canoe Area, Minn. What were you able to accomplish with this money?

Dr. JEMISON. Well, in the 8 months that we have had the $75,000 provided for Boundary Waters Canoe Area recreation research, I think

we have made a real fine start. We have contracted with a University of Minnesota scientist to assemble bits and pieces of information gathered in the past so we will have, at the beginning, a good summary of what is known about the pressure of people on the forest in an area like Boundary Waters. We have two new scientists on the job laying out studies to refine our knowledge of what the carrying capacity might be for each forest type under the pressure of use of the recreationists. We are studying methods to build up and improve areas of heavy use. These studies are going ahead and we think this will be a very productive activity.

CONSTRUCTION OF SEVEN LABORATORIES IN 1966

Chairman HAYDEN. Would you please inform the committee of the status of the construction work on the seven laboratories for which funds were provided in the fiscal year 1966 appropriation?

Dr. JEMISON. In general, our progress is very good. At Missoula, Mont., we have the construction underway, ground has been broken, and as the weather moderates construction will go forward. At Fort Collins, Colo., we are ahead of schedule. At Houghton, Mich., we are scheduling a bid opening soon and I feel confident as weather moderates, we will be able to go ahead with that project very rapidly.

At New Haven, Conn., we have the bids and are in the process of making an award to the lowest qualified bidder.

At Morgantown, W. Va., we have the foundation of the laboratory in and the superstructure is going up. At Olustee, Fla., our building is 75 percent complete. At Sewannee, Tenn., the building is close in and the finishing work is proceeding. We expect completion by May 1, 1966.

DESIGN AND SPECIFICATIONS FOR THREE LABORATORIES IN 1966

Chairman HAYDEN. What is the status of preparation of design and specifications for the three laboratories and laboratory additions included in the fiscal year 1966 appropriations?

Dr. JEMISON. At Olympia, Wash., our architectural design, floor plans and structural analysis is complete and we have a final determination of the cost of this building which will be $450,000. At State College, Miss., where we are designing a tree seed laboratory, planning is in the last stages. Our final plans are due in headquarters this week. At Athens, Ga., you may recall the planning funds for this project were received as a supplemental about mid-October. Thus, we got a later start on this project than the others. Design criteria for the Athens laboratory are completed and final estimates are being made prior to selection of the contract architect.

LABORATORY-OFFICE BUILDING, RADNOR, PA.

Chairman HAYDEN. What is the status of and the future need for the proposed laboratory office building at Radnor, Pa.? Answer this particularly with respect to its relationship to the reorganization of your units in the Eastern part of the United States.

Mr. HENDEE. The plans for the Radnor, Pa., building are proceeding according to the schedule we laid out. We let a design contract last year, in fiscal year 1965, and this contract was negotiated prior to the decision to reorganize the eastern complex of the Forest Service. We

have diagramatic sketches which have been submitted to the General Services Administration, and final plans are scheduled for September 1966.

The building is being designed on the criteria which was developed for the former regional office and the Northwestern Forest Experiment Station. Of course, the new office of State and private forestry and Northeast Experimental Stations we now have, will require less space at least for the immediate future. However, until the space is needed it will be used by other U.S. Department of Agriculture offices that are now housed in rented space in the Upper Darby, Pa., area.

Shipment of Trees

Chairman Hayden. In the material furnished with your project, entitled "Cooperation in Forest Tree Planting," I note that the number of trees shipped to landowners in the past 5 years has declined each year. What is the reason for this?

Mr. Cliff. Mr. Chairman, Deputy Chief Rasmussen is in charge of that work and he will respond to your questions on State and private forestry.

Mr. Rasmussen. Puerto Rico and 48 States cooperate in this program for the production and distribution of tree planting stock for establishing forests, windbreaks, shelterbelts, and farm woodlots. There are a number of reasons why the production has declined since 1960. These nurseries met current demands for tree planting stock. These demands have declined. First, the soil bank program was in operation in 1960 and 1961. When the soil bank program was completed, the demand for production of trees dropped accordingly. Second, there has also been a temporary surplus of young timber in some areas of the South. This has caused folks to look twice before putting areas into trees. However, the proposed new pulpmills in those areas probably means that they will resume planting trees.

Third, higher land values make some people reluctant to tie up their land for a long time. Fourth, many of the close and accessible tracts were planted under the soil bank program.

These forest tree nurseries are meeting the current demand for tree planting stock from farmers and woodland owners. We don't expect this demand to fall any lower.

General Forestry Assistance

Chairman Hayden. There is requested an increase of $328,000 in the general forestry assistance program. Will you please discuss this program for the committee?

Mr. Rasmussen. I will answer that question, Mr. Chairman. In fiscal years 1965 and 1966, we received a supplemental appropriation of $350,000 to step up the technical forestry assistance in the Appalachian States. The program is operated in cooperation with the State foresters. The States have added about 18 or 20 new foresters in the Appalachian States to provide technical forestry assistance to farmers and woodland owners. The requested increase will permit continuation of this accelerated effort of technical assistance to farmers and woodland owners in Appalachia.

FOREST ROADS AND TRAILS

1967 BUDGET REQUEST

Chairman HAYDEN. For forest roads and trails in fiscal year 1967 you propose an appropriation of $102,530,000, an increase of $1,358,000 over the fiscal year 1966 appropriation. I know that there will be a supplemental budget estimate for increased pay costs amounting to $964,000. When this is figured in, the increase is $394,000. The justification for this estimate will be printed in the record.

(The justification follows:)

Appropriation act, 1966	$101,172,000
Proposed supplemental, 1966, for increased pay costs	964,000
Base for 1967	102,136,000
Budget estimate, 1967	102,530,000
Increase	+394,000

This appropriation provides for the liquidation of obligations incurred for the construction and maintenance of forest roads and trails (and the purchase of access roads) pursuant to the authorizations contained in the Federal Highway Act of 1964 and the Pacific Northwest Disaster Relief Act of 1965. An appropriation of $102,530,000 for 1967 will provide sufficient cash to liquidate prior year obligations and obligations planned for fiscal year 1967 which must be paid by June 30, 1967.

Authorizations for appropriations [1]

Fiscal year	Construction	Maintenance	Total	Funded	Unfunded
1965	$66,800,000	$18,200,000	$85,000,000	$85,000,000	
1966	69,800,000	53,200,000	123,000,000	70,144,000	$52,856,000
1967	66,800,000	18,200,000	85,000,000	102,530,000	−17,530,000
Total	203,400,000	89,600,000	293,000,000	257,674,000	35,326,000

[1] The annual appropriation language and these justifications combine the appropriation for "Forest roads and trails" made pursuant to 23 U.S.C. 205 and the appropriation of 10 percent of forest receipts for construction and maintenance of roads and trails pursuant to 16 U.S.C. 501. This merger of funds is made in order to simplify the programing, allotment, and accounting of funds at the field level. Since the accounts for these 2 funds are merged it is not practicable to distribute obligations and expenditures between the 2 appropriations on a precise basis. The amounts shown for the "Forest roads and trails" appropriation are a proration based on the percentage that contract authorization used under the appropriated funds is of total available funds. Expenditure amounts for maintenance are based on all such obligations requiring cash payment during the fiscal year.

Status of unfunded authorizations

Unfunded contract authorizations beginning of 1966:	
Federal-Aid Highway Act of 1962 (Public Law 87–866) and Federal-Aid Highway Act of 1964 (Public Law 88–423)	$116,992,000
Federal-Aid Highway Act of 1964, as amended (Public Law 89–41)	38,000,000
Appropriation, 1966	−101,172,000
Proposed supplemental, 1966, increased pay costs	−964,000
New contract authorization, 1966 (1967 authorization available in 1966—Federal-Aid Highway Act of 1964)	85,000,000
Total unfunded beginning of 1967	137,856,000
1967 budget estimate (cash requirements)	102,530,000
Balance to remain unfunded as of June 30, 1967	35,326,000

Analysis of cash requirements

1. Unliquidated obligations June 30, 1965	$43,091,179
2. Estimated cash requirements to finance 1966 program	[1] 67,994,121
3. Total cash requirements by June 30, 1966	111,085,300
4. Less cash on hand 1966:	
Balance from 1965	8,949,300
Appropriation, 1966	101,172,000
Total	110,121,300
5. Additional cash needed for 1966 obligations (supplemental proposed in fiscal year 1966)	964,000
6. Obligations in 1966 for which cash was not provided in item 2	40,555,208
7. Estimated cash required to finance 1967 program	[2] 61,974,792
8. Total cash required for 1967	102,530,000

[1] An estimated 60 percent of the $85,949,000 new obligations, 70 percent of $20,350,000 obligations for Pacific Northwest flood damages, and $2,250,000 for obligations incurred in the Appalachian region will require cash payments during the fiscal year.

[2] An estimated 63 percent of the $82,301,000 regular program obligations and 70 percent of the $15,000,000 obligations for Pacific Northwest flood damages will require cash payments during the fiscal year.

PROJECT STATEMENT

The following tabulation reflects the total program for the construction and maintenance of roads and trails on the national forests by combining the funds available under the appropriation "Forest roads and trails" with the permanent appropriation of 10 percent of national forest receipts. This permanent appropriation for "Roads and trails for States" (10 percent fund) is estimated at $14,700,000 for 1967 compared with $14,203,671 for 1966, an increase of $496,329.

Project	1965	1966 estimate	Increase or decrease		1967 estimate
			Increased pay costs (Public Law 89-301)	Other	
1. Construction of roads and trails [1]	[1] $68,646,119	$82,898,000	+$190,000	−$2,087,000	$81,001,000
2. Maintenance of roads and trails [2]	[2] 36,825,453	39,855,000	+71,000	−8,926,000	31,000,000
Total obligations	105,471,572	122,753,000	+261,000	−11,013,000	112,001,000
Transfer from "Roads and trails for States"	−13,141,263	−14,203,671		+496,329	−14,700,000
Program under "Forest roads and trails" contract authorization	92,330,309	108,549,329	+261,000	−11,509,329	97,301,000
Obligations incurred under unfunded contract authorization	−16,358,309	−6,413,329		+11,642,329	5,229,000
Total increased pay costs (Public Law 89-301)	(----------)	(964,000)	(+261,000)	(----------)	(1,225,000)
Total available or estimate	[3] 75,972,000	[4] 102,136,000	+261,000	+133,000	102,530,000

[1] Includes obligations incurred for Appalachian region under 2d Supplemental Appropriation Act, 1965 (Public Law 89-16), approved Apr. 30, 1965:

1965	$250,000
1966	2,250,000

[2] Includes obligations incurred under Pacific Northwest Disaster Relief Act of 1965 (Public Law 89-41), approved June 17, 1965:

1965	$2,650,000
1966	20,350,000
1967	15,000,000

Also includes $8,450,000 obligations incurred for Pacific Northwest flood damages under the Federal-Aid Highway Act of 1964.

[3] Includes following cash amounts provided in 2d Supplemental Appropriation Act, 1965 (PublicLaw 89-16), approved Apr. 30, 1965:

Construction, Appalachian region	$2,500,000
Maintenance, Pacific Northwest flood damages	2,000,000

[4] Includes supplemental for $22,500,000.

Estimated obligations for Appalachian region (funds in connection with Appalachian Regional Development Act of 1965):

1965	$250,000
1966	2,250,000
1967	2,250,000

An increase of $394,000, including $261,000 to place 1966 pay costs on a full-year basis, is needed to meet cash requirements for liquidation of contract authorization. This appropriation provides for the liquidation of obligations incurred for the construction and maintenance of forest roads and trails pursuant to the authorization contained in the Federal-Aid Highway Act. An appropriation of $102,530,000 for 1967 is required to:

(1) Pay for obligations of the prior year which will be due for payment in fiscal year 1967.

(2) Pay the portion of 1967 obligations of $98 million contract authorization which will require cash payment in that year. This includes $85 million 1967 authority less $1.7 million advanced to fiscal year 1966 for construction of timber access roads in Appalachian region, plus $15 million authority provided in Pacific Northwest Disaster Relief Act of 1965.

(3) Pay for obligations incurred in connection with establishment of Whiskeytown-Shasta-Trinity and Spruce Knob-Seneca Rocks National Recreation Areas.

The level of financing will provide funds to meet the most critical needs for roads and trails required for sale of timber, for making recreation areas accessible, for faster attack on fires, and for meeting other transportation needs in the multiple-use management of the national forests. This level of financing assumes continued contributions to the road system by timber purchasers in meeting timber marketing goals. Timber purchasers are required to build only the standard of road necessary for a prudent operator to remove the timber. The Service will provide some additional funds to bring these roads up to the required standard for future timber sales and for recreation-type travel.

The national forest road and trail transportation system is an extension of the public highway system and is highly important in maintaining and increasing rural industries dependent on forest resources. It permits the urban dweller to leave busy crowded highways and enjoy the beauties and recreational opportunities offered by the national forests.

This growing use of the national forest roads and trails places additional requirements for these facilities to be maintained in a safe and usable condition.

The major projects planned for 1967 are:

	Miles	Amount
Flood damage repairs to roads and trails		$15,000,000
Recurrent road maintenance	188,133	13,000,000
Recurrent trail maintenance	102,947	3,000,000
Bridge construction units	195	4,920,000
Road construction	1,605	47,131,000
Trail construction	750	3,750,000
Surveys, plans, and supervision of timber purchaser roads	5,000	19,800,000
Supplementary timber purchaser roads	812	3,900,000
Road purchase		1,500,000
Total		112,001,000

EXAMPLES OF RECENT ACCOMPLISHMENTS

The June 1964 floods in Montana and Idaho plus the December 1964–January 1965 floods in California, Oregon, Washington, Idaho, and Nevada placed a tremendous workload on the areas involved. In addition, the Alaska earthquake caused considerable damage. Immediate repairs were started in all cases. Financing for these programs was provided by the Northwest Disaster Relief Act for $38 million, deferment of planned projects, and release of reserved authorizations. This program was planned and programed as follows:

	1965	1966	1967
Alaska earthquake	$300,000		
June 1964 flood	6,700,000	$1,700,000	
December 1964-January 1965 flood	13,000,000	21,350,000	$15,000,000

Under the regular program the existing system of roads and trails used for the protection and multiple-use management of the national forests is maintained and improved and additional facilities constructed to the extent authorizations are available. In the 1963–67 period 31 percent of the 10-year planned program has been authorized.

The transportation system is maintained in part by State and local authorities, licensees, permittees, and purchasers of Federal timber and other forest products. The following tabulation shows how the system was maintained in 1965:

[In approximate mileage]

	Roads	Trails
By the Government	113,417	98,145
By others	74,716	4,802
Total	188,133	102,947

During fiscal year 1965, $20,213,000 was obligated for flood repair; $16,612,000 for regular maintenance and $68,647,000 for road, trail, and bridge construction. In addition, purchasers of Government timber accomplished road maintenance representing an estimated expenditure of $7,024,000 and started construction on 4,362 miles of road estimated to cost $56,684,000.

Construction started in 1965 was:

	By the Government	By timber purchasers
Roads (miles)	1,613	4,362
Trails (miles)	671	
Bridges	175	

ROADS AND TRAILS PROGRAM

Chairman HAYDEN. Do you have any particular comment concerning your roads and trails program?

Mr. NELSON. Only to add to what I said earlier this morning. We have had a lot of floods that required us to reprogram a lot of our money and authorizations. The program in this budget is based on carrying out a program at the $85 million level of contracting authorization, which is the full current authorization we have under the Highway Act. Also it entails completion of the use of the $38 million of contracting authorization which was a special authorization for the Northwest floods. As I mentioned earlier, we expect to complete that in 1967.

Chairman HAYDEN. What were your roads obligations in connection with the establishment of Whiskeytown-Trinity-Shasta and Spruce Knob-Seneca Rocks National Recreation Areas?

Mr. NELSON. For 1966, we are using approximately $800,000 in the Whiskeytown-Shasta-Trinity National Recreation Area, for roads; we expect to use about the same amount of money in 1967. In the Spruce Knob-Seneca Rocks National Recreation Areas for fiscal year

1966, we have a contract for engineering and design work totaling $111,000 in relation to roads, especially a road that will be a prime access road to Spruce Knob. I don't have any figures for our estimate for 1967 but there will be some road funds used in 1967.

LAND ACQUISITION, SPECIAL ACTS

JUSTIFICATION

Chairman HAYDEN. There will be placed in the record the justification for your estimate of $80,000 needed for acquisition of lands in various national forests as authorized by special acts of Congress.

(The justification follows:)

Appropriation act, 1966	$80,000
Budget estimate, 1967	80,000

Project statement

Project	1965	1966	Increase	1967 estimate
1. Cache National Forest, Utah	$10,000	$20,000		$20,000
2. Uinta and Wasatch National Forests, Utah	14,730	20,000		20,000
3. Toiyabe National Forest, Nev		8,000		8,000
4. Cleveland National Forest, San Diego County, Calif.	8,000			
5. San Bernardino-Cleveland National Forests, Riverside County, Calif	8,000			
6. Sequoia National Forest, Calif	326	32,000		32,000
Unobligated balance reverted to national forests fund	28,945			
Total available or estimate	70,000	80,000		80,000

The Congress has enacted several special laws which authorize appropriation from the receipts of certain specified national forests for the purchase of lands to minimize erosion and flood damage. Appropriations under four of these special acts for 1966 are:

Forest and act

Cache (Utah), act of May 11, 1938, as amended	$20,000
Uinta-Wasatch (Utah), act of August 26, 1935, as amended	20,000
Toiyabe (Nevada), act of June 25, 1938, as amended	8,000
Sequoia (California), act of June 17, 1940	32,000
Total	80,000

There 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.

During fiscal year 1965, 3,462 acres of land were purchased under the special purchase authorities applying to the Cache, Uinta and Wasatch National Forests in Utah.

In this same period, 160 acres of land were purchased in the national forests of southern California under special laws enacted in 1938 and 1940. These acquisitions help to protect steep, critically valuable watersheds lying immediately above heavily populated urban areas.

Cache National Forest—In fiscal year 1965, funds were available from two sources for purchase of lands within the Cache National Forest in Utah.

1. The Receipts Act of May 11, 1938, as amended—$10,000. This is an annual appropriation.

2. The act of July 24, 1956—$200,000 appropriated under this authority in fiscal years 1957 through 1960. These funds remain available until expended. Through fiscal year 1965, $176,790 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 the 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 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 lands valued at $185,000. Additional contributions are expected in fiscal year 1966.

The appropriation of $10,000 under the act of May 11, 1938, is from receipts of the Cache National Forest. In the absence of this appropriation, the local counties would receive 25 percent of these receipts for roads and school purposes. 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 over 20 years and shared in by both the local agencies and the Federal Government through the national forests.

Through fiscal year 1965, 29,363 acres have been approved for purchase pursuant to the Receipts Act of 1938, and 15,014 acres under the Special Act of 1956. The 1966 objective is to acquire 1,500 additional acres of these critical watershed lands.

Uinta-Wasatch.—In fiscal years 1963 through 1966, an appropriation of $80,000 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 1,425 acres has been approved for purchase through fiscal year 1965 and an estimated 700 acres will be acquired during 1966. It is estimated that it will take from 4 to 5 years to complete the necessary American Fork acquisitions.

Sequoia National Forest.—In fiscal year 1966, $32,000 was appropriated under this act to begin a program of acquiring critical watershed lands. It is estimated that approximately 300 acres will be purchased during 1966.

Program Comments

Chairman Hayden. Do you have any comments concerning this program?

Mr. Nelson. These appropriations implement a number of different acts passed by the Congress whereby we used the receipts of the particular forest to acquire lands. Last year the amount for the Cache National Forest Special Act was raised from $10,000 to $20,000 because the local people concerned asked that we acquire additional lands. The lands acquired under these authorities are basically for watershed protection purposes.

Land Acquisition, Uinta National Forest

Justification

Chairman Hayden. There will be placed in the record the justification statement for appropriation of $300,000 for acquisition of lands for Uinta National Forest.

(The justification follows:)

Appropriation Act, 1966	
Budget estimate, 1967	$300,000
Increase	+300,000

Project statement

Acquisition of lands for Uinta National Forest:	
1965	
1966	
Increase	+$300,000
1967 estimate	300,000

Public Law 89–226 authorizes the Secretary of Agriculture to acquire approximately 10,000 acres of nonfederally 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. The lands to be acquired are located on the South Fork of the Provo River and constitute the watershed from which the city of Provo draws its municipal water supply. The lands are intermingled with, and surrounded by, national forest land which is now the property of the United States and acquisition of the 10,000 acres authorized by act would consolidate the national forest area and not only serve to halt erosion and promote flood control, but facilitate administration of the national forest.

The lands proposed for acquisition have been used for grazing domestic livestock for many years. A gradual attrition of the more desirable plant species and a materially reduced density of the ground cover on steep slopes have resulted in sheet erosion and numerous small active gullies. Most of the tributary drainages show gully erosion with active cutting along the steeper portions. Deposits of silt and debris of recent origin indicate deterioration of the watershed. If the lands are acquired, it will be necessary to limit and, in some instances, perhaps exclude grazing for varying periods of time in order to allow for reestablishment or recovery of the natural vegetative cover. Some watershed improvement work such as artificial reseeding may also be necessary. It is believed that the necessary rehabilitation work can be accomplished largely through intensified land management.

Most of the lands which would be acquired are in a single ownership and are available for purchase. The cost of all lands proposed for purchase is estimated to be $300,000.

CHANGE IN LANGUAGE

The estimates include proposed new language for this item as follows:

"For the acquisition of land in the Uinta National Forest, Utah, in accordance with the Act of October 1, 1965 (79 Stat. 899), $300,000, to remain available until expended."

The proposed language would appropriate funds for the purchase of lands within the boundary of the Uinta National Forest in accordance with recently passed legislation as discussed above.

PROGRAM PLANS

Chairman HAYDEN. This is a new program. What comment do you have with regard to it?

Mr. NELSON. This is to implement a new law that was passed last year by the Congress, Public Law 89–226. The estimate and request is $300,000. That would allow us to buy 10,000 acres of land which would be all that was intended by the act. We're confident this amount of money is what is needed. Nine thousand acres will be purchased from one owner. There are some small owners totaling 1,000 acres which we will buy.

I might also say that 1,000 acres are being purchased by the city of Provo. That is the higher priced land in the bottom of the canyon. This total area is a high-value watershed where the city gets its domestic water. It has been depleted by misuse and it will take better management to get the watershed into better condition.

ASSISTANCE TO STATES FOR TREE PLANTING

JUSTIFICATION

Chairman HAYDEN. Again this year you requested $1 million for assistance to States for tree planting under provisions of title 4 of the 1956 Agricultural Act. The justification for this request will be included in the record.

(The justification follows:)

ASSISTANCE TO STATES FOR TREE PLANTING

Appropriation act, 1966, and base for 1967	$1,000,000
Budget estimate, 1967	1,000,000

Project statement

Project	1965	1966 estimate	Increase	1967 estimate
Assistance to States for tree planting	$998,058	$1,019,576	−$19,576	$1,000,000
Unobligated balance, start of year	−17,634	−19,576	+19,576	
Unobligated balance, end of year	19,576			
Total increased pay costs (Public Law 89-301)		(3,400)	(+1,300)	(4,700)
Total available or estimate	1,000,000	1,000,000		1,000,000

This program helps provide for the Nation's expanding future needs for industrial wood through financial and technical assistance to the States in carrying out a Federal-State cost sharing program of planting, seeding, or other forestation work on nonstocked or understocked non-Federal commercial forest land. In addition, important side benefits are derived such as added employment in depressed areas, beautification of the countryside and expanded multiple-use opportunities. In fiscal year 1966, about 100,000 acres will be treated, and work on the production of improved seed will be done in 13 States. Nearly 20,000 man-months of employment will be provided by this rate of planting and seed production work. Conservative estimates indicate a need for planting 70 million acres of non-Federal land in the United States. At the present rate of all tree planting (1,035,000 acres annually), it will take 70 years to complete the job. This rate of progress is slow in relation to the need for improvement of the economically depleted areas in which these lands are located. There is also a pressing need for genetically improved seed which will produce faster growing trees of higher quality and with greater resistance to disease. This program is authorized under title IV of the 1956 Agricultural Act. It is designed to help the States accelerate forestation of non-Federal public lands and private lands for the production of industrial wood. Approved State lands propose the forestation of over 1.2 million acres mainly of State-owned and county forest land and other forestation work related to the production and processing of improved seed and nursery production in 34 States at an estimated cost of $40 million. This program will help materially with improvement of the overall economic development of many rural areas. Furthermore, the assistance to States for tree planting programs will furnish work opportunities that will supplement the objectives of the Economic Opportunity Act of 1964.

Generally, the areas in need of tree planting on the non-Federal public lands are in depleted condition, much of it covered with undesirable brush and shrubs that require costly site preparation work prior to planting or seeding to commercial forest tree species. The accomplishments under this program often serve as demonstrations that encourage adoption of appropriate planting practices.

This program enables the States to double their tree planting program on State-owned forest lands and to make effective progress in the production of genetically improved seed.

1964 accomplishments by States

State:	Acres treated
Arkansas	727
Florida	4,595
Georgia	566
Hawaii	2,730
Idaho	157
Illinois	153
Indiana	143
Iowa	360
Kentucky	294
Louisiana	85
Maine	2,052
Maryland	331
Massachusetts	258
Michigan	11,195
Minnesota	12,152
Mississippi	2,138
Missouri	2,636
Montana	1,125
New Hampshire	85
New Jersey	8,612
North Carolina	20
Ohio	1,218
Oregon	16,466
Pennsylvania	1,750
Rhode Island	44
South Carolina	5,811
Tennessee	418
Texas	900
Vermont	17
Washington	9,973
Wisconsin	2,545

During 1965 New York State came into the program. They plan tree planting on State and county forest lands in addition to their regular forestation program.

COOPERATION IN FOREST TREE PLANTING

Chairman HAYDEN. What particular comment do you have concerning this program?

Mr. RASMUSSEN. This is a cooperative program with State foresters to reforest State forest lands. It also includes some private land. It is a program in which the States are contributing $2¼ million in addition to the Federal funds. Last year, about 100,000 acres were reforested, reseeded, and brought into production. It is a reforestation program State foresters like and are using to place into production idle State forest land.

Chairman HAYDEN. What is the relationship between this program and the program which you call "Cooperation in forest tree planting?" Why are they not put together?

Mr. RASMUSSEN. Cooperation in forest tree planting is authorized under section 4 of the Clarke-McNary Act of 1924. It authorizes and directs cooperation with the States in the procurement, production, and distribution of forest tree seeds and plants to farmers and landowners.

Title IV of the 1956 Agricultural Act authorizes cooperation with States in the reforestation of State and private forest land. It covers

seeding and the actual planting of trees in the ground. I suppose there is no reason why they could not be combined. However to do so would require additional legislation. They are two separate pieces of legislation: one covers the production and distribution of tree planting stock; while the other covers the actual job of reforestation.

Mr. CLIFF. The tree planting, and reforestation work is authorized in the agriculture bill of 1956. It provides for assistance to the States to actually plant trees for commercial timber production mainly on State lands. The assistance to States for tree planting could be used to reforest private land, but so far it has been mostly on State lands. The cooperation in forest tree planting program provides planting stock only for reforestation on privately owned wood lots and other lands. It does not provides money to actually plant the trees. These are two separate programs, authorized by two different laws for two somewhat different purposes.

Mr. RASMUSSEN. The planting stock from the C–M4 nurseries is used on State lands as well as private.

TIMBER DEVELOPMENT ORGANIZATION LOANS AND TECHNICAL ASSISTANCE

JUSTIFICATION

Chairman HAYDEN. For expenses as provided in section 204 of the Appalachian Regional Development Act of 1965, you propose an appropriation of $500,000. The justification statement in support of this appropriation will be printed in the record.

(The justification follows:)

Appropriation act, 1966 and base for 1967	
Budget estimate, 1967	$500,000
Increase	+500,000

Summary of increase

	1966 available	Increase	1967 estimate
For loans and related expenses in Appalachian region		+$400,000	$400,000
To provide technical assistance to timber development organizations		+100,000	100,000
Total		+500,000	500,000

Project statement

Project	1965	1966 estimate	Increase	1967 estimate
Loan and related expenses		$600,000	+$100,000	$700,000
Technical assistance	$50,000	50,000	+50,000	100,000
Unobligated balance, start of year		−950,000	+650,000	−300,000
Unobligated balance, end of year	950,000	300,000	−300,000	
Total increased pay costs (Public Law 89-301)		(1,500)	(+500)	(2,000)
Total available or estimate	1,000,000		+500,000	500,000

An increase of $500,000 in appropriations is needed for the following purposes:

(*a*) $400,000 for loans and related expenses to provide up to one-half of the initial capital required for timber development organizations through loans under applicable provisions of the Consolidated Farmers Home Administration Act of 1961, and as authorized under authority of the Appalachian Regional Development Act of 1965. The loans will be used to supplement private capital required for the establishment of the private, nonprofit timber development organization under State laws. These organizations will provide management services (*a*) to improve timber productivity and quality, and (*b*) to increase returns to timber landowners in the Appalachian area. The organization will follow sound management practices and seek outlets for the timber produced. It it is estimated that 3 to 4 timber development organizations would be established during fiscal year 1967.

(*b*) *$100,000 to provide technical assistance in establishing and operating proposed private, nonprofit timber development organizations.*—It is expected that some of this technical assistance will be provided through the use of State forestry agencies but with financing of their out-of-pocket expenses from this appropriation. It will include costs for feasibility studies for specific areas having potential prospects for successful operation of timber development organizations. It is estimated that 3 to 4 feasibility studies will be made during fiscal year 1967, at a cost of $20,000 to $40,000 each.

Loans are needed to help local timber development organizations become established and to sustain them until they have had a good chance for long-term success. Technical, business, and managerial assistance to timber development organizations is needed for:

1. Feasibility studies to determine the suitability of potential locations;
2. Establishment of the organizations; and
3. Technical guidance until the enterprises are operating successfully.

In many areas of the Appalachian region, a chronic condition of underdevelopment and severe unemployment exists. As a result, many people are denied reasonable economic and cultural opportunities. In addition, the productive force in both physical and human resources is severely limited in its contribution to the Nation, while the costs of essential welfare services are steadily increasing. Technological advances have displaced the employment opportunity for many workers. This situation can be alleviated through purposeful and dynamic use of resources and technology available to us today. This region has great resources. Its people are productive and self-reliant.

At one time the Appalachian region was a center of lumber production. But when the lumber industry had harvested the virgin forests, production was drastically reduced. In its wake was left large areas of cutover forest lands that have taken decades to regenerate to the extent that they can once again be regarded as usable resources. For these reasons, special supplementary forestry programs are being provided for the Appalachian region.

CHANGE IN LANGUAGE

The estimates include proposed new language for this item as follows:

For loans under the applicable provisions of the Consolidated Farmers Home Administration Act of 1961 (7 U.S.C. 1926 et seq.) and for related expenses and technical forestry assistance, as authorized by section 204 of the Appalachian Regional Development Act of 1965 (79 Stat. 13), $500,000 to remain available until expended.

The proposed language would provide for financing timber development organization loans and technical assistance in the regular appropriation request for 1967. Funds for financing such loans and technical assistance in fiscal years 1965 and 1966 were provided in the Second Supplemental Appropriation Act, 1965 (79 Stat. 81).

SUPPLEMENTAL APPROPRIATION ACT OF 1965

Chairman HAYDEN. $1 million have heretofore been provided for this purpose in the Supplemental Appropriation Act of 1965. What has been accomplished with the money so provided?

Mr. RASMUSSEN. Mr. Chairman, the Appalachian Commission requested that a study be made to determine exactly what constitutes a

timber development organization so that they and we might make more adequate judgments as to the suitability and effectiveness of an application for a feasibility study. This study is underway by McDonald Associates. The first stage of this study should be completed this month. To date, this is about the only money expended under this appropriation.

Chairman HAYDEN. What is the total amount of the authorization for this program?

Mr. RASMUSSEN. The total amount is $5 million.

MISCELLANEOUS ACQUISITIONS, IMPROVEMENTS, PROVISIONS, AND FUNDS

Chairman HAYDEN. There will be placed in the record statements for which you have furnished regarding acquisition of lands for the Wasatch National Forest, Superior National Forest, Cache National Forest, and for access roads, none of which propose appropriations of any funds in fiscal year 1967; cooperative range improvements; administrative provisions; permanent appropriations; the working capital funds; and trust fund.

(The statements follow:)

(f) ACQUISITION OF LANDS FOR WASATCH NATIONAL FOREST

Project statement

Project	1965	1966	1967 estimate
Acquisition of lands for Wasatch National Forest	$109,005	$111,309	
Unobligated balance brought forward	−70,314	−111,309	
Unobligated balance carried forward	111,309		
Total or estimate available	150,000		

The act of September 14, 1962 (Public Law 87-661) provided authorization for the appropriation of $400,000 for purchase of privately owned lands within the Wasatch National Forest in Utah. The full amount of this authorization has been appropriated with the funds remaining available until expended.

The purchase of 2,411 acres of land was approved in 1965. It is expected that most of the remaining 8,500 acres will be acquired in 1966.

(g) ACQUISITION OF LANDS FOR SUPERIOR NATIONAL FOREST

Project statement

Project	1965	1966	1967 estimate
Acquisition of lands for Superior National Forest	$213,924	$325,292	
Unobligated balance brought forward	−539,216	−325,292	
Unobligated balance carried forward	325,292		
Total or estimate available			

The act of June 22, 1948 (Public Law 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, Minn. The full amount of this authorization has been appropriated with the funds remaining available until expended.

The legislation authorized and directed the Secretary of Agriculture to acquire any properties which in his opinion should be in Federal ownership in order to restore and preserve the wilderness character of the remaining canoe country

along the Canadian boundary in Minnesota. Only about six cases remain in which further negotiation is warranted or where additional work is required preparatory to condemnation action.

(h) Acquisition of Lands for Cache National Forest

Project statement

Project	1965	1966	1967 estimate
Acquisition of lands for Cache National Forest	$3,198	$23,210	
Unobligated balance brought forward	−26,408	−23,210	
Unobligated balance carried forward	23,210		
Total or estimate available			

The 1965 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 is included within the status of program for "special acts."

(c) Access Roads

Project statement

Project	1965	1966 estimate	1967 estimate
Access roads	$817,771	$63,224	
Unobligated balance start of year	−847,440	−63,224	
Recovery of prior years obligations	−33,556		
Unobligated balance end of year	63,224		
Total available or estimate			

The unobligated balance of $63,224 from the fiscal year 1962 appropriation will be fully obligated during fiscal year 1966. During fiscal year 1965, 16 cases were obtained involving 321 miles of new land easements or rights-of-way over existing roads or interests in existing roads. An estimated 12 miles will be obtained in fiscal year 1966.

This appropriation was eliminated in fiscal year 1964 and future access road purchase, beyond that to be accomplished with the balance remaining in this appropriation, will be accomplished under the "Forest road and trail" appropriation.

(i) Cooperative Range Improvements

Appropriation Act, 1966, and base for 1967	$700,000
Budget estimate, 1967	700,000

Part of the grazing fees from the national forests, when appropriated, are used to protect or improve the productivity of the range, mainly by construction and maintenance of fences, stock-watering facilities, bridges, corrals, and driveways. These funds are advanced to and merged with the appropriation "Forest protection and utilization," subappropriation "Forest land management."

Formula for Appropriation

Section 12 of the act of April 24, 1950 (Granger-Thye Act), provides that of the moneys 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.

The appropriation for this item since fiscal year 1951 has been $700,000, except

for fiscal years 1954 and 1955 when $531,000 and $400,000 were appropriated. Since the actual use figures are not available until after more than one-half of the fiscal year for which funds are appropriated has elapsed, the 1967 appropriation request of $700,000 necessarily represents the best current approximation of the amount which will become available in the calendar year 1966 under the animal-months-of-use formula.

For calendar year 1964, the latest available figures, use amounted to 5,492,216 animal-months for cattle and horses, 5,777,189 animal-months for sheep and goats, and 126 for swine. This use under the 2- and 10-cent formula calculated to $664,778.

ADMINISTRATIVE PROVISIONS, FOREST SERVICE

CHANGES IN LANGUAGE

Changes in the language of this item are proposed as follows (new language is in italic, deleted matter is enclosed in brackets):

Appropriations to the Forest Service for the current fiscal year shall be availiable for: (*a*) purchase of not to exceed one hundred and [nine] *sixty-five* passenger motor vehicles of which one hundred and [one] *fifteen* shall be for replacement only, and hire of such vehicles; operation and maintenance of aircraft and the purchase of not to exceed [six] *four* for replacement only; (*b*) employment pursuant to the second sentence of section 706(a) of the Organic Act of 1944 (5 U.S.C. 574), and not to exceed $25,000 for employment under section 15 of the Act of August 2, 1946 (5 U.S.C. 55a); (*c*) uniforms, or allowances therefor, as authorized by the Act of September 1, 1954, as amended (5 U.S.C. 2131); (*d*) purchase, erection, and alteration of buildings and other public improvements (5 U.S.C. 565a); (*e*) expenses of the National Forest Reservation Commission as authorized by section 14 of the Act of March 1, 1911 (16 U.S.C. 514); and (*f*) acquisition of land and interests therein for sites for administrative purposes, pursuant to the Act of August 3, 1956 (7 U.S.C. 428a).

Except to provide materials required in or incident to research or experimental work where no suitable domestic product is available, no part of the funds appropriated to the Forest Service shall be expended in the purchase of twine manufactured from commodities or materials produced outside of the United States.

Funds appropriated under this Act shall not be used for acquisition of forest lands under the provisions of the Act approved March 1, 1911, as amended (16 U.S.C. 513–519, 521), where such land is not within the boundaries of an established national forest or purchase unit [nor shall these lands be acquired without approval of the local government concerned].

* * * * * * *

The first and second changes would provide authority for the Forest Service to purchase 165 passenger motor vehicles of which 115 will be replacements. The justification of this need appears in the following pages.

The third change would provide authority for the Forest Service to acquire four aircraft, by purchase, for replacement only. The justification of this need appears in the following pages.

The fourth change would remove the requirement for approval by local governments of forest land acquisitions under the Weeks Act. The Land and Water Conservation Fund Act of 1965 provides major financing for the purchase of lands having a primary value for recreation. The act states:

"The purposes of this Act are to assist in preserving, developing, and assuring accessibility to all citizens of the United States of America of present and future generations and visitors * * * such quality and quantity of outdoor recreation resources as may be available and are necessary and desirable for individual active participation in such recreation and to strengthen the health and vitality of the citizens of the United States * * *."

The present language of the administrative provisions section makes it possible for a local government or official to estop purchase of significant tracts of land urgently needed for recreation or other purposes, even though the private landowner has voluntarily offered the property to the United States. This has occurred several times in the past. This change would permit the purchase of such land without local approval thereby allowing vital programs to go forward.

PASSENGER MOTOR VEHICLES

Purchase of passenger motor vehicles

During fiscal year 1967, it is proposed to replace 115 passenger vehicles. Of these, 102 will meet replacement standards and 13 will require replacement because of accidents or excessive maintenance costs. It is also proposed to purchase 50 additional passenger cars. Of these, 40 will be used as replacements or in lieu of additional ½-ton pickups and carryalls which are more expensive. The other 10 passenger motor vehicles will be additions to the Service-wide fleet to meet expanding program needs.

The Forest Service had 656 passenger carrying vehicles at the start of fiscal year 1966. It will add 8 units to its fleet during the fiscal year, making a total of 664 units available at the start of fiscal year 1967, excluding possible transfer to other agencies. It is proposed that the total number of passenger-carrying vehicles be increased to 714 by the end of fiscal year 1967. Due to program needs, it may be necessary to replace sedans with station wagons or vice versa, but this would not change the total number of passenger motor vehicles scheduled for replacement or addition.

Justification for substitution of passenger-carrying vehicles for light trucks

Currently, the Forest Service operates 528 sedans and 128 station wagons. In addition, the Forest Service has 7,744 ½- to 1-ton trucks. It is now possible to advantageously substitute some passenger carrying vehicles for pickups and carryalls. The pattern of utilization in some areas requires a sedan or station wagon-type vehicle in lieu of a truck.

The sedan or station wagon costs less to operate and maintain than a truck. For example, it costs the Forest Service 5.42 cents per mile to operate a sedan and 5.83 cents per mile to operate a station wagon in the Great Lakes area, whereas it costs 8.09 cents per mile to operate a ½-ton pickup, or 8.75 cents per mile to operate a ½-ton carryall in the same area. This type of cost differential between passenger cars and light trucks holds true in other parts of the country. If the Forest Service could substitute 40 passenger cars for light trucks, this would result in a savings of about $11,880 per year.

Use of vehicles

Passenger motor 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; and (4) regional office field-going administrative personnel in performing, directing, and inspecting fieldwork.

The Forest Service is essentially a field organization and its passenger motor 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 forests.

About 435 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 forest regional and 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.

Justification of replacements

Dependability of passenger 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 fieldwork as well as loss of effective worktime of employees. The continued use of overage 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 cars in a safe and satisfactory operating condition, it is the policy of the Forest Service to schedule periodic preventive main-

tenance inspections, services, and tuneups 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 standard 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 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 expenses. 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 motor 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 motor pools.

Justification of additions

The Forest Service analyzes current work plans and program in determining its overall passenger car 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. Expanding activities in research, timber sales, public use of recreational facilities, fire protection, and other land management activities are increasing the need for more passenger cars. These increasing needs are being met in some areas through greater use of interagency motor pool vehicles. These pools, however, serve only very small parts of the total land area administered by the Forest Service; therefore, increasing requirements for passenger car transportation in several areas cannot be fully met except through purchase of additional units for the Forest Service fleet. None of the additions requested will be assigned to areas served or scheduled to be served by interagency motor pools.

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 3 years and the estimated use for the budget year.

AIRCRAFT

Replacement and addition of aircraft

The 1967 estimates propose replacement of four aircraft by purchase and four by transfer from other agencies as available. The Forest Service currently has 57 aircraft:

Single-engine reconnaissance and transport airplanes	9
Light twin-engine reconnaissance and transport airplanes	10
Medium and heavy cargo and transport airplanes (10 medium, 4 heavy)	14
T–34B lead airplanes (2-place scout)	22
Helicopter	1
Forest spray airplane (Pawnee)	1

One light twin-engine airplane has been modified, equipped, and is being used to develop fire mapping with infrared equipment in low visibility of smoke and

at night. Results have been favorable with limited operational use planned for next season. The other reconnaissance and transport aircraft are used primarily to transport firefighters, smokejumpers, administrative personnel, equipment, and supplies to remote and inaccessible areas where commercial service is inadequate, or not available for detection and suppression of forest fires. They are also used 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 T-34B lead airplanes are primarily a single-purpose military model aircraft used by air tanker bosses to direct and control the dropping of fire retardants on forest fires by more than 150 tanker aircraft usually contracted from private owners.

The helicopter is used for training forest personnel in tactical use of helicopters and experimental development of techniques and equipment for direct tactical suppression of forest fires.

The replacements requested will be primarily light twin-engine airplanes. They will be utility airplanes that may be used for several purposes, such as lead planes for air tankers, small paracargo dropping, reconnaissance, and transporting freight and passengers. These will be new standard manufactured airplanes to upgrade with greater utility some old surplus T-34B's and single-engine reconnaissance airplanes which have reached an age in total number of flying hours where it is uneconomical to overhaul or modernize them to meet civil airworthiness requirements. These replacements will provide a more effective operation, with the wider twin-engine operation safety margin. Forest Service aircraft are operated to a large extent over rough mountainous terrain where landing fields are poor and few. It is especially important that these aircraft be maintained for maximum performance and dependability to provide an adequate standard of safety.

Other aircraft currently in use may be replaced as newer and more suitable models and types become available from military services as excess property. They would be obtained on transfer without reimbursement and would not increase the fleet beyond 57 aircraft. When aircraft are partially or completely destroyed in a crash accident they may be replaced out of any available fund. Many current Forest Service aircraft were manufactured during World War II, and obtained from military surplus. Most of these planes have nearly reached their limit of useful age. The military services have a few types of aircraft which have more potential suitability for Forest Service work that may become surplus in the near future. At present one medium cargo and personnel transport has reached the limit of economical usefulness.

(l) Roads and Trails for States, National Forests Fund

Appropriation, 1966 and base for 1967	$14,203,671
Budget estimate, 1967	14,700,000
Increase (due to an estimated increase in national forest receipts in fiscal year 1966)	496,329

The permanent appropriation of 10 percent of national forest receipts pursuant to the act of March 4, 1913 (16 U.S.C. 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.

(m) Expenses, Brush Disposal

Appropriation, 1966 and base for 1967	$8,500,000
Budget estimate, 1967	8,600,000
Increase	100,000

Project statement

Project	1965	1966 estimate	Increase	1967 estimate
Brush disposal	$8,536,170	$8,500,000	+$100,000	$8,600,000
Unobligated balance, start of year	−8,971,944	−9,987,145		−9,987,145
Unobligated balance, end of year	9,987,145	9,987,145		9,987,145
Total increased pay costs (Public Law 89-301)		(143,000)	(+55,000)	(198,000)
Total available or estimate	9,551,371	8,500,000	+100,000	8,600,000

Timber cutting normally increases the fire hazard because of dry fuel increase in the form of logging slash. This slash may also contribute to the buildup of insect populations, increase certain disease infestations, and cause damage to stream channels.

National forest timber sale contracts require treatment of debris from cutting operations or deposit of funds to pay for the work. When economical and expedient the work is performed by the timber purchaser. If it is not feasible for the purchaser to do the work, it is done by the Government using deposits made by the timber purchaser to cover costs of the work as authorized under section 6 of the act of April 24, 1950 (16 U.S.C. 490).

The effect of timber cutting and the manner of treating slash vary widely among regions. In the three eastern regions, volume cut per acre is relatively low, utilization is high, and generally, humid atmospheric conditions result in rapid decomposition of debris so little slash disposal work is necessary. An exception occurs in some sales where a heavier cut per acre is made, such as the jack pine stands of Minnesota. In such areas, slash is broken up 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 epidemic is sometimes necessary in these areas.

In contrast, the cost of slash abatement on most sale areas of the West is high. High volumes per acre generally produce heavy slash. Long dry periods with much lightning and man-caused fire risk result in extremely hazardous fire potential. The warm, humid condition necessary for rapid slash deterioration seldom occurs so more intense slash disposal is required. Treatment varies greatly with different methods of cutting. Clear-cut areas are broadcast burned. In selectively cut areas, debris may be piled for burning over the whole area or in strips which serve as firebreaks.

While slash disposal follows general prescriptions within regions, individual needs of each sale offering are planned and appraised prior to advertisement and appropriate specific requirements are incorporated into each timber sale contract. In each instance, the method used is the one which will attain adequate protection of the area at the least expense. In some instances adequate protection from fire is attained by providing additional protection until the slash hazard reverts to near normal. Logging debris which may move into water courses under these conditions must be removed. Greater intensity of fire protection for several years and occasional stream clearance may be less costly than complete slash disposal immediately after cutting. In such cases brush disposal funds are used to provide the needed manpower and facilities.

(n) Forest Fire Prevention

Appropriation, 1966 and base for 1967	$32,000
Budget estimate, 1967	32,000

Project statement

Project	1965	1966 estimate	Increase	1967 estimate
Forest fire prevention	$30,292	$37,000	+$5,000	$42,000
Unobligated balance, start of year	−44,316	−45,041	+5,000	−40,041
Unobligated balance, end of year	45,041	40,041	−10,000	30,041
Total increased pay costs (Public Law 89-301)		(425)	(+175)	(600)
Total available or estimate	31,016	32,000		32,000

The purpose of the project is public education on the need for the prevention of man-caused wildfires on all the Nation's forests and rangelands. Its goal is the further reduction of man-caused forest fires on all ownerships to the point where their impact on natural resource management programs is negligible.

This project is accomplishing its purpose in two ways:

1. By the dissemination to the public of Smokey Bear's forest fire prevention messages on commercial products licensed by the Chief of the Forest Service.

2. By support of the Smokey Bear Junior Forest Rangers and of the Smokey Bear Awards program through the contribution of fees and royalties by licensees.

The Smokey Bear licensing program is an important part of the cooperative forest fire prevention campaign which has been in effect for 24 years. The campaign itself has been conducted each year since 1942 as a cooperative project of the State foresters and the Forest Service, U.S. Department of Agriculture, and is a public service program of the Advertising Council. The campaign utilizes the free public service resources of the various national advertising channels such as car cards, poster display systems, radio and television networks, and magazine and newspaper allocation plans in developing public cooperation in the prevention of man-caused forest fires. Since 1945, this campaign has been built around Smokey Bear who has become recognized and accepted by the public as a nationwide symbol of forest fire prevention.

Under authorization of the act of May 23, 1952 (18 U.S.C. 711), the Secretary of Agriculture has issued rules and regulations governing the licensing program. These licenses specify payment of royalties (usually 5 percent) and set up certain controls for administering the program and collecting the royalties including advance deposits to protect the Government's interest. Such collections, along with appropriated funds, are used to finance the cooperative forest fire prevention campaign.

The licensing program provides about one-tenth of the total funds required for the cooperative forest fire prevention program.

(o) Restoration of Forest Lands and Improvements

Appropriation, 1966 and base for 1967	$100,000
Budget estimate, 1967	100,000

Project statement

Project	1965	1966 estimate	Increase	1967 estimate
Restoration of forest lands and improvements	$11,655	$118,443	−$18,433	$100,000
Unobligated balance, start of year	−19,134	−18,443	+18,443	
Unobligated balance, end of year	18,443			
Total increased pay costs (Public Law 89-301)		(745)	(+655)	(1,400)
Total available or estimate	10,964	100,000		100,000

Recoveries from cash bonds or forfeitures under surety bonds by permittees or timber purchasers, who fail to complete performance, are used to complete improvement, protection, or rehabilitation 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 U.S.C. 579c).

(p) Payment to Minnesota (Cook, Lake, and St. Louis Counties) from the National Forests Fund

Appropriation, 1966 and base for 1967	$140,619
Budget estimate, 1967	141,000
Increase	381

Project statement

Payment to Minnesota from the national forests fund (total available or estimate):	
1965	$137,763
1966 estimate	140,619
Increase	+381
1967 estimate	141,000

The act of June 22, 1948, as amended (16 U.S.C. 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 an amount equivalent to three-fourths of 1 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.

(q) Payments to Counties, National Grasslands

Appropriation, 1966 and base for 1967	$462,500
Budget estimate, 1967	462,500

Project statement

Payment to counties (total available or estimate):	
1965	$448,910
1966 estimate	462,500
Increase	--------
1967 estimate	462,500

At the end of each calendar year, 25 percent of the revenues from the 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 U.S.C. 1012).

(r) Payments to School Funds, Arizona and New Mexico

Appropriation, 1966 and base for 1967	$112,130
Budget estimate, 1967	115,000
Increase (due to an estimated increase in national forest receipts in fiscal year 1966)	+2,870

Project statement

Payments to school funds (total available or estimate):	
1965	$108,205
1966 estimate	112,130
Increase	+2,870
1967 estimate	115,000

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. Estimated payments in fiscal year 1966 to Arizona will be $111,794 and to New Mexico $336.

(s) PAYMENTS TO STATES, NATIONAL FORESTS FUND

Appropriation, 1966 and base for 1967	$35,504,367
Budget estimate, 1967	36,800,000
Increase (due to an estimated increase in national forest receipts in fiscal year 1966)	+1,295,633

Project statement

Payments to States (total available or estimate):	
1965	$32,837,416
1966 estimate	35,504,367
Increase	+1,295,633
1967 estimate	36,800,000

The act of May 23, 1908, as amended (16 U.S.C. 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 for the sale of national forest timber, grazing, and special use permits, etc., before the 25 percent is applied are listed below:

1. Payment to the State of Minnesota covering certain national forest lands in the 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, Public Law 733. 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, of shares of the gross receipts from the national forests in those States are proportionate to the areas of land granted to the States for school purposes within the national forests.

(t) WORKING CAPITAL FUND, FOREST SERVICE

This fund finances on a reimbursable basis various services such as repairing and replacing equipment, including aircraft, stocking and issuing supplies, operation of subsistence camps, operation of sign shops, photographic and reproduction facilities, and tree nurseries in support of programs of the Forest Service (16 U.S.C. 579b, as amended). These service operations serve programs of fire protection, timber utilization, construction and maintenance of roads and other improvements, reforestation, grazing, watershed, forest and forest products research, and kindred conservation activities of the Forest Service, including cooperative assistance with other Federal agencies, States, counties, and individuals engaged in the same objectives.

Operating results and financial condition.—Government investment in the fund as of June 30, 1965, including donated assets and retained earnings for fiscal year 1965, is $34,730,000. By the end of 1967, the investment is anticipated to be $41,247,000, an increase of $6,517,000 which represents estimated earnings and donations during 1966 and 1967.

Retained earnings as of June 30, 1967, will total an estimated $9,900,000, of which $7,146,000 will have been invested in additional equipment and increased cost of equipment replaced; $1,458,000 will be reserved for increased cost of equipment to be replaced and $1,296,000 will provide adequate working capital for operation of the fund.

(u) 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 the account, "Cooperative work, Forest Service," 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.*—

2. *Construction and maintenance of other improvements.*—Under the acts of June 30, 1914 (16 U.S.C. 498), and March 3, 1925, and April 24, 1950 (16 U.S.C. 572), deposits for cooperative work are accepted from State and local government agencies, associations, Federal timber purchasers, 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 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 private lands.*—The act of June 30, 1914 (16 U.S.C. 498), authorizes the acceptance of deposits 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 U.S.C. 572), authorizes the acceptance of contributions for the protection of private 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 private forest land intermingled with Federal ownership on the national forests. The lands in private 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 private 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 U.S.C. 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. Deposits in fiscal year 1965 under this authorization totaled $20.7 million. Fiscal year 1965 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 U.S.C. 572), and of section 210 of the act of September 21, 1944 (16 U.S.C. 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.

Subsection (c), section 5, act of April 24, 1950 (16 U.S.C. 572), provides broad authority to reimburse appropriations initially charged for expenses for cooperative services performed. The justification given in requesting this authority in the legislative history in House Report 1189 and Senate Report 1069, 81st Congress, is limited to emergency situations. It would be convenient and economical to use this broad authority to furnish cooperative scaling services to timber purchasers by charging appropriations available for this type of work. Collections would be made later from the purchaser whenever he has arranged to pay for stumpage and other related charges after such charges have been determined. Comptroller General's Decision No. B–150466 dated January 14, 1963, clarified the authority in section 5 of the act of April 24, 1950 (64 Stat. 82, 16 U.S.C. 572), to make collections in arrears for elective cooperative deposits related to timber sales applicable to payment bond procedures. In summary, the Comptroller General stated that he would have no legal objections to the Forest Service rendering services authorized by section 5 on a reimbursable basis in instances where: (1) it has been administratively determined to be advantageous to the Government, and (2) necessary precautions have been taken to insure the recovery of all costs involved. Including payment bond procedures; provided: (1) Deposits to appropriations do not exceed the amount of costs incurred, and (2) appropriate congressional committees be advised of our plans to use section

5(c) in situations other than the emergencies contemplated by the Congress at the time the law was enacted. Beginning in fiscal year 1964, the Forest Service used this procedure when appropriate.

6. *Research investigations.*—The acts of June 30, 1914 (16 U.S.C. 498), and May 22, 1928 (16 U.S.C. 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. 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 private lands.*—The act of March 3, 1925, as amended by section 5, act of April 24, 1950 (16 U.S.C. 572), authorizes the acceptance of contributions for the management of private lands. These contributions are made by private 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 U.S.C. 572), authorizes the acceptance of contributions for reforestation of private lands situated within or near a national forest. This work is limited to areas of private 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

Project	Balance available, June 30, 1964	Actual, fiscal year 1965			Estimate, fiscal year 1966			Estimate, fiscal year 1967		
		Funds received	Obligations	Balance	Funds received	Obligations	Balance	Funds received	Obligations	Balance
1. Construction and maintenance of roads and trails	$831,160	$1,665,680	$1,315,810	$1,181,030	$1,900,000	$1,900,000	$1,181,030	$1,900,000	$1,900,000	$1,181,030
2. Construction and maintenance of other improvements [1]	560,895	628,636	581,520	608,011	750,000	750,000	608,011	750,000	750,000	608,011
3. Protection on national forests and adjacent private land:										
(a) Fire	521,162	1,990,626	1,978,786	533,002	2,025,000	2,025,000	533,002	2,025,000	2,025,000	533,002
(b) Other	1,423,265	1,332,161	1,466,093	1,289,333	1,500,000	1,500,000	1,289,333	1,500,000	1,500,000	1,289,333
4. Sale area betterment on national forest lands (including reforestation)	28,184,836	20,726,759	16,810,722	32,100,873	21,000,000	20,000,000	33,100,873	22,000,000	21,000,000	34,100,873
5. Scaling of timber	267,179	846,673	875,009	238,843	835,000	835,000	238,843	835,000	835,000	238,843
6. Research investigations	284,259	831,225	836,493	278,991	900,000	900,000	278,991	900,000	900,000	278,991
7. Administration of private lands	9,775	11,196	11,501	9,470	5,000	5,000	9,470	5,000	5,000	9,470
8. Reforestation (private lands)	90,931	40,760	42,583	89,108	40,000	40,000	89,108	40,000	40,000	89,108
Total	32,173,462	[2]28,073,716	23,918,517	36,328,661	28,955,000	27,955,000	37,328,661	29,955,000	28,955,000	38,328,661

[1] Includes approximately $260,000 State hunting and fishing cooperative deposits.

[2] Includes $1,048 reimbursed to appropriation.

NOTE.—Balances carried forward are due primarily to necessity of deferring work for which funds are deposited until the most practicable time. For instance, funds for sale area betterment are received in advance of 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, weather conditions, etc.

Above obligations for 1965 include:

(1) Transfers to national forests fund of earned sale area betterment deposits in excess of obligations for sale area betterment work	$163,574
(2) Refunds to cooperators	151,862
	315,436

REQUEST FOR MOTOR VEHICLES

Chairman HAYDEN. Will you please explain to the committee the need for 50 new passenger motor vehicles?

Mr. HENDEE. Mr. Chairman, we are asking for a total of 165 passenger and motor vehicles, of which 115 will be for replacement. Of the 50 additional vehicles, 40 of them will be used in lieu of half-ton pickups and carryalls. We can operate sedans at a savings of approximately $300 per year, or a total of about $12,000 less for these vehicles than for what we operate now. Ten of these fifty would be for additions to the fleet due to expansion in our programs and need for these passenger-carrying vehicles.

Chairman HAYDEN. Indicate in the record where you plan to assign each of these vehicles.

Mr. HENDEE. We will supply that for the record.

(The information follows:)

PLANNED DISTRIBUTION OF 50 PASSENGER-CARRYING VEHICLES FOR FISCAL YEAR 1967

Location	Fleet addition	Replacement for truck
Regional office, Missoula, Mont	1	
Do		1
Nezperce National Forest		1
Kootenai National Forest		1
Coeur d'Alene National Forest		1
Dickinson, N. Dak		1
Black Hills National Forest	1	
Rio Grande National Forest		1
Medicine Bow National Forest		1
San Juan National Forest		1
Sitgreaves National Forest	1	
Coconino National Forest		1
Lincoln National Forest		1
Carson National Forest		1
Sawtooth National Forest	1	
Boise National Forest		2
Humboldt National Forest		1
Dixie National Forest		1
Wasatch National Forest		1
Los Padres National Forest	1	
Do		1
Angeles National Forest		2
San Bernardino National Forest		1
Shasta-Trinity National Forest		1
Umpqua National Forest	1	
Willamette National Forest	1	
Deschutes National Forest		1
Fremont National Forest		1
Malheur National Forest		1
Mount Baker National Forest		1
Okanogan National Forest		1
Siskiyou National Forest		1
Umatilla National Forest		1
Wallowa-Whitman National Forest		1
Wenatchee National Forest		1
Pacific Northwest station		1
State and private forestry, Athens and Dry Branch, Ga	2	
Naval stores, Valdosta, Ga		3
Georgia National Forest		1
Ouachita National Forest		1
Chippewa National Forest	1	
Do		2
Mark Twain National Forest		1
Northeast station, Columbus, Ohio		1
Total	10	40

MISCELLANEOUS STATEMENTS

Chairman HAYDEN. I have a number of letters and other material which I shall place in the record at this point.

QUESTIONS SUBMITTED BY SENATOR MCGEE

PINE BEETLE CONTROL SPRAY PROGRAM

Question. With reference to your spraying program to control the pine beetle, I have had comments from some of my constituents that this program has not been successful and that it has resulted in the killing of more good timber and wildlife than pine beetles.

Do you feel that your program has resulted in effective control of the pine beetle? What amount has been requested in this budget for beetle control and in what areas do you contemplate using these funds for this purpose?

Does the chemical or pesticide which you use in this process kill the timber in the area and does it kill birds, animals, and other wildlife, as I have been advised? If so, is there any alternative to this result?

Answer. Senator McGee, the spraying program to control the pine beetle is the spraying program around Jackson Hole, Wyo., against a large outbreak of mountain pine beetles in the lodgepole stands of Teton National Forest and Grand Teton National Park.

We are making good progress in controlling this epidemic. It is not yet under control, however, and at least another season of work will be needed before control will be attained. Several seasons of control effort are usually required to check a major bark beetle epidemic.

We are aware of the criticism of a few people who claim that spraying is killing more trees than the beetles and is killing birds and other wildlife as well. Such charges are common nowadays around large insect control projects that involve use of pesticides.

It is the beetles that are killing the trees, not the chemicals used in spraying them. Once beetles invade a tree that tree is doomed, although it may still look healthy to the casual observer. This is so because the beetles that are working under the bark have already done their deadly job of girdling the trees by the time insect spotters, trained in the telltale signs a tree is under attack, can find and mark the tree for spraying.

Treating the attacked tree destroys the beetle larvae in the tree before they mature and emerge to attack healthy trees. The beetle broods in one infested tree; if allowed to emerge will attack from 5 to 10 or more healthy trees. The epidemic around Jackson Hole has been an unusually virulent one and beetles are attacking on more than a 10 to 1 ratio. That is why that epidemic has been so destructive and hard to control. But the destruction of beetle broods in infested trees will break the back of the epidemic.

The pesticides used in bark beetle control are sprayed on the trunks of each infested tree by hand equipment. Spray nozzles are held close to the tree to enable the spray solution to saturate the bark and penetrate the tree to reach the beetles under the bark. It is not necessary to spray the branches or foliage of the trees, or to broadcast the spray. For this reason, there is little hazard to birds or other wildlife and we have never noted any damage to wildlife from bark beetle control projects.

Senator, spraying is not the only method of controlling bark beetles. Logging infested trees and hauling the logs with beetle broods in them from the woods to the sawmill is also an effective control measure. Logging is the first action considered in combating beetle outbreak and is always used in these cases where the timber is merchantable and sales can be made. Some bark beetle outbreaks can be handled entirely by logging. For others, logging is limited or cannot be used because trees are inaccessible, not otherwise currently merchantable, or are reserved from harvest as is the case in a national park.

Another method of combating a beetle infestation is to fell and burn the infested trees. This method can be used in winter months when burning is safe but not during the summertime when the fire hazard is high.

All three methods have been used in the Jackson Hole area to the extent each could be used.

Estimated needs for bark beetle control in 1967 are shown in the following tabulation:

Rocky Mountain States	$73,000
Southwestern States	81,000
Intermountain States	2,500,000
California	204,000
Pacific Northwest States	24,000
Southeastern States	600,000
Total	3,482,000

ACCESS AND TIMBER ROADS

Question. The matter of access roads which would allow a greater harvest of our timber resources from our national forests continues to be a matter of some concern to me and my timber people in Wyoming. As we are all aware, once a road has been constructed for the primary purpose of harvesting timber it is there for all to use—livestock producers, hunters, fishermen, and tourists—so that we are not talking about a single-purpose project. Since, however, they do primarily involve timber production, I suppose the Forest Service is under the greatest pressure to supply these road facilities.

In the area of Dubois, Wyo., it has been reported to me that a critical lack of access and timber roads is seriously curtailing the operations of the timber industry. Since this is one of the more important industries of that area, this allegation assumes considerable importance.

Would you supply for the record what appropriations have been requested for access and timber roads in this particular area?

Has the Forest Service given any thought to a program which would accelerate the financing and construction of access and timber roads throughout the country? Do you feel that the funds requested in your present budget now before this committee for this purpose will be adequate and sufficient to provide roads which will enable full and efficient timber harvests from Forest Service lands, or will some timber harvests be sacrificed due to lack of access roads?

Answer. First of all, Senator McGee, we completely agree that practically all roads built by the Forest Service are multiple-use roads. They serve the many uses of the national forests.

We have given considerable thought to a road program that would allow us to proceed in an orderly manner to develop the road system needed on the national forests and national grasslands to facilitate a more complete development and use of these important properties. From time to time, through a process of transportation planning, we revise our plan to keep it up to date. Currently the plan indicates an eventual road system of 396,000 miles. As of June 30, 1965, we had 188,133 miles but about half of this existing system is substandard for present needs.

The national forest development program transmitted to the Congress included an item for development of the transportation system on a gradual buildup basis. Fiscal year 1967 will be the fifth year of that program. Based upon the program implemented for these 5 years, we will stand at 64.9 percent of the road and trail program as recommended by the national forest program for appropriated funds under authority of the Federal Highway Act. You pointed out that many of our roads are initially built to facilitate the removal of timber. Our timber sale program has been financed at about 90 percent of the proposed program. Although these two are quite closely dependent upon each other, the road program is lagging.

It should be made clear that the controlling factor of how fast we can handle the important road program is the contracting authority which is set up in the biannual Federal Highway Act. This budget will give us sufficient funds to use all of the contracting authority we have. The Bureau of the Budget has allocated to us all of the contracting authority which the Congress has authorized. This committee has always appropriated the necessary cash to cover obligations made in using our contracting authority.

To be more specific, the present level of road development is such that it will not allow us to construct all of the roads needed to maximize timber harvest from the national forests. Harvesting of timber in some areas has to be deferred until we can get a road system established. The answer, however, is not with this budget or with this committee, but, rather, with the authorization limit within the Highway Act.

Speaking even more specifically to the Dubois area in Wyoming—within the program of authorization for fiscal year 1967 we propose to use approximately $174,000 in the Dubois area; $134,000 will be for road work, and $40,000 for trails.

STRAWBERRY ROAD BETWEEN STAR VALLEY AND GREYS RIVER ROAD

Question. I have received a letter on behalf of the Star Valley Development Association of Afton, Wyo., in reference to the so-called Strawberry Road in that valley. This proposed road is about 15 miles in length and is badly needed in connection with the operation of sawmill operations which were established a couple of years ago, largely with the assistance of Federal financing. I have also

been advised that the proposed cost of this road to $284,000. While the primary interest of this group is to assist the timber industry, we have here a proposed road that would be multipurpose and would serve many industries as well as the public generally. I would like to determine if the Forest Service can be of any assistance to these people and this area in the construction of this road; if so, in what manner and to what extent might some help be forthcoming?

Answer. Yes, Senator, we will help in construction of the Strawberry Road which is between Star Valley and Greys River Road. Construction of this road will be advantageous to the mill operation within Star Valley. We will do the location surveying. We will do the engineering design of the road, and when construction starts we will do the necessary construction engineering. We will also purchase and deliver to the project all of the needed culverts necessary for the drainage structures.

Also, I should point out, we propose to use fiscal year 1967 contracting authority of about $250,000 to construct a road on Sheep Creek, a tributary to Greys River, which is a source of timber that might be hauled over the Strawberry Road, depending upon what mill is the successful bidder.

REGIONS 2 AND 4 ACCESS ROADS

Question. Would you supply for the record the appropriations you have requested for access roads in regions 2 and 4? How does this compare with the appropriations which were made available for this purpose in fiscal year 1966?

Answer. Barring flood disasters or other items that may cause a rearrangement of allocation of contracting authority among regions, the fiscal year 1967 program for region 2 will be at a level of about $8,778,000—and the level for region 4 will be $10,196,000—or a total of $18,974,000. This compares with $19,273,000 used in fiscal year 1966, at which time there was special authority available for flood repair.

WILDLIFE HABITAT RESEARCH FACILITY, WYOMING

Question. For some time now, I have been extremely interested in the establishment of a facility in Wyoming to study wildlife habitat with some particular emphasis on the elk population. In prior testimony before this subcommittee Forest Service personnel have indicated that they believed there was an urgent need for this type of research facility in Wyoming and that it merited funding as soon as possible.

With the ever-increasing demands which are being made on our wildlife population, I feel that such a program would be most worth while, and I do hope that this committee and Congress see fit to make funds available this year so that we may commence the research and studies which are so badly needed.

In testimony, last year, it was indicated that such a program could be undertaken with an initial appropriation of $60,000. If that amount were to be made available to you this year by this committee and the Congress, would that be sufficient to take the necessary initial steps to establish this wildlife habitat research center?

Answer. Yes, sir. That amount of funding would be sufficient to take the initial steps and to activate this work at a modest level. In the development of the national forestry research program transmitted to the Congress by Secretary Freeman in April 1964, this project was envisioned at a higher level. But we feel that this research could be initiated in an effective manner with a minimum of $60,000.

QUESTIONS SUBMITTED BY SENATOR MUNDT

DEER REPELLENT PROGRAM, BLACK HILLS, N. DAK.

Question. I was interested in reading on page 75 of your justifications about the deer repellent work that was done in the Black Hills of South Dakota. Was this work accomplished by the forest research laboratory in Rapid City?

Answer. Yes, sir. This work, carried out in cooperation with the Denver Wildlife Laboratory of the Fish and Wildlife Service, was accomplished at the Rapid City laboratory.

STAFFING RAPID CITY LABORATORY

Question. Speaking of the Rapid City laboratory, you will recall at our hearings last year you informed me that an additional $120,000 was needed to fully staff the laboratory. I submitted an amendment to provide that amount which was accepted by our Senate committee. The conference, however, reduced the amount for the laboratory to an additional $60,000. If we were to provide another $60,000 this year would this amount fully staff the laboratory or would more be needed?

Answer. An additional $60,000 would fully staff the laboratory at Rapid City.

FOREST RESOURCES IN SOUTH DAKOTA

Question. Your justification discusses, in the middle of page 96, field inventories of timber resources that have been completed during the past year. You indicate an inventory was completed for South Dakota. Could you provide information on this inventory to the committee?

Answer. Information on forest areas and timber volume in the western portion of South Dakota was published in 1964. A comprehensive report on the forest resource situation and outlook for the State as a whole will be completed in mid-1966.

AERIAL LOGGING

Question. I was deeply interested in your discussion of aerial logging systems on page 95 of the justifications. You say that "design and operating criteria, heretofore lacking, are being developed to insure economical and safe balloon and skyline logging systems." Last year Chairman Hayden and I offered an amendment to provide $200,000 for research on harvesting timber from difficult access areas by balloon logging. We lost this amendment in conference. What would you say about the present need for an amendment of this type and how much money do you feel it should cali for?

Answer. Aerial logging systems represent some of the most promising opportunities to harvest timber from steep, highly erodable, and inaccessible mountain slopes.

Balloon logging is one of the aerial logging approaches which our research has already shown to be sound from an engineering standpoint. We have carefully developed the specific steps that must be taken in research to make a balloon logging system workable and economically feasible. We attach a very high priority to this project.

In the early development stages of the Forest Service budget, we determined that $500,000 would be required to implement a full program of research on aerial logging systems and to make the balloon logging phase fully operational for timber harvesting in the next several years. Due to the tight budgetary situation, we dropped this suggested increase.

We expect to scale our research upward from the present $42,000 available for aerial logging systems research to the level of $500,000 in the years ahead as the budgetary situation permits. Balloon logging, which is an integral and major part of this research program, would be scaled up substantially from the $21,000 now going into the work as the funding for the total program increased.

MOVING OF HEADQUARTERS FROM CUSTER TO RAPID CITY

Question. I've had numerous letters from constituents concerning rumors that the Forest Service might move its headquarters from Custer to Rapid City. This would be a blow to Custer. It is my understanding that one of the reasons for the proposed move is that your people are in five buildings in Custer. Why can't we provide adequate facilities in Custer that would take care of the situation? How much space is needed and what would it cost? How long would it take to get the planning done and what would that cost?

Answer. The space situation at Custer is one which has given us considerable concern, also. You are correct in your statement that the Forest Headquarters at Custer is very important to that small city and the decision to keep it there depends upon adequate office space and housing being made available. On a relative priority basis we have not been able to provide those facilities. When the overall budget situation permits, we should hope to work something out there to relieve the present unsatisfactory condition where our people are in offices at five different locations.

Our preliminary estimates are that about $670,000 would be needed to provide 15,000 square feet of office space and 12,000 square feet of warehouse and shop space. Included in this estimate would be the water, sewer, walks, roads landscaping, and related items. An additional $25,000 would be needed for land purchase and $60,000 for architect and planning services for this facility. This $85,000 would be the funds required for the planning operation which could be completed within a year's time.

QUESTIONS SUBMITTED BY SENATOR STENNIS

SOUTHERN HARDWOODS LABORATORY, STONEVILLE, MISS.

Question. Several years ago the Southern Hardwoods Laboratory was dedicated at Stoneville, Miss., for research on southern hardwoods. Has this project been staffed at the level contemplated when the Laboratory was dedicated?

Answer. No, sir; we have not had the resources to staff this Laboratory at the level called for in the national forestry research program and in the Laboratory plans.

Question. What is the nature of the problems that would require further staffing?

Answer. The problems requiring study are improvement of cultural methods for growing southern hardwoods, and reduction of losses from insects and diseases.

In silviculture of southern hardwoods, the problems most in need of study are methods of managing the swamp tupelo and cypress forests of the alluvial bottom lands, and methods for reducing animal damage in order to assure future timber crops.

The proposed insect research would find ways to reduce the ravages of boring worms which cause degrade of oak timber. Disease research would be directed at reducing losses caused by wood rots, root rots, and cankers that attack southern hardwood trees.

Question. What increase would be needed to staff the Southern Hardwoods Laboratory for study of these problems?

Answer. We estimate that an increase of $250,000 would be needed for effective staffing of this program when resources permit.

NEW LABORATORY AT OXFORD, MISS.

Question. In fiscal year 1965, funds in the amount of $35,000 were provided for preparation of design and specifications for a Forest Hydrology Laboratory at Oxford, Miss. What is the status of planning for this Laboratory and what will the costs for construction be?

Answer. Detailed design and specifications for this Laboratory have been virtually completed and we are now in the process of working out a few final construction details with GSA. The estimated cost of constructing this research facility is $450,000.

Question. Why is a new laboratory needed at Oxford at this time?

Answer. A new laboratory is needed to accommodate the watershed research program at Oxford.

Presently, the Forest Service scientists are housed in a temporary structure on the campus of the university. This structure is inadequate to meet both the space needs of the program and the Laboratory facilities necessary to speed up research accomplishments.

The research program is concerned with developing practical techniques for rehabilitating severely eroded lands, developing methods of managing vegetation to augment ground water recharge and sustain streamflow, and to develop management methods to prevent a new cycle of erosion.

Question. If funds were provided for construction of this Laboratory in fiscal year 1967, could the Forest Service advertise for bids, and award the construction contracts?

Answer. Yes, sir.

LABORATORY AT STATE COLLEGE, MISS.

Question. In fiscal year 1966 funds were provided for preparation of design and specifications for a laboratory at State College, Miss., for research on forest seed production and handling problems. What is the status of planning for this laboratory?

Answer. Detailed design and cost estimates for the seed laboratory have been completed.

Question. What is the estimated cost of constructing the laboratory and auxiliary facilities?

Answer. The estimated construction cost is $250,000

Question. Will you highlight the particular problems that would be attacked at this laboratory?

Answer. This laboratory would be used for research on problems of tree seed and seedlings, particularly of important southern hardwood species. Advantage would be taken of excellent cooperation available from Mississippi State University's outstanding agricultural seed research program.

Seed research would concern the requirements for successful storage, sowing, and early germination of seed of southern hardwoods, about which very little is known. Some related research on pine seed problems would also be included. The seedling research would be directed to nutritional and other requirements of valuable hardwood species for early survival and rapid growth.

Question. If funds were provided in fiscal year 1967 could the Forest Service advertise for bid and let the construction contracts?

Answer. Yes, sir.

FORESTRY RESEARCH, PACIFIC NORTHWEST

LETTER FROM SENATOR MAGNUSON

U.S. SENATE,
COMMITTEE ON COMMERCE,
March 1, 1966.

Hon CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate.

DEAR SENATOR: Attached is a letter addressed to me by Hon. Bert L. Cole, Commissioner of Public Lands of the State of Washington.

The commissioner requests that his letter and the attached statement be included in the record of the hearings on Interior Department and related agencies appropriations.

I will deeply appreciate your complying with Mr. Cole's request.

Kindest personal regards.

Sincerely,

WARREN G. MAGNUSON,
U.S. Senator.

LETTER FROM COMMISSIONER OF PUBLIC LANDS, STATE OF WASHINGTON

FEBRUARY 25, 1966.

Hon. WARREN G. MAGNUSON,
U.S. Senate,
Washington, D.C.

DEAR WARREN: I am concerned about forestry research in the proposed budget of the U.S. Forest Service for fiscal year 1967.

Because of your position on the Appropriations Committee, I ask that you give special attention to two high-priority items which are particularly important to this State and region, but which are not provided for in the budget.

The attached statement highlights my thoughts on and support for early construction of the proposed Forestry Research Laboratory at Olympia and for an accelerated program in aerial logging systems as a part of the engineering research project headquartered in Seattle.

Please include this letter and the attached statement for consideration in the record of the hearings. I know you are familiar with this need, and I greatly appreciate your careful consideration and vigorous support of such items so important to the West.

Very truly yours,

BERT L. COLE,
Commissioner of Public Lands.

STATEMENT OF COMMISSIONER OF PUBLIC LANDS, STATE OF WASHINGTON

ACCELERATED FORESTRY RESEARCH NEEDED IN THE NORTHWEST

The forest industries of Washington and Oregon are a vital part of our growing Pacific Northwest economy. They employ one-tenth of the entire labor force. In 1963, the forest industries of these 2 States employed 138,900 people and generated $1.5 billion of the total value added by manufacturing. These employees received $827 million in wages. In our State of Washington, I am directly concerned that the forest resource be managed and utilized wisely and economically as a continued sound basis for economic strength and social well-being.

Olympia Research Laboratory

The Washington State Department of Natural Resources has for several years been an active partner with the U.S. Forest Service in two cooperative forestry research projects at Olympia, Wash.

One project has the important task of increasing the level of yields in Douglas-fir forests through the development of more efficient, cultural practices—measures such as thinning, pruning, fertilizing, and the prompt start of a new tree crop after the mature trees have been harvested. As the foremost timber tree in Oregon, Washington, and northern California, Douglas-fir is a primary source of raw material, now and in the future, for forest-based industries in these areas.

A second project at Olympia seeks to find effective, economical, and safe control methods for the mounting losses that animals—rodents, rabbits, porcupine, bear, deer, and elk—are causing in our Nation's forests. In Oregon and Washington alone, total damage to trees, seeds, and seedlings is estimated at $15 million each year. The U.S. Bureau of Sport Fisheries and Wildlife is also an active participant in the animal damage research effort.

For several years, progress in these two important projects has been impeded by lack of adequate laboratory and related facilities. The small temporary building and office-trailer now shared by scientists of the two Federal agencies are grossly inadequate to meet even minimum program needs.

Northwest forestry agencies and industry were, therefore, greatly encouraged when Congress last year appropriated $35,000 to enable the Forest Service to draw up plans for a new Silviculture and Animal Problems Laboratory. To facilitate this effort, the Washington State Department of Natural Resources last fall purchased 10 acres adjacent to the Webster Forest Nursery at Olympia, and leased the tract to the Forest Service to provide a much-needed site for the new laboratory. Plans and specifications for the new building will soon be complete.

We are extremely disappointed to learn that funds for constructing the new laboratory—estimated at $450,000—are not included in the budget for next year (fiscal year 1967). We question if economy in Federal spending is really served by jeopardizing progress in vital forestry research through further delay in constructing an essential laboratory facility.

The need for this laboratory building grows more serious each month and I strongly urge that construction funds be provided without further delay in the appropriation bill now being considered by Congress.

Aerial logging research

Technological improvements have been one of the main sources of strength for the forest economy in the Pacific Northwest. The forest industries and public agencies can share the credit for the advances that have been made in forestry, logging, and processing. Chemical bombing of forest fires, the track-type tractor, the powersaw, plywood, fiberboard, and numerous other technological developments can be cited. Our growing national and regional economy will continue to require these kinds of developments—and even at a faster rate.

One of the most promising possibilities for technological progress that I have seen in the last few years is that of aerial logging systems, particularly skylines and balloons. These systems promise to contribute substantially to more effective and economical logging throughout the West, including Alaska. In my own State of Washington, large areas of young-growth forest, both public and private, are nearing merchantability as a result of our past and present efforts in forest protection, especially against fire. Western Washington is the major timbered area in the West, I am proud to say, where timber growth is most rapidly approaching the level of the timber cut.

This kind of young-growth timber covers several million acres in the Douglas-fir subregion. It will increase in importance as the younger stands grow. However, at present there are more than 2.6 million acres of young timber that cannot be thinned by present logging methods. Aerial logging systems could make this area economically loggable. The potential is not limited to our State of Washington nor to young-growth timber. Throughout the West aerial logging systems are needed to make it economically feasible to log mature timber and thin young stands on about 25 million acres without adversely affecting soil, water, and esthetic values.

It has been estimated that about 500 million additional board feet of timber could be harvested annually from these areas of difficult access with aerial logging systems just in western Washington and western Oregon. The value of this stumpage to the landowners would be over $5 million dollars each year—much more than enough to justify a major effort to make aerial logging systems operational.

What impresses me most about this research is that the chances of success are so high. My forestry staff and I have been cooperating closely with the U.S. Forest Service engineering project in Seattle. This preliminary research on aerial logging systems has shown so far that balloons and improved skylines represent a major potential for increasing the efficiency of timber harvest in our rough mountains. Therefore, I was disappointed that Congress did not give this work the necessary support last year although the Senate bill did include $400,000 for that purpose. The problem is still with us. We have some catching up to do. The benefits from an accelerated forest engineering research program on balloon and skyline logging by the U.S. Forest Service at Seattle far outweigh the costs. I urge that you provide now for public funds to capture these benefits.

LETTER FROM THE WASHINGTON FOREST PROTECTION ASSOCIATION

FEBRUARY 21, 1966.

HON. CARL HAYDEN,
Chairman, Senate Subcommittee on Appropriations for Interior and Related Agencies, U.S. Senate Building, Washington, D.C.

DEAR MR. HAYDEN: This association has been a leader in forest protection in Washington State since 1908. Within its framework the forest landowners, cooperatively and with the public agencies, have worked hard to protect our basic resource and have reason for pride in our modern fire history. However, fire is not the only enemy of the forests of this State which are owned by our Federal Government, State, cities, private citizens, Indians, and others. We find that animals and insects must also be controlled. Steps are being taken to exercise this control but replacement of the present inadequate facilities is urgently needed.

Enclosed is a booklet outlining the program and needs at the Animal Damage Research Laboratory at Olympia, Wash. This is truly a cooperative project, not alone for our State, but for the entire Nation. It blends the skills, facilities, and other resources of many groups, public, and private, for the benefit of all.

Bear damage research is mentioned as but one activity of this center. This association is the agency in this State which is controlling bear damage on private, State, municipal and Indian-owned lands. These owners pay the cost of seven professional hunters who kill some 500 bear per year in damage areas. This is in addition to over 6,000 killed annually by sportsmen in this State. We can control damage in this way but find that we must continue to remove animals at a steady rate to maintain protection. Believing that there may be a better way, two agencies of State government, this association and several timber companies joined with the Federal agencies at the Olympia research center in a comprehensive 3-year research effort to determine causes. As a part of the association contribution, we provided the funds and the State department of natural resources provided the labor to build a permanent bear-holding pen at the Laboratory.

This is but one facet of the many problems under study at the Olympia animal damage research center. The spirit of cooperative effort, and the problems are a fact of life. We need the facilities to solve many animal problems. The estimated cost of $450,000 to provide them is modest in comparison with the benefits to be derived by all.

One other problem involving inadequate facilities requires an immediate solution, and the consequences of failure to do so stagger the imagination. The European pine shootmoth has been introduced into western Washington. It is of no threat except to ornamental pines in this part of the State. However, if it escapes to the pineries of eastern Washington and thence to the yellow pine stands of the entire West, it has been estimated that the consequences will be loss of 12,000 to 74,000 jobs annually plus the other economic benefits of the wood products which would have been produced.

This insect is under quarantine in western Washington. Attempts at eradication with known technology have failed here. Despite the quarantine, it has been transported to spots in the pineries of eastern Washington and to Oregon and, fortunately, it has been possible to find and eradicate those spots. We are then faced with a large area of heavy infestation in western Washington which we cannot control with present knowledge and on which quarantine has not been completely effective. This area is some 60 miles from the susceptible pineries of the West. There is the constant danger that someone will carry an infected tree out of the quarantine area and precipitate a disastrous epidemic.

The U.S. Forest Service has launched a major research effort to find a biological way to eradicate this insect while it is contained in the quarantine zone. There is hope of success provided the process can be developed in a few years. A serious obstacle in this race is the lack of adequate insect quarantine and other facilities at the U.S. Forest Service Forestry Sciences Laboratory in Corvallis, Oreg. Though the emergency need for these facilities is to fight the shootmoth, they are also needed to develop safe dependable controls for the other forest-destroying insects. The estimated cost of $2,680,000 for these facilities is considered a modest investment in view of the cost of failure on the European pine shootmoth project alone.

A responsible public can no longer tolerate these agents of destruction on the public and private forests from which they demand so much. The public demands for recreation, forest products, taxes, water, and the host of other benefits dictates that every effort be made to keep these forests fully productive.

Yours very truly,

WILLIAM H. LARSON, *Manager.*

DEPARTMENTAL STATEMENTS

Silviculture and Animal Problems Laboratory, Olympia, Wash.

An increase would be used to construct a laboratory for research on production of second-growth Douglas-fir timber and the prevention of animal damage to forest trees in the Pacific Northwest. Inadequate laboratory space is limiting the scope of the present research and delaying the development of new information needed for the solution of pressing problems. The 1966 appropriation included $35,000 to develop architectural design and sepcifications for the proposed laboratory. These plans are now nearing completion so that construction can proceed when funds are available. The estimated cost is $450,000.

The timber economy of the Northwest is more dependent each year on availability of second-growth Douglas-fir. The volume of old-growth is becoming more limited, and techniques for utilizing smaller logs have been developed to supplement the cut. Expansion of the pulping industry has added to the opportunities for use of younger and smaller trees. The older overmature stands are still an important source for the lumber and plywood industries, but the younger forests which have developed on large acreages after harvest of the original stand play an incerasingly significant role in maintenance of a sustained-yield timber supply. It is these young stands that are receiving emphasis in the silvicultural research at Olympia. Means of insuring rapid growth and production of high-quality wood are sought that will make it possible for the second-growth stands to contribute in full measure to high volume sustained allowable cut. Action on the laboratory phases of this research is essential to satisfactory progress.

The animal damage research at Olympia deals with problems that are serious on all classes of forest ownership. Rodents, deer, and elk prevent or retard tree establishment through consuming seeds or girdling the bark or seedlings or browsing the foliage. Bear and porcupine strip the bark of saplings, poles, and larger trees. The cumulative effect of this damage is to delay regeneration of harvested stands and degrade the composition and quality of growing stock.

Methods for controlling animal damage now in use fall far short of needs. New ones must be developed which eliminate or sharply reduce the impact of animals on the forest. Better repellants are one possibility. Provision of alternate food sources is another. Making trees unpalatable through injection of systemics, or stepping up juvenile growth to get seedlings above the level of attack are other means that need study. Advanced research equipment and techniques are essential for much of this work. The proposed laboratory would provide the facilities required.

The Fish and Wildlife Service and the State of Washington are cooperators in the research. A building site has been made available by the State of Washington.

Engineering research, Seattle, Wash.

An increase would be used to accelerate development of balloon and other aerial logging systems to economically harvest timber from difficult access areas while protecting multiple-use values. Achievement of these objectives will be a great step forward in conservation logging.

Research work to date has shown that aerial logging systems can materially reduce, perhaps as much as 50 percent, the mileage of roads required to harvest timber in mountainous areas—thus reducing costs, land taken out of production, and soil disturbance. Aerial systems will make it feasible to log in many sensitive areas without major impacts on soil, water, and esthetic values. It is estimated in the Douglas-fir region that advanced aerial logging systems could probably economically log 500 million board feet annually from areas now considered inoperable under present logging technology.

Balloon logging has been shown to be technically feasible, but to make the system economically feasible requires studies of various balloon configurations, wind tunnel tests, development of cheaper gas supply systems, means of deicing, and ground handling and transport facilities. Accelerated research could result in making the balloon logging concept of aerial logging operational in several years.

An increase in Forest Service research effort of $500,000 annually is required to bring into early operational use urgently needed aerial logging systems.

Forestry Sciences Laboratory, Corvallis, Oreg.

In fiscal year 1961, an appropriation was made by the Congress for first stage construction at Corvallis. A laboratory was subsequently constructed on the Oregon State University campus. This facility was designed to handle the research staff needs during the early phases of program development. It was planned that further construction would follow when the present laboratory was filled.

A further stage of construction is now needed to allow consolidation of forest insect and disease research at Corvallis for the Pacific Northwest and to provide sufficient room for the work now underway. It is estimated that these additional facilities for the present and projected program will cost $2,500,000. Architectural and engineering plans will cost $180,000. Oregon State University has offered a free site lease to accommodate the addition similar to the lease it provided for the present facilities.

The research at Corvallis stresses work on the fundamental biology and ecology of forest diseases and insects with a primary objective of developing biological and silvicultural controls which are safe and effective. Also, the important problems of pesticide residues in forest soil and water are under study. Further related research involves forest-water relationships with emphasis on forest soil characteristics and timber stand treatment, especially as it affects water yield and quality.

Timber management research at Corvallis is aimed at developing improved Northwest trees, including seed orchard management studies. It also includes studies to develop forest management systems for true fir-mountain hemlock and coastal Sitka spruce-western hemlock forests.

The location of these facilities on the campus of Oregon State University has and will continue to make close cooperative work possible with the faculty of the university.

Alpine Snow and Avalanche Control Research

LETTER FROM SENATOR ALLOTT

U.S. Senate,
Committee on Appropriations,
March 1, 1966.

Hon. Carl Hayden,
Chairman, Interior Appropriations Subcommittee,
New Senate Office Building, Washington, D.C.

Dear Mr. Chairman: It has been called to my attention that the Forest Service could utilize $175,000 additional funding over the $44,000 in the budget for alpine snow and avalanche control research. Presently two scientists and their assistants are engaged in this work, located at Colorado State University. Colorado is an ideal location for this type of research, and the additional $175,000 would be utilized to hire five additional scientists for research.

As you know, melting snow provides water for our streamflow in the Rocky Mountains, and in fact is the principal source. If the location of the snow can be controlled, or the amount of snow in the high mountains increased, runoff can be better regulated. Work is now underway measuring snowfields under natural conditions to determine accumulation and melting characteristics, and the relationships between these factors and runoff. Work is also being carried on to determine how drifting can be modified by snow fences, so as to better control location of the snow.

These studies are also important to avalanche control, in that the snow can be trapped away from the normal avalanche paths. Avalanche control through structural methods is also being researched.

All of this work is important to us in Colorado, and to other States which depend on the rivers and streams with their headwaters in Colorado. We in the Western States have been in the forefront of water conservation, particularly through storage structures, but I know that you realize also the benefits that would accrue if the runoff could be better regulated.

The avalanche control research which is so closely associated with the alpine snow work will be of great benefit to the burgeoning ski industry of Colorado, and of course would find application far beyond our borders. The other prime beneficiary of avalanche control work would be the traveling public which uses mountain highways. In addition, hydroelectric projects and mines come readily to mind as being particularly vulnerable to avalanches by reason of their mountain locations. The benefits in reduced danger of loss of life would alone justify increased work in avalanche control, but the economic savings to all these groups are an important additional consideration.

New studies proposed by the Forest Service in snow conservation would explore the effectiveness of chemicals for accelerating or retarding snowmelt and for reducing evaporation from snowpack surfaces, and basic work on the relation of terrain factors and vegetation to the snow transport characteristics of wind. Both avalanche forecasting and avalanche control would hopefully be improved. Specifically, in the field of forecasting, new studies would be designed to determine the relations of meteorological factors to changes in the strength of snowpacks and to integrate meteorological, terrain and snowpack conditions into an improved avalanche hazard forecasting system. In avalanche control, work would be directed toward development of improved mechanical structures and reforestation techniques to control or prevent avalanches.

Favorable consideration, both by yourself and your committee, is respectfully requested.

Sincerely yours,

Gordon Allott,
U.S. Senator.

DEPARTMENTAL STATEMENT

Melting snow is the principal source of water for streamflow in the Rocky Mountains. As much as two-thirds of the annual flow occurs before mid-July. Shortages of water for irrigation and other uses are common by August. Snowfields of the alpine zones are an important source of late summer streamflow to valley lands below. Management to increase the amount of snow trapped in the alpine is possible and offers the most promising method of improving the seasonal pattern of runoff for mountain streams.

Avalanches are inevitable with the deep snow and steep terrain that characterize alpine regions. Recent increases in winter sport activities and winter travel have increased avalanche dangers to life and property. Most avalanche paths are filled by wind-transported (slab) snow and the same types of information needed to effect controlled snow drifting for water yield improvement are required to increase or decrease snow trapping in selected areas with respect to avalanche paths.

Studies are already underway to determine accumulation and melting characteristics of snowfields under natural conditions, relations of snowfields to yields and timing of runoff, the manner and extent to which snow drifting can be modified by various kinds and arrangements of snow fences, and structural control methods for some avalanche areas.

New studies would be undertaken to determine snow transport characteristics of wind in relation to terrain factors and vegetation and effectiveness of chemicals or other materials for accelerating or retarding snowmelt and for reducing evaporation from snowpack surfaces. New studies would also be designed to determine the relations of various meteorological factors to metamorphic changes in snowpacks that affect their strength and, hence, potential for avalanching. New studies would also seek to develop techniques for integrating meteorological terrain, and snowpack conditions into an improved snow avalanche hazard forecasting system. They would also be directed toward development of improved mechanical structures and reforestation techniques for controlling or preventing avalanches.

A meeting of western experiment stations and regions is planned for fall of 1966 to more fully consider the alpine snow and avalanche control research program in order to better define research needs, and reappraise priorities and responsibilities.

In the national forestry research program presented to the Congress by Secretary Freeman in April 1964, it was envisioned that the total need for this project would be $175,000. We are making reasonable progress in this field with our present allocations. With a major planning conference scheduled for this fall, increases in this research would be of moderate priority.

RESEARCH AT SOUTHERN HARDWOODS LABORATORY, STONEVILLE, MISS.

LETTER FROM SENATOR FULBRIGHT

U.S. SENATE,
Washington, D.C., February 24, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Enclosed for consideration are copies of three letters addressed to me by constituents expressing their strong desire that adequate appropriations be made for operation of the Southern Hardwoods Laboratory at Stoneville, Miss. I hope that these funds may be recommended by your committee.

With best wishes, I am,
Sincerely yours,

J. W. FULBRIGHT.

LETTER FROM GEORGIA-PACIFIC CORP.

FEBRUARY 14, 1966.

Hon. CARL HAYDEN,
Senate Office Building,
Washington, D.C.

DEAR SENATOR HAYDEN: Full-scale operation of the Southern Hardwoods Laboratory at Stoneville, Miss., is a matter of considerable concern to the wood-using industries located in the lower South. This important research facility has performed a vital service to industry by furthering knowledge of growing and using our hardwood resources. In order to continue much-needed research and expand its investigations, additional support is required to adequately staff and operate the laboratory. The budget, as presented to Congress, has not made provision for this increase.

The Georgia-Pacific Corp. is highly interested in its hardwood resources in Arkansas, Louisiana, and Mississippi. One-seventh of our extensive land holdings are in permanent hardwood sites, and approximately one-fifth of our raw material is hardwood. Due to the complexities of species, site and stand conditions, our knowledge of hardwood management is considerably below that of pine.

Loss of hardwood land to agriculture has been sizable in our area in recent years. This dictates that we will have to learn how to grow more hardwood on less area in the future. Finding ways for preventing and controlling the damaging influences of insects and disease will upgrade the value of the products harvested. Use should be found for some of the present unmerchantable hardwood species to further utilize the resource.

With prospects for finding answers to these vital questions, it is most likely that ours, and other wood-using industries will be in a position to expand their capacity for using hardwood. This will have a most desirable economic effect on our State and the South as a whole.

For these reasons, we wish to urge that you strongly consider the $250,000 additional support needed for the Southern Hardwoods Laboratory when this matter is presented before the House Subcommittee on Appropriations on February 28.

Sincerely,

S. V. SIHVONEN, *Manager.*

LETTER FROM FAUST BAND SAW MILL, INC.

FEBRUARY, 15, 1966.

Senator JOHN W. FULBRIGHT,
Senate Office Building,
Washington, D.C.

DEAR SIR: The five hardwood log using industries here in Helena and West Helena employ approximately 800 men. All of these industries are faced with a constantly decreasing supply of hardwood timber. This has come about through clearing of hardwood timberland for agricultural uses which is estimated to total 260,000 acres of bottom land hardwood forest in Arkansas in the past 2 years.

Predictions are that the demand for hardwood for both lumber and also pulp use in the next 30 years will greatly increase over what it is today. The situation comes down to this, we must produce more timber on fewer acres. This requires more knowledge and application of intensive forestry practices. One source of this knowledge that is needed is the Southern Hardwood Laboratory operated by the U.S. Forest Service at Stoneville, Miss. This research laboratory has been of considerable help to all the hardwood using industries in providing basic information that can be used to increase both the quantity and the quality of hardwood timber. We understand that this research laboratory has requested an additional $250,000 that is not now in the budget as presented to Congress and that a hearing before the House Subcommittee on Appropriations is scheduled for February 28. We write to urge you to support the plea for this increased appropriation.

Sincerely yours,

THOMAS E. FAUST.

LETTER FROM ARKANSAS WOOD PRODUCTS ASSOCIATION

FEBRUARY 21, 1966.

Hon. CARL HAYDEN,
Chairman, Senate Subcommittee on Appropriations,
Senate Office Building, Washington, D.C.

DEAR SENATOR HAYDEN: I would like to solicit your support on an issue not directly in your purview, but one of vital importance to Arkansas. The need for prompt action stems from a hearing scheduled by the House Subcommittee on Appropriations starting on February 28. U.S. Forest Service witnesses are to be heard on that date and industry witnesses shortly thereafter. Our concern with these hearings will be to protest vigorously that the budget, as presented to Congress, does not include funds to adequately staff the Southern

Hardwood Laboratory operated by the U.S. Forest Service of Stoneville, Miss. Both the House and Senate Appropriations Subcommittee reviewed the needs of the Laboratory in developing their budget recommendations, but we failed to convey to them the urgency of this matter to the hardwood industry. All members of both subcommittees, and any other interested persons in Washington, should be made aware that the Laboratory cannot function effectively in fulfilling its vital role without an additional appropriation of $250,000 to provide staff members and research personnel.

By way of background to the problem, you are well aware of the importance of forest products as the No. 1 industry of Arkansas. About one-half of this industry is based on the harvesting and manufacturing of hardwood products. Research in pine management is well developed and has contributed greatly to Arkansas position as the No. 1 State in the production of southern pine lumber. Research in hardwood management, however, has lagged far behind and this deficiency is having a detrimental effect on this important segment of our State's economy. The hardwood industry has also been seriously threatened by the alarming loss of acreage to other uses, especially soybean production. This is an economic problem beyond the scope of our present consideration, but it has created a need to manage each remaining acre of hardwood timber as efficiently as possible. An urgent need exists to discover, by means of research, the best techniques of management in order to meet the demands on the hardwood industry and keep its people employed.

As a matter of philosophy, it would seem reasonable to expend this sum as an investment in the future production, profits, and employment when much larger sums are being given away with no such hope of recovery. The wood products industry is almost the only unsubsidized industry remaining. We do not now ask for subsidy, being willing to depend on the private enterprise system as we always have, but research is an area definitely suited to government's proper role.

The many employees and thousands of landowners who depend on hardwood forest products join me in urging you to use whatever influence you can in securing this $250,000 sum to staff the Southern Hardwood Laboratory. Please call on this office if you need any information relative to your efforts in this cause. Thank you.

Sincerely yours,

ART SMITH, *Executive Secretary.*

LETTER FROM TOWNSEND LUMBER CO., INC.

FEBRUARY 24, 1966.

Senator CARL HAYDEN,
Senate Office Building,
Washington, D.C.

DEAR SENATOR HAYDEN: I am writing this personal letter on behalf of the hardwood lumber industries of our State and those of our neighbors. My request is to ask that you give your attention to matters concerning the Southern Hardwood Research Laboratory at Stoneville, Miss.

A hearing before the House Subcommittee on Appropriations is scheduled for February 28, for the U.S. Forest Service. Senator Carl Hayden and Congressman Winfield K. Denton are chairmen of this committee for the Department of Interior.

At a recent meeting of industrial leaders in hardwood lumber production, special time was devoted to discussion of research needs with relation to the diminishing acreage availability on which to grow our future timber.

As you must well know, a tremendous amount of our productive hardwood lands are rapidly being cleared for conversion to farming desires. The primary crop being soybeans. In the last 2 years, with the absence of acreage controls on this crop, 260,000 acres in Arkansas alone have thus been converted. The most desirable acreage for this farm request is found in our river bottom lands. These are the same areas that have long sustained the southern hardwood lumber needs.

In anticipation of future acreage controls, land values have jumped to unprecedented highs. It is no longer profitable to invest in these acres based on the long-term needs required for growing timber.

With these facts before us, our only line of defense to preserve future supply needs is to accelerate our forest research methods. We will be forced to produce more and better timber on those acres remaining in years to come,

Research in timber requires time—time to think, to analyze, to prove or disprove, then more time to put into effect the end results of proven theories.

In order to gain this time we are seeking that the Appropriations Committee furnish us enough funds, approximately $250,000, so that six additional scientists may be placed on the Laboratory staff. These men and the additional equipment and aids are considered by our industry a necessary must in order to enter into the new fields of research so that we may continue to answer the needs of this Nation's hardwood lumber supply.

I am sending letters of similar type to Senators McClellan, Fulbright, Denton, and to the Congressmen of our State. Industry witnesses will be heard at a later date, after the February 28 committee meeting.

This is a vital request, and your support will long be remembered by all of us now employed in this field.

With best regards.

Respectfully yours,

R. K. SHELTON, *Forester.*

LETTER FROM J. H. HAMLEN & SON, INC.

FEBRUARY 24, 1966.

Senator CARL HAYDEN,
Senate Office Building,
Washington, D.C.

DEAR SIR: We understand that the budget for the U.S. Forest Service will come up for discussion by your committee next week, and we want to call your attention to an item which was omitted. This covers an additional appropriation for research at the Southern Hardwoods Laboratory at Stoneville, Miss. Research in hardwoods is of vital interest to the South, and indeed to the country as a whole, and while we are mindful of the need for economy in Government, we do believe that this is a justifiable expenditure and we would appreciate your help in having this additional $250,000 appropriation approved for the Southern Hardwoods Laboratory.

Very truly yours,

JAMES H. HAMLEN.

DEPARTMENTAL STATEMENT

The Mississippi River Delta and similar sites in the South support 45 million acres of hardwood forests, currently producing 45 percent of the national production of hardwood sawtimber. There are a number of serious problems which face southern hardwood timber growers on which answers are urgently needed.

Stands of tupelo and cypress occupy extensive swampland areas in the lower Mississippi Delta region and in the lower reaches of the other main rivers which cross the Coastal Plain. Tupelo, the most extensively occurring and fastest growing species in the swamp forest, is valuable for pulp and container veneer. However, it grows in previously unmanaged stands and little is known about methods for regenerating a new crop to insure future supplies. The needed research would concentrate on determination of the soil and site requirements which favor continuous management for tupelo, and on effective techniques for planting this species.

Southern bottomland hardwoods are increasingly threatened by animal damage, primarily by deer but also by nutria and beaver. This damage is most severe in planted stands but is also serious in extensive natural forests of cottonwood, sweetgum, and other southern hardwoods. Research is needed on possible controls through providing alternate food supplies, the use of repellents, the use of less palatable species or strains of trees and other measures which have not been explored.

The strengthening of tree-improvement research and studies of soil and site requirements in southern hardwoods is necessary. Tree-improvement research would be started on superior trees of sweetgum, cherrybark oak, nuttall oak, green ash, and willow. Research on basic water relationships in southern bottomland forests would also be strengthened. Flooding, drainage, and other water-regulation measures to favor timber growth need to be perfected so that they can be prescribed for different bottomland conditions.

Insect and disease losses in these forests are heavy. Borers attack living trees and degrade the wood. Defoliators have killed trees and reduced the growth rate

on over 3 million acres in the past decade. Diseases exact an estimated annual toll of over 50 million cubic feet of wood, largely on sawtimber trees.

Increased hardwood insect and disease research would permit development of preventive and control measures for hardwood borers, defoliators, and insects damaging hardwood regeneration and young stands, for diebacks and wilts associated with cumulative drought, for heart rots in merchantable stands, and for several root pathogens, stem cankers, and foliage blights. Of immediate and urgent importance are studies of the factors influencing insect and disease attack in the tension zones adjacent to the Great Plains, particularly in Texas, where even slight reductions in rainfall are followed by excessive dying of species such as the live oaks.

Facilities for this increased research are available at Stoneville. An annual increase of $250,000 would be required to carry out research on these problems.

INTERMOUNTAIN BROWSE LABORATORY, PROVO, UTAH

LETTER FROM SENATOR MOSS

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
February 10, 1966.

HON. CARL HAYDEN,
Chairman, Interior Subcommittee,
Senate Appropriations Committee, Washington, D.C.

DEAR SENATOR HAYDEN: You may recall that last session I appeared before the subcommittee to request that planning funds be appropriated in the fiscal year 1966 appropriation bill for an intermountain browse laboratory to be established by the U.S. Forest Service at Brigham Young University in Provo, Utah. The committee did not grant my request, and I am renewing it this session. The amount which the Forest Service says it could use to good advantage in fiscal 1967 for architectural design and planning is $37,000. Estimated construction cost of the facility is $460,000.

At the present time the Forest Service is conducting limited studies in livestock range management and associated wildlife habitat in the intermountain region in a rented building in Provo, Utah. There are no laboratory facilities and the space now occupied is completely inadequate and unsuited to the studies involving greenhouse culture, controlled environment plant growth, and anlytical procedures, all part of the job which should be done.

Brigham Young University, which is located at Provo, has offered to lease the Forest Service a site on the campus for the construction of an intermountain browse laboratory and related facilities. Such a laboratory could make a very significant contribution to the intermountain area, where restoration of browse covering is essential both to the continuation of our big game and of our livestock industry.

I am scheduled to appear before the subcommittee the middle of March, and will make a more detailed case in behalf of an intermountain browse laboratory at that time. If representatives of the Forest Service are heard before I appear, I would appreciate it if the following questions could be asked of them:

Question. I am informed that Brigham Young University has leased a site on their campus to the Forest Service for construction of a wildlife browse laboratory. What is the nature of the work at this location and what is the status of the construction project?

Question. What is the estimate for funding this laboratory and could you include its construction in your program if funds were provided in fiscal 1967?

Sincerely,

FRANK E. MOSS,
U.S. Senator.

DEPARTMENTAL STATEMENT

A laboratory with auxiliary facilities is needed for research on livestock range management and associated wildlife habitat in the intermountain region. The office space now occupied by research scientists in this work is completely inadequate and unsuited to the job that needs to be done. Studies that involve greenhouse culture, controlled environment for plant growth, or analytical procedures of more than a rudimentary nature are severely limited by lack of facilities. The

first stage of construction is estimated to cost $460,000. Architectural design on plans would require $37,000.

One phase of the program at Provo ties in with livestock grazing on approximately 160 million acres of dryland ranges which has been an important segment of the economy of the intermountain west since the first settlement. Long-continued heavy use has resulted in widespread range depletion. From the beginning, lack of knowledge of management systems adaptable to maintenance of range productivity, and of rehabilitation techniques, has hindered the livestock industry. Sustained research using modern facilities and equipment is needed to determine more precisely the basic requirements and characteristics of important forage species and the best grazing management systems for maintaining production of forage and rehabilitating deteriorated ranges.

A second part of the program deals with habitat for wildlife. Wildlife has become one of the most important wildland resources of the intermountain west and its importance is increasing rapidly. In 1960 one-half of the big game harvest of 11 Western States and about one-fourth of that of the contiguous 48 States was in this territory. Browse is a key source of big game food and it is the principal vegetative cover in much of the area. Artificial restoration of critical areas is essential to maintain even the present game herds in severe winters. Replacement of worthless shrubs with desirable browse species would permit greatly increased production of game in harmony with other uses of these wildlands.

A purposeful program of selection and breeding of shrubs for specific uses is proposed for the Provo laboratory. This is an ideal location providing close association with two major universities having strong interests and research in genetics, physiology, and ecology of native vegetation; with close proximity to major shrub types; and with long-term ecological records over a wide range of altitude and environmental conditions.

A site for the laboratory has been made available on long-term lease by Brigham Young University.

FORESTRY SCIENCES LABORATORY, RALEIGH, N.C.

LETTER FROM SENATOR ERVIN

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
February 15, 1966.

Senator CARL HAYDEN,
Chairman, Senate Committee on Appropriations, New Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: Enclosed is a copy of a letter I have received from Dean R. J. Preston of the School of Forestry of North Carolina State University at Raleigh, N.C.

Dean Preston is greatly concerned over the need for a second wing to the Forestry Sciences Laboratory in the Research Triangle in Raleigh.

It is my understanding that no funds were requested in the fiscal year 1967 appropriations budget for planning or construction of a new wing on this laboratory, but I would greatly appreciate any consideration that your committee is able to give to this $85,000 appropriation as discussed by Dean Preston.

With kindest wishes.

Sincerely yours,

SAM J. ERVIN, Jr.

LETTER FROM DEAN, SCHOOL OF FORESTRY, NORTH CAROLINA STATE UNIVERSITY

February 7,1966.

Hon. SAM J. ERVIN, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR ERVIN: The Southeastern Forest Experiment Station badly needs a second wing to their Forestry Sciences Laboratory in the Research Triangle. They had requested an amount of $85,000 to cover developing plans for this new wing and this item was not included in the budget submitted by the President.

The Forest Sciences Laboratory is making an important contribution to the economic development of our State. They are conducting research of a basic nature that can substantially affect the well-being of our forest-based industries. To indicate the need for a vigorous research program, the value of forest products produced in North Carolina exceeds $1,800,000,000 annually and the forest industries are exceeded only by textiles as a source of industrial employment for our citizens.

The Forest Science Laboratory is now crowded above capacity. Even with the $85,000 for planning becoming available July 1, 1966, it would be at least 3 years before the facility could be ready for occupancy. If the $85,000 is not made available now this time lag will become even more critical. Our programs of research in the School of Forestry are closely coordinated with those in the Forest Science Laboratory, five of their scientists serving as adjunct professors to the school. We are deeply interested in helping their program develop along with ours to better serve the interest of our State and region.

I would like to request that you use your influence in attempting to amend the budget to include this item of $85,000 for planning. This relatively small item is essential before the building can be enlarged and I am confident that the return to our State would justify this new wing many times over. Georgia did receive such planning funds, although it is my understanding that their project was of lower priority and the planning funds were not requested by the Forest Service. I certainly do not begrudge Georgia getting their funds, but I hate to see our program set back.

Sincerely,

R. J. PRESTON, *Dean.*

DEPARTMENTAL STATEMENT

An addition is urgently needed to release overcrowding in the present laboratory and to provide specialized facilities not now available. The proposed building would provide laboratories and offices for scientists who now are housed in storage areas, greenhouse areas, and a library-conference room. Specialized equipment now set up in storage areas could be properly accommodated, and new equipment needed to solve pressing problems could be added. These additions would speed the progress of research seeking controls for tree-killing insects, diseases and air pollutants; means of supplying more soil nutrients for better tree growth; and better chemicals to kill unwanted trees and brush. The immediate need is for $85,000 to provide architectural design and engineering specifications for construction estimated to cost $1,100,000.

The present laboratory at the Research Triangle Park was started with funds appropriated in fiscal year 1961. A headhouse plus two greenhouses, a storage building for chemicals, a shelter for experimental animals and laboratory equipment have been added in recent years.

A major reason for the overcrowding is the rapid expansion in recent years of research on pesticides and biological controls of tree-killing insects and diseases. This laboratory has become a primary location for Forest Service research on control of destructive pests and air pollutants. Five projects are located there now, and work on a sixth is to be moved to this location when space is available. Scientists on these projects give special attention to insect biology in order to develop biological controls, to insect-killing chemicals that are carried systematically through the tree, and to conventional insecticides having low toxicity to mammals, birds, and fishes. Annosus root rot that is destructive to pine plantations is receiving particular attention. Cooperative work with the Public Health Service, now located at Asheville but to be moved to this laboratory, is concerned with symptoms and susceptibility of forest trees to toxic air pollutants. Research on these problems has made some spectacular discoveries in the past 3 years, but rate and amount of progress are hindered by crowded and inadequate facilities.

Not only will this office-laboratory help alleviate critical overcrowding, but it will provide needed special facilities. Equipment and facilities can be provided for work with hazardous toxic chemicals. Studies requiring radioisotopes, and electron microscope and controlled environments can be accommodated. Fungus isolation rooms, a fungus herbarium, an insect museum, and an electrophysiology laboratory are needed. These would facilitate the conduct of important basic and applied research.

Ample space for this expansion is available on the present site donated to the Forest Service by the Research Triangle Foundation.

Wood Products Marketing and Applied Utilization Laboratory

LETTER FROM SENATORS M'CARTHY AND MONDALE

U.S. Senate,
Committee on Agriculture and Forestry,
February 17, 1966.

Hon. Carl Hayden,
Chairman, Senate Committee on Appropriations,
New Senate Office Building.

Dear Senator Hayden: In a letter we sent to you and members of the committee last year, we discussed the urgent need to establish a facility on the campus of the University of Minnesota at Duluth to provide a Federal Wood-Products Marketing and Applied Utilization Laboratory.

We appreciate the response which you and the committee gave last year by including $35,000 for preparation of design and specifications for this facility in the Senate appropriations bill for the Interior Department and related agencies. We regret that it was not possible to retain this item in the conference report.

We wish to emphasize again the value and importance of such a facility to help strengthen the economy of the northern Lake States area. It will help develop new markets, expand existing markets and utilize more efficiently the important timber resources of this region.

Forests cover three-fourths of the land area of this region and most of it is capable of growing commercial crops of timber. However, the existing market is inadequate for the best utilization of species such as aspen and balsam fir, which tend to deteriorate rapidly if not marketed promptly when mature. In general the lack of timber markets contributes to the depressed economy of the area and new markets for forest products would be one of the best means of expanding employment opportunities.

As you know, marketing problems are related to utilization, and research to meet both of these problems is needed. Marketing research would help solve problems involving transportation, location of underused resources, and evaluation of potential consumer demand. Utilization research would be directed to conversion systems and processes to make more effective use of the timber of the area for various wood products and for handling and storing the primary forest products.

The proposed laboratory does not involve duplication of existing laboratories and it is not in conflict with their objectives.

The cost of the facility is estimated at $300,000 with another $250,000 needed for staff salaries and maintenance. The site for the laboratory would be provided by the University of Minnesota at no cost to the Federal Government. It is estimated that $35,000 would be sufficient to develop designs and specifications.

We would appreciate committee consideration of this proposal and your again approving an appropriation of $35,000 so work on this laboratory can be started.

Sincerely yours,

Eugene J. McCarthy.
Walter F. Mondale.

DEPARTMENTAL STATEMENTS

Timber resources in the northern Great Lakes region played a major role in early development. Timber harvest provided jobs for settlers, profits for businessmen, and products needed in a growing national economy. Removal of the trees hopefully opened up the land for agriculture. The resource was exploited rapidly, and when agricultural use failed to develop on the scale expected, an era of recovery followed in which timber stocking and volume gradually increased. The replacement species often were not the same as in the original stand, nor was the timber quality as good.

The timber resource in the northern Great Lakes region is now grossly underused. There is a large surplus of broadleaf trees smaller than sawlog size. Young conifer stands coming into the market offer an opportunity for expanded use. Material for special forest products such as Christmas trees, decorative materials, maple syrup, novelties, and curios is abundant.

A group of marketing specialists is now seeking ways in which the timber resources can be used more effectively in support of the economy of the northern

Great Lakes region. To provide them with the space and facilities they need to use their skills to the fullest extent, construction is proposed on the campus of the University of Minnesota at Duluth. A site has been offered by the university where the values of close association between Forest Service and university scientists can be realized and where cooperative aids such as library service will be readily available.

The facility proposed is estimated to cost $420,000. Architectural designs and plans will cost $35,000. Included would be modern aids to compilation and analysis of resource statistics so that alternatives in the development of resources in localized areas could be appraised. It would provide for investigation of processing and transportation of forest products to pinpoint the potentials for improved efficiency and to develop those improvements. And it would have space for research on local applications of new or modified uses for timber and related forest products. In summary, it would be a center for information on use of the forestry resources of a region which now is realizing too little from what must be considered its major asset.

WILDLIFE HABITAT RESEARCH, LARAMIE, WYO.

LETTER FROM SENATOR SIMPSON

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
February 14, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR SENATOR: Enclosed you will find a copy of a letter I have received from our Wyoming State game and fish commissioner, indicating his interest in appropriations for the Forest and Range Experiment Station at Laramie, Wyo.

This station performs significant and vital functions, of great benefit to the entire West. The appropriation of moneys for this station is most important.

I will appreciate your giving consideration to this matter.

With warmest personal regards, I am,

Sincerely,

MILWARD L. SIMPSON,
U.S. Senator.

LETTER FROM STATE GAME AND FISH COMMISSIONER, WYOMING

FEBRUARY 8, 1966.

Hon. MILWARD L. SIMPSON,
Senate Office Building,
Washington, D.C.

DEAR SENATOR SIMPSON: I am writing this letter to again support and encourage the submission of $100,000 to the Forest and Range Experiment Station at Laramie, Wyo., for research in the field of wildlife habitat, under the supervision of the U.S. Forest Service.

This item was requested in the amount of $60,000 last session by Senator McGee, but was stricken from the budget.

Your support will be greatly appreciated.

Sincerely yours,

JAMES B. WHITE,
State Game and Fish Commissioner.

DEPARTMENTAL STATEMENT

The elk herds of Wyoming are nationally known for esthetic qualities and for sports hunting, but their management is complicated. Critical ranges have been overused, not only by elk but also by domestic livestock, and this range abuse has serious impacts on both watershed values and fish habitat. There is insufficient management information available on improving and managing elk ranges to allow optimum production of this important game animal in harmony with other land uses.

Research is needed to determine interrelations between elk and livestock and how they should be managed to permit restoration of abused ranges. The work would be designed to develop and evaluate management systems to allow efficient forage use while stabilizing the vegetation and soil. Where native forage or cover plants have been largely destroyed, additional research will be needed to find ways of improving these areas by artificial revegetation practices. Management methods must also be developed to allow use of transitory ranges created by timber cutting, while permitting establishment of new stands of timber.

The modern Forest Range and Watershed Laboratory at Laramie is equipped to facilitate basic ecological and physiological research to support work at field locations. Results should be generally applicable to elk habitat throughout the Rocky Mountains.

It would require $100,000 annually to implement this research.

TIMBER MANAGEMENT RESEARCH, ALEXANDRIA, LA.

LETTER FROM T. L. JAMES & CO., INC.

FEBRUARY 14, 1966.

Hon. CARL HAYDEN,
U.S. Senate,
Washington, D.C.

DEAR SENATOR HAYDEN: Over the years you have taken a personal interest in matters pertaining to forest research and you have traditionally supported such programs in the South from time to time as such needs were made known to your Appropriations Committee.

Senator Ellender has been advised of two current needs which require urgent consideration and I feel sure he will take these up with you and other members of the Appropriations Committee at the proper time.

Briefly, the Louisiana Forestry Association has endorsed the need for an additional $50,000 at the Alexandria Research Center of the U.S. Forest Service for updated and strengthened timber management research. You will recall a number of years ago it was this branch that discovered bird and rodent repellants which were the breakthrough on the direct seeding of southern pines. The use of direct-seeding methods has continued to spread all over the South and the Alexandria Center are called on for technical support throughout the region. They need the additional money for three or four technicians and to take care of increased costs which have accrued to this program.

We are also emphasizing the need for an additional $250,000 at the Stoneville, Miss., Southern Hardwoods Laboratory. We do not need to duplicate the services which are presently being offered at Stoneville in Louisiana, for they have led the way in hardwood research throughout the Mississippi Delta region, and they have done an admirable job. However, we have 8 million acres of bottomland hardwood lands in Louisiana which must have increased care and attention to bring them into full production. The Laboratory at Stoneville can do this job, and will do it, if they can obtain proper staffing and facilities. I am sure both Senators Stennis and Ellender will discuss this more in detail with you.

My main objective in writing was not only to get these two items written into the records, but to express again appreciation for the leadership you have so generously given to the needs of forest research throughout your long and productive tenure in the Senate. It is our hope that your committee will be able to provide funds for these two most worthwhile causes this year.

With very best wishes.

Very truly yours,

H. D. BURKHALTER.

LETTER FROM R. F. LEARNED & SONS, INC.

FEBRUARY 23, 1966.

Hon. CARL HAYDEN,
Senate Office Building,
Washington, D.C.

DEAR SENATOR HAYDEN: On or about March 16 the Subcommittee on Appropriations for the Department of Interior and Related Affairs will meet to hear proponents of additional appropriations for research in southern hardwoods.

Those of us connected with the production, marketing, and use of southern hardwoods are concerned over the limited budgets available for research in this most valuable regional and national resource. The supply of hardwoods is dropping at an alarming rate, far outdistancing regrowth. To make matters worse, regrowth is generally in substandard and less desirable species.

The research center at Stoneville is understaffed and cannot handle the demand made upon it by industry and tree farmers. It cannot physically provide the research-based information we need at this time.

With millions being spent on other projects, it does not seem unreasonable to ask for and get $250,000 additional annually for the Southern Hardwood Research Laboratory at Stoneville, Miss., and for $50,000 for timber management research at the Alexandria, La., Research Center. Your continued strong consideration and backing in this matter is urgently needed.

Sincerely yours,

H. B. PEABODY, Jr., *President.*

DEPARTMENTAL STATEMENT

Pine timber is an important part of the economy of east Texas and west Louisiana, and the timber sites are highly productive for loblolly and shortleaf pines. However, periodic droughts in this climatic tension zone make the establishment of new crops hazardous. Research on more dependable techniques is needed.

This research would concentrate on site preparation methods and seeding and planting techniques for problem sites. It would involve studies of the combined effects of rainfall nad soils on pine seedling growth and survival. These studies would show the climatic and geographic limits for successful pine culture in the tension zone. They would also provide new regeneration techniques for use in the areas where critical climatic and soil problems impede the renewal of productive forests.

The research would also concentrate on development of intensive cultural techniques for increasing the productivity of Midsouth artificially established stands. One feasible way for increasing returns from these stands, with increased profits to the landowner, is to study and develop cultural methods which are profitable. Such possibilities include better thinning systems and development of stocking standards, weeding or cultivating to remove water consuming competition, fertilization, and water control. The need for this research has reached a critical stage as a result of the establishment of millions of acres of plantations east of the tension zone.

An addition of $50,000 annually will be required for scientists and supporting staff in order to speed up the research on these important problems.

FOREST PRODUCTS LABORATORY EXPANSION

LETTER FROM UNION BAG-CAMP PAPER CORP.

MARCH 1, 1966.

Mr. CARL HAYDEN,
Chairman, Interior and Related Agencies Subcommittee,
Senate Appropriations Committee, Washington, D.C.

DEAR SENATOR HAYDEN: This statement is submitted in lieu of requesting an opportunity to appear personally before the subcommittee to testify on certain aspects of the U.S. Forest Service budget requests for the fiscal year 1967. I hope that the information contained herein will be helpful to the determinations the subcommittee will make.

As vice president for research for Union Bag-Camp Paper Corp., I am acutely aware of the problems of our company in achieving better wood utilization for the production of pulp and of chemical products. As vice president of the technological Association of the Pulp & Paper Industry (TAPPI), I know that our company's problems are typical of those of the pulp and paper industry generally. As a member of the American Paper Institute's Advisory Committee to the Forest Products Laboratory at Madison, Wis., I am thoroughly familiar with the research work done in that laboratory. I feel strongly that work in pulp and paper should be expanded at the laboratory to stimulate and complement work

done by industry to solve these problems. To carry out such work effectively, the Forest Products Laboratory needs improved facilities.

This letter is submitted in support of requests for appropriations for laboratory facilities at Forest Products Research Laboratory, Madison, Wis.

Our forests are a renewable, but limited natural resource. They are of great economical importance to our country and to the thousands of citizens who rely on forest products for their livelihood. The pulp and paper industry continues to expand its position as a major forest products producer. Its tonnage has approximately doubled in the last 16 years. The ever-increasing demand for wood as such and for pulp and paper has been well met by greater productivity of wood per acre due to improved forest practices, utilization of sawmill waste (as pulpmill raw material) and use of hardwoods that were formerly thought of as weed trees. Basic work at the Forest Products Laboratory at Madison pointed the way that led to the extensive use of hardwoods in the paper industry.

Despite major improvements in technology, the paper industry today sells as product less than one-half of the dry weight of the tree brought to the mill, and less than one-third of the dry weight of the tree as felled. The residue is used as fuel or left in the woods. Today a limited number of chemicals in addition to pulp and paper result from the pulping process. Theoretically, the yield of pulp from wood could be increased about 40 percent. Theoretically, large volumes of useful chemicals could be produced from components of the tree not suitable for pulp and paper. Actually, the science of the fibers used for pulp and of the lignin that binds them together in the tree is poorly understood. If there is to be more efficient utilization of our wood supply to meet the ever-increasing demand for pulp and paper (per capita consumption increased 17 pounds in 1965 to 500 pounds) and if we are to find uses for parts of the tree now used for fuel—or wasted entirely—a better understanding of the science of these materials is required. This is recognized in the paper industry. From 1957 to 1965, the pulp and paper industry increased its expenditures for research 105 percent compared to 65 percent for all of industry.

The pulp and paper and the chemical groups at Forest Products Laboratory at Madison carry out the type of basic research that supports much of the work done by industry. It also stimulates industry's efforts. The new research and development laboratory for the pulp and paper research at Madison should make possible a more productive group. The proposed facilities for wood chemistry are also badly needed. With the move of the pulp and paper and wood chemistry groups from the present building, there is need to reorganize these facilities for better utilization in research for other wood uses.

Against this background, I strongly urge that the subcommittee give favorable consideration to the $1,191,000 appropriation needed to construct the wood chemistry building at Madison, and to the $190,000 appropriation for the preparation of plans and specifications for remodeling the present laboratory building.

Very truly yours,

WM. H. AIKEN,
Vice President, Research and Development Division.

EXPANSION, FOREST INSECT AND DISEASE LABORATORY, DELAWARE, OHIO

LETTER FROM OHIO FARM BUREAU FEDERATION

Hon. CARL HAYDEN, FEBRUARY 28, 1966.
Chairman, Senate Subcommittee on Appropriations for the Department of Interior and Related Agencies, Senate Office Building, Washington, D.C.

DEAR SENATOR HAYDEN: I am writing to you to urge that your subcommittee add to the Forest Service appropriations the money needed to develop plans for the expansion of the forest insect and disease laboratories at Delaware, Ohio. We had hoped that funds for planning this expansion would be included in the President's budget. Since they were not and expansion is needed now, we urge that they be added to the Forest Service budget for the next fiscal year.

Over the years, our organization has been concerned about the reduction and destruction of hardwood forests in this State and in the Nation. This has come about because of urbanization, efforts to exploit the land, hardwood diseases, and insects, and the general lack of concern on the part of private as well as public interests. Not only the quantity of hardwood timber has been reduced

but the quality has steadily declined over the years. This decline in quality has been due primarily to the diseases and insects that prey upon the hardwoods. As a result, we are running out of the quality timber we have relied upon for so many years. This shortage is dramatically illustrated by the current supply-demand situation in black walnut. And just recently, the National Association of Purchasing Agents included "hardwoods" in their list of items in short supply.

In addition to furnishing consumer goods, trees have been used traditionally to improve the esthetics of man's environment; such as, shade, screens, recreation, beautification, etc. Undoubtedly, this use of trees will be accelerated in the years ahead in both rural and city areas. Special measures must be devised by research to protect and extend the life of the trees in these environments.

The Forest Service research program at Delaware, Ohio, is devoted to improvement of controls for serious hardwood timber pests and shade tree insects. Good progress is being made but the present facilities are inadequate. Additional laboratory space is required for the scientists to use fully their abilities, to conduct studies that require modern techniques and materials, and to control dangerous materials required for highly specialized research.

Rapid, on-the-ground application of research results is vitally needed to make effective use of research results. To get the research applied, the Forest Service will soon transfer to Delaware, Ohio, a group of its forest pest control specialists. Expanded facilities will be needed to accommodate these workers. Development of needed plans for the expansion in 1966–67 will prevent further delays in meeting the physical needs of the workers assigned to this laboratory but more important than that, delays in preventing greater tree losses. We have visited the Delaware laboratories and firmly believe that more space is fully justified and urgently needed. Therefore, we strongly urge that you and your subcommittee add the necessary funds to the Forest Service budget so that plans can be initiated.

Yours very truly,

D. R. STANFIELD,
Executive Vice President.

LETTER FROM OHIO FORESTRY ASSOCIATION, INC.

MARCH 1, 1966.

Senator CARL HAYDEN,
Chairman, Senate Subcommittee on Appropriations for the Department of Interior and Related Agencies, Senate Office Building, Washington, D.C.

DEAR SENATOR HAYDEN: The Forest Insect and Disease Laboratory built in 1959 at Delaware, Ohio, has already proven to be a valuable asset to Ohio and this region, but it must be enlarged to cope with the growing needs of this area. Designed to accommodate a staff of scientists and assistants totaling 35 persons, it is today carrying on enlarged programs authorized by Congress which have resulted in crowding 53 people in to these facilities.

The Ohio Forestry Association, long a stanch and vigorous proponent of forest research has through its executive committee authorized us to request that you and your committee take immediate steps to provide $72,000 in the U.S. Forest Service appropriations for planning an expansion program at this laboratory.

This additional laboratory-office building that we are recommending for your consideration will cost approximately $950,000 eventually to construct and equip. It would provide—

1. Adequate space for scientists, supporting people, and scientific research equipment now at Delaware.
2. For installation and use of new scientific equipment and techniques so necessary to the discovery of improved pest control methods.
3. Laboratories that could be isolated for research with dangerous and toxic chemicals, radiological materials, and similar modern systems.
4. Laboratory and office facilities for the forest pest control staff that the Forest Service is locating at Delaware. This is a part of their effort, which we wholeheartedly approve, to strengthen and accelerate on-the-ground application of research findings.

We believe that this area of forestry research must be strengthened, especially in the control of those pests that slow up growth, and degrade and kill the prime hardwoods (walnut, cherry, oak, yellow poplar, etc.) that grow so well in Indiana, Ohio, Kentucky, and other parts of Central and Eastern United States.

Research at the Delaware laboratories is concentrated upon finding improved ways of controlling serious forest insects and diseases such as wood borers and poplar scale, and oak wilt which is the most serious potential threat to the oak timber resources in Eastern United States. This disease could wipe out all of our oak trees just as the blight has killed all our chestnut timber.

Control of plant insects and diseases has become a matter of great public concern. And we wish to commend actions taken by the Congress to improve control methods and eliminate the ill side effects of pesticides. A reasonable part of the additional funds provided for Forest Service research in control of forest pests was allocated to the Delaware laboratories and good progress is being made in the research programs authorized.

For the reasons outlined above, we strongly recommend and urge the addition of $72,000 to the Forest Service budget you are preparing to permit immediate planning for additional laboratory and office facilities at Delaware, Ohio. Your favorable attention to our recommendation will be greatly appreciated and most helpful to many of our citizens throughout Eastern and Central United States.

Sincerely,

ROBERT R. PATON, *Executive Director.*

DEPARTMENTAL STATEMENT

An addition to this laboratory (estimated construction cost, $950,000) would provide space for research programs that are cramped in present quarters, and would allow continued development to meet the needs as set forth in the national forestry research program. It would house a unit in the pest control organization serving the Central States area, and thus provide for fruitful interchange between research and the closely related pest control work. In addition, it would provide space for service functions formerly furnished to the Forest Insect and Disease Laboratory by the headquarters office of the Central States Forest Experiment Station which has been closed. The immediate need is $72,000 for architectural design and specifications.

The research presently underway at Delaware is concerned with insect and disease problems affecting the hardwood forests of the Central States.

Concentrated study has been made for several years of insects involved in transmission of Dutch elm disease. Increased funding in fiscal year 1965 permitted program expansion to include intensification of basic research on the Dutch elm disease; study of attraction, arrestant, and repellent factors to nutrition and tree attack by insects; biological control with parasites and chemosterilants; and study of the systemic action of chemicals introduced into trees to prevent insect attack. In implementing the expanded program, additional manpower and a considerable amount of scientific instruments were housed in the existing laboratory. The congestion has resulted in overflow of men and materials into trailers and a greenhouse where conditions for doing research are less than satisfactory.

Recently, in meeting the need for research on shade-tree insects, adjustments involving additional space for manpower and equipment have had to be made on a temporary and highly unsatisfactory basis. As the insect program at the laboratory develops to meet the most critical needs, more office and laboratory space will be required.

The disease research now being done at Delaware deals with causes and control of oak wilt which occasions heavy losses in a broad area of the central hardwood region. It also concerns the problem of heartrot which degrades large volumes of hardwood timber and is particularly serious in trees of larger size which normally produce the highest quality wood. There still is a major job in identifying the fungi causing heartrot and determining the extent of distribution and damage.

The additional facilities would provide space for a more intensive attack on the problems of oak wilt and heartrots. They would also permit investigation of the role of viruses as predisposing influences for other pathogens; for isolation of forest tree viruses and determination of their mode of transmission and means of control; and for work on the causes and control of two new stem canker disease of poplar and alder, and similar work on wilts of maple and elm.

The laboratory addition would also house a pest control zone office to facilitate the extension of research results to field application, and to provide the most

efficient means of technical interchange between scientists engaged in research and those responsible for control. Delaware, Ohio, is well situated geographically as a central location for Forest Service's northeastern area, where it can provide cooperative forest pest control detection and control assistance to the States of Ohio, West Virginia, Pennsylvania, Indiana, Illinois, and Missouri.

Because the present status of pest control methodology changes frequently as new information about pests and how to deal with them is developed by research workers, old methods are being constantly improved and new methods evolved. It thus is important that control and research scientists keep in close touch with each other, often working together in planning and carrying out pilot tests of promising new leads developed in the laboratory. Moreover, both control and research workers require laboratory facilities in carrying out their respective responsibilities.

WILDLIFE HABITAT LABORATORY, NACOGDOCHES, TEX.

LETTER FROM WELDER WILDLIFE FOUNDATION

FEBRUARY 17, 1966.

Hon. CARL HAYDEN,
U.S. Senate,
Washington, D.C.

DEAR SENATOR: Because I met you on many occasions in the 25 years I was in a fairly high and responsible position in the U.S. Fish and Wildlife Service, may I impose on just a few moments of your time to call your attention to the need of the Forest Service's scientific laboratory on the campus of Stephen F. Austin State College, Nacogdoches, Tex. This laboratory serves the U.S. Forest research arm throughout the South in the field of wildlife research and silviculture.

I have had fairly close contact with this laboratory and feel that the personnel there are thoroughly competent and progressive men who deserve support. It is my understanding that the laboratory has been using one of the buildings belonging to Stephen F. Austin State College but, because of a 37-percent increase in enrollment this last year and a startling but lesser increase in several years preceding, the school has reached the point where it must tear the old building down and build more classrooms to accommodate the great number of students that are and will be registering there. Because of this emergency this laboratory is in need of financial assistance. The highest priority, of course, is for a new scientific laboratory to replace the accommodations they now have. They need to accommodate 12 to 15 research scientists and technicians. I understand that the laboratory they have in mind would cost about $335,000, plus another $30,000 for planning. The college has deeded 1½ acres of land to the Forest Service for this building. The Service also appears to be in urgent need of additional $100,000 to expand current research in timber-wildlife relations and in forage nutrition research.

The 108 million acres of commercial forest land in the Midsouth are the natural habitat for most southern game species. Both the timber and game can be grown on the same area if basic management principles are known and correctly applied. Ignorance of the facts leads to misconceptions and wastefulness. Research can lead the way to an enlightened management only if it has adequate facilities and well-trained personnel.

One phase of wildlife habitat research that has been sorely neglected is that of forage nutrition. Yet, if the facts were known about the kind and amount of foods that game need to facilitate growth and reproduction, great strides could be made toward providing a much more fruitful habitat. Indeed, without basic information on nutrition our chances are remote for achieving the true game potential of southern forests. It is well to point out that the facts obtained here would in large part benefit forest wildlife management throughout much of the Southeastern United States.

My years in administration and research in the Fish and Wildlife Service, with close contact with related fields in the Forest Service and here at Welder, continually have confirmed my belief that research pays big dividends. I am sure it will do so for forest wildlife management in the South. Your help in securing funds for the laboratory and expansion of research at Nacogdoches will be especially appreciated by those of us who have an enduring interest in wildlife in

Texas and throughout the South. At least the principles developed here should apply throughout most of America. Your help will give this program a great boost.

Sincerely yours,

CLARENCE COTTAM, *Director.*

DEPARTMENTAL STATEMENT—ESTABLISHMENT OF LABORATORY

A small group of Forest Service research scientists are stationed on the campus of Stephen F. Austin State College at Nacogdoches, Tex., to study problems of wildlife habitat management and associated timber management in the forests of the west Gulf Coastal Plain and Arkansas highlands. A mutually beneficial and productive relationship has developed between college scientists and those on the Forest Service staff. Cooperation in the conduct of research occurs in the day-to-day operations; the college and representatives of the Forest Service are well pleased with the way in which both groups benefit from their association.

If the space the college is providing could be made available indefinitely and if modifications were practical to provide laboratories essential for intensive modern research, the present situation would be ideal. However, the college now needs the space now occupied by the Forest Service to take care of its own demands for space. Recognizing the values associated with the present arrangement, the college has offered a building site for construction of a Forest Service laboratory. It is estimated that a laboratory would cost $335,000. Architectural design and plans are estimated at $27,000.

The Forest Service research program at Nacogdoches is answering some of the problems involved in growing wildlife in harmony with timber in east Texas and the mid-South. Timber products play an important role, having an annual value of approximately $70 million at local points of delivery in east Texas. Many times this value is added in manufacture. Intensive management, based on modern research, increases the productivity of forest stands and provides a sustained supply of timber of superior quality.

The wildlife habitat research determines concurrently the requirements and efficient practices for producing deer, squirrel, turkey, and quail from the forest. The research includes studies of the vegetation, its nutritive value, relationship to soil types, response to use and abuse, response to wildlife species to types of cover, and associated questions.

DEPARTMENT STATEMENT—WILDLIFE HABITAT RESEARCH AND TIMBER MANAGEMENT

In eastern Texas and parts of adjacent States, a substantial timber and wildlife resource can be developed to support an expanding economy. The problem is to find how the timber growing and harvesting can be effectively dovetailed with improved habitat for deer, turkey, quail, squirrels, and other game which is in high demand by hunters. Cultural methods for timber needs to be developed which will allow for optimum production of both the timber and wildlife resources.

The problems are especially acute in the southern bottom land forests. Bottom land hardwoods occur on about 1.8 million acres in eastern Texas and on nearly 21 million acres in the mid-South. These lands are highly productive for timber and also provide some of the finest hunting and other recreational opportunities in the South. However, little or no research has been conducted to provide management guides for wildlife, and serious problems have developed. In some cases wildlife is causing severe damage to timber; in others, capacity to support such game as turkeys, squirrels, and deer has been markedly lowered.

A comprehensive research program is needed in bottom land hardwoods to determine how to grow wildlife and timber together in commercially productive forests. Studies would be made of food and cover requirements of wildlife, size and distribution of forest openings, and nutritional qualities of wildlife foods, in order to realize the tremendous potential of the bottom land hardwoods for hunting and timber production.

In addition, there is a pressing need to develop systems of pine timber culture which will maintain the supply of forest products for dependent industries and also provide for the needs of forest wildlife. This research will be closely coordinated with existing research by wildlife specialists who are determining

the food and cover needed by game in the upland pine-hardwood forests. The timber specialists will find out how timber-growing practices can be modified to provide the prescribed conditions of wildlife on areas where both timber and game are important to the local economy.

A feasible acceleration of this research at Nacogdoches would require an additional $100,000 annually to meet the most pressing problems.

FOREST SERVICE TREE NURSERIES

LETTER FROM AMERICAN ASSOCIATION OF NURSERYMEN, INC.

MARCH 2, 1966.

Hon. CARL HAYDEN,
Chairman, Subcommittee on Interior and Related Agencies, Senate Appropriations Committee, U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: We wish to once again respectfully call the subcommittee's attention to two items in the Department of the Interior budget, both of which appear under title II, "Related Agencies—Department of Agriculture—Forest Service." Item No. 1 is an appropriation of $300,000 for "State and private forestry cooperation." No. 2 calls for an appropriation of $1 million under title IV of the Agricultural Act of 1966. The first sum would be earmarked for Clarke-McNary section IV funds which, in 1924, were designed to "stimulate States to plant trees." The second sum is designed to be used to grow trees for planting on Federal and State lands and to reforest non-Federal land.

Each year the nursery community has come to the Congress and urged elimination of all Government funds which end up producing nursery stock in direct competition with the products of our industry. For some years Congress has seen fit to resist those who urge an increase in appropriations for this purpose. We respectfully urge that these items be completely eliminated this year.

While the nursery community recognizes the national benefits from tree planting, we contend that a great deal more planting would be realized if funds appropriated were used to purchase nursery stock from private nurseries rather than to create Federal and State production facilities. The private nursery community is vast when compared with Federal-State nursery installations but, unfortunately, the overall health of the nursery industry is impaired by existence of Government facilities which compete with a portion of it. Any time a portion of an industry finds it necessary to destroy some of its products because markets have been absorbed by noncompetitive production, the whole industry suffers. We submit that existence of Government nurseries has an undesirable effect on the entire nursery community.

In this, the first year of President and Mrs. Johnson's national beautification program, our industry is faced with a great challenge—the challenge to produce nursery stock in great enough quantities and high enough quality to allow this Nation to be beautified at a rapid rate. As we travel around the country we find nurserymen increasing their production to meet the needs of the beautification program but we find many of them hesitant to do so because of the specter of Government nurseries increasing their production at the same time. Private nurseries cannot compete with Government nurseries because Government nurseries sell their production at unrealistic prices. Their sales price has no relation to costs. Ours must. No nurseryman—no farmer—wants to find himself overproduced, and no businessman can accurately plan his production when there exists in competition with him a vast uncompetitive production capacity.

For the health of the nursery industry and the national beautification program we respectfully urge the committee to delete funds requested in the 1966–67 Federal budget which would go toward production of nursery stock.

We respectfully request that this letter be made a part of the permanent record of hearings on this subject.

Sincerely yours,

ROBERT F. LEDERER,
Executive Vice President.

GEORGE ROGERS CLARK RECREATION WAY, SHAWNEE NATIONAL FOREST, ILL.

LETTER FROM GALLATIN COUNTY BOARD OF SUPERVISORS

FEBRUARY 24, 1966.

Senator CARL HAYDEN,
Chairman, Subcommittee on Appropriations for the Department of the Interior and Related Agencies, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Development of the outdoor recreation resource in this area is important to our economy and the enjoyment of a large region of the Midwest. The George Rogers Clark Recreation Way is the key to the overall development of that resource. This scenic highway will be a beautiful drive, offering the participant a view of the many activities in southern Illinois. The recreation road will make accessible all the major attractions in the Shawnee National Forest, Crab Orchard National Wildlife Refuge, five State parks, and many private developments.

For the consideration of your committee, we recommend that $260,000 be added to the Forest Service budget for fiscal year 1967. The money is to be used for preliminary plans and surveys (recreation and engineering) for the proposed George Rogers Clark Recreation Way, Shawnee National Forest.

Gallatin County appreciates your consideration and the opportunity to present this statement.

Yours very truly,

HERSCHEL RIGSBY,
Chairman, Gallatin County Board of Supervisors.

LETTER FROM HARDIN COUNTY COMMISSIONERS

FEBRUARY 21, 1966.

Hon. CARL HAYDEN,
Chairman, Subcommittee on Department of the Interior and Related Agencies, U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: Hardin County contains a large area of topography and soils highly suited to outdoor recreation. The Ohio River, with many beautiful overlooks, forms the east and southern boundaries of the county. The outdoor recreation potential is largely undeveloped at this time.

The economy of our county is such that the development of the recreation resource is very important. The demand for the recreational opportunities we have to offer is high and is predicted to increase manifold in the future. Hardin County is within the boundary of the Shawnee National Forest. In short, we have the suitable lands and a public agency. Needed is funds to construct the facilities demanded by people.

The George Rogers Clark Recreation Way is a proposed scenic highway extending across the east-west extent of Illinois in the Shawnee National Forest. When constructed, this highway will attract 3.5 million visitors annually. Many millions of dollars in private construction will be required to house, supply food and services to the visitors. This, in turn, will create many jobs. In order to get this project started, we request that $260,000 be added to the Forest Service budget for fiscal year 1967. This sum to be used for the engineering and recreation services required for preliminary planning, location, and design of the scenic highway and its scenic strip.

We also recommend that $170,000 be added to the Forest Service budget for the recreation and engineering plans required for the construction of Lusk Creek Lake in adjoining Pope County.

The favorable consideration of these requests by your subcommittee will be appreciated. We appreciate this opportunity to make our views known.

Yours very truly,

RUIE ROBINSON,
HOWARD CREAMER,
WINIFRED BARNARD,
Members.

LETTER FROM SALINE COUNTY BOARD OF SUPERVISORS

FEBRUARY 18, 1966.

Hon. CARL HAYDEN,
Chairman, Subcommittee on Appropriations for the Department of the Interior and Related Agencies, U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: The Saline County government endorses and supports the proposal to construct a scenic highway across the Shawnee Hills. A portion of this proposed highway, known as the George Rogers Clark Recreation Way, is located in this county. We firmly believe that this project is one of the most important steps in the development of the recreation potential of the area.

We understand that $260,000 is needed by the Shawnee National Forest for recreation and engineering plans and surveys to get the project underway. Your support in obtaining these necessary funds will be appreciated.

We are informed that the House Subcommittee on Appropriations for the Department of the Interior and Related Agencies will hold hearings early in March. Your personal support of our proposal that $260,000 be added to the Forest Service budget for 1967 will be appreciated.

In addition to your personal help, would you kindly arrange for this information to be entered into the records of the hearing.

Thank you for your help.

Yours very truly,

PAUL TANNER,
Chairman, Saline County Board of Supervisors.

DEPARTMENTAL STATEMENT

There has been considerable public interest in a scenic highway across southern Illinois for over 30 years. Many civic organizations in Illinois are keenly aware of the social and economic benefits which would accrue to them and to all citizens by the construction of such a highway. They are proposing that such a highway be constructed by the Forest Service, to be known as the George Rogers Clark Recreation Way.

This highway would traverse a highly scenic area between the two great rivers of the midcontinent—the Ohio and the Mississippi. It will link the more important historical, archeological, geological, and scenic areas across the State. The highway would be almost entirely within the boundaries of the Shawnee National Forest.

In addition to the scenic recreation resource which this road would develop, there are significant economic benefits to the area which would result from its construction. A study by Southern Illinois University states that the income from the recreation facilities could be increased from its present level of $4 to $35 million annually. The Illinois State Board of Economic Development estimates that 2,300 new jobs would be provided by this additional income.

The routing for the highway has been studied in a very generalized way, but not in specific detail. A complete route of feasibility study is needed to develop detailed estimates of the cost of such a highway as well as to define the specific resources and scenic opportunities which would be developed; $260,000 will be needed to make this study.

It is anticipated that the State of Illinois will contribute to the engineering design work for the highway when the route has been selected.

SUBCOMMITTEE RECESS

Chairman HAYDEN. We will recess until 2 o'clock.

(Whereupon, at 12:25 p.m., Friday, March 4, 1966, the hearings were recessed until 2 p.m., the same day.)

(Afternoon Session, 2 O'clock, Friday, March 4, 1966)

The subcommittee met at 2 p.m., pursuant to recess, in room 1223, New Senate Office Building, Hon. Robert C. Byrd, presiding.

Present: Senators Byrd, Bartlett, and Proxmire.

U.S. DEPARTMENT OF AGRICULTURE

Forest Service

STATEMENTS OF JOHN A. BAKER, ASSISTANT SECRETARY OF AGRICULTURE; E. P. CLIFF, CHIEF, FOREST SERVICE; A. W. GREELEY, ASSOCIATE CHIEF, FOREST SERVICE; C. W. HENDEE, DEPUTY CHIEF, FOREST SERVICE; M. M. NELSON, DEPUTY CHIEF, FOREST SERVICE; B. L. RASMUSSEN, DEPUTY CHIEF, FOREST SERVICE; G. M. JEMISON, DEPUTY CHIEF, FOREST SERVICE; AND R. F. DROEGE, ASSOCIATE DEPUTY CHIEF, FOREST SERVICE— Resumed

1967 Budget Request

Senator Byrd. The subcommittee will be in order.

Chief Cliff, I certainly am most appreciative of your courtesy always in appearing before this subcommittee and we are always very grateful for the information that you provide and for your helpful testimony.

May I take this opportunity to compliment the Forest Service on the dedication, sincerity of purpose, and the consummate skill with which it does its work. I have a very, very high regard for the Forest Service.

Mr. Cliff. Thank you very much. We will try to live up to that.

Senator Byrd. I have a similarly high regard for the people who come before this subcommittee year after year to present the budget request of the Forest Service. We in West Virginia are very proud of the progress that our State has been able to make through your cooperative efforts, through your guidance, and your direction.

Spruce Knob-Seneca Rocks National Recreation Area

Since you were here last year the legislation which I introduced to establish the Spruce Knob-Seneca Rocks National Recreation Area has been passed and signed by the President. I believe that this was the first national recreation area to be established in the national forest system.

Is that not true?

Mr. Nelson. Yes; you are correct, Senator, and we are real proud that that is one of the first and we thank you for the help that you gave in giving us this statue.

Mr. CLIFF. There is one other one in the West which was created about the same time which was the Whiskeytown-Shasta-Trinity National Recreation Area. They were almost simultaneous. There are these two that involve the national forest.

Senator BYRD. I know from meetings that I have attended in the good company of Mr. Droege and the others in the Forest Service, and yourself, too, Chief Cliff, and talks I have had with many people that there is a tremendous interest in this national recreation area not only in West Virginia, but also in much of the entire East.

Can you, Chief Cliff, or you, Mr. Nelson, or can someone please tell the subcommittee what progress the Forest Service is making in developing this national recreation area?

Mr. NELSON. Senator, I would be glad to do that. For the short time that has passed since the area has actually been established we think real good progress has been made.

MASTER PLAN FOR AREA

Our first big job, of course, is the preparation of a complete and detailed master plan for the area. As you know, this has to be done very carefully and, as you also know from some of the meetings that you have attended, there are many individuals and groups concerned with this, many of them have different ideas that vary widely, so we must proceed carefully with these plans to try to meet as near as we can the interests of the various groups and still have it produce the most for people. So, really, our first big job, Senator Byrd, is the big planning job and it is going very well.

Senator BYRD. But you are not holding up your work until you have completed your master plan, are you?

Mr. NELSON. No; we certainly are not. There are a number of projects we can start on before the actual plan is fully completed. One of the most important is to acquire lands that we know will be needed. We discussed some of our land acquisition problems and plans when we testified with the Bureau of Outdoor Recreation concerning the land and water conservation fund before this same subcommittee. Secondly, we are completing the design for a modest observation and visitor facility at Spruce Knob, which is the highest point in West Virginia and a real focal point of this national recreation area. Thirdly, we have entered into a contract for architecture and engineering services for planning and preliminary design of the road that will be improving access to Spruce Knob. So, we are moving ahead.

OBSERVATION TOWER ON SPRUCE KNOB

Senator BYRD. As you know, I have been very interested in getting moneys for an observation tower on Spruce Knob. I believe that in each of the last 2 years, certainly last year, I was able to get some moneys included for that purpose.

I believe that the appropriation which I was able to get last year in this committee and was able to have adopted by the Senate was in the amount of either $100,000 or $75,000, but this amount was lost in conference.

Now, you do envision going ahead with the construction of an observation tower on Spruce Knob and I believe that the budget includes about $55,000 for this purpose.

Mr. NELSON. You are correct, Senator. This very budget does include $55,000 for construction of a facility on the top of Spruce Knob, as you mentioned.

SOUTH BRANCH, POTOMAC RIVER

In addition, we have scheduled $129,000 for other recreation developments within the national recreation area. You will recall last year we talked briefly of the development possibility down the South Branch of the Potomac River.

Much of this $129,000 will be used for construction of the camp and picnic area on an excellent site which has recently been acquired on the South Branch near the entrance to South Branch Gorge.

A part of this fund will also be used for additional work in preparation and finishing the master plan which I mentioned before. The completed development of this site on the South Branch will take about twice the amount that we expect to be able to do this year.

The road eventually will have to be improved considerably, but there is a passable and usable road to the area. We plan to go ahead with some of the development in this South Branch area for which we have some funds in our regular recreation budget.

RECREATIONAL DEVELOPMENT—SOUTH BRANCH

Senator BYRD. Would you describe a little more carefully the recreational development on the South Branch of the Potomac River? You say that most of the $129,000 will be used to begin construction of a campsite and picnic area there?

Mr. NELSON. Yes, Senator. We purchased last year a site—it was in private ownership before—which is an excellent site for development of a camp and picnic area. That is one of the places where the forest supervisor expects to spend the major part of that portion of his allotment for recreation development which he will receive for recreation development with the Spruce Knob-Seneca Rocks National Recreation Area.

Senator BYRD. Just where is this?

Mr. NELSON. The South Branch with reference to Petersburg—is up the river from Petersburg. Then there is a gorge called the Smoke Holes. This would be up the South Branch of the Potomac above the Smoke Holes.

Senator BYRD. Between Petersburg and Moorefield?

Mr. NELSON. No, it would be up river from Petersburg.

Senator BYRD. Rig is located to the west of Moorefield and north of Petersburg. It would be somewhat south of Rig I suppose.

Mr. NELSON. The South Branch development is located on the South Branch of the Potomac River southwest of Petersburg in Grant County. It is about 15 or 20 miles up the river from Petersburg and several miles down river from an existing Forest Service recreation development called the Smoke Hole camp and picnic area. In relation to Rig, it would be southwest of that community which is down river from Petersburg.

CAMPING, PICNICKING, AND PARKING

Senator BYRD. What do you envision in the way of picnic tables and a trailer parking area, and so forth in connection with this site?

Mr. NELSON. I don't have the total number that this site might include. In fact, I don't know if the final plan is completed.

Mr. Greeley may have something to add, but our normal site of this type includes areas for camping; it includes areas for picnicking, and they are generally separate. They must include parking space for cars.

There has to be some sanitation facilities and we must make sure that we have pure water for drinking. A family unit, that we often refer to, consists normally of a place to park, a table, a stove, or some type of a unit so that they can have a fire for cooking and facilities for garbage.

Senator BYRD. What is the overall estimate of the cost when completed?

Mr. NELSON. I don't believe that we are prepared right now to say what the overall estimate is unless Mr. Greeley is.

Mr. GREELEY. I have a figure, Senator Byrd, of $260,000. This includes $210,000 for recreation facilities and $50,000 for interior roads and parking. This plan provides for 90-some family units, camping and picnicking facilities, and car-parking facilities, water, and sanitation.

Senator BYRD. There is no water impoundment involved?

Mr. GREELEY. That's right. It is on the river so there is no impoundment.

TOURIST CAPABILITY

Senator BYRD. What will be the capability of this site insofar as the number of tourists which it might be expected to accommodate?

Mr. GREELEY. This would be more than just a moderate type facility as it would be phased up.

Mr. CLIFF. One way to estimate that is, 90 family units which if filled, with the average family of 4 people, would accommodate nearly 400 people at one time, and then multiply that by the number of days during the recreation season when it would be occupied.

In a season's time it would accommodate a large number of visitors.

Senator BYRD. What portion of the $129,000 would be utilized for this site?

Mr. GREELEY. I think we lack detail on this, Senator.

Senator BYRD. All right. The remainder would be used for what?

Mr. NELSON. Part of it is in connection with finishing the master plan.

Mr. GREELEY. There are two major things. One is this work at the South Branch and the other is master plans and more specific plans for this site and probably other sites, too. We will use some of the $129,000 to make a start, anticipating that what would be started this year we would just keep right ahead and work on next year.

TROUT POND

Senator BYRD. Last year at my request this committee added $50,000 for planning a lake for recreation purposes at Trout Pond on the George Washington National Forest in my State.

What is the status of the planning for Trout Pond?

Mr. NELSON. First, Senator Byrd, we appreciate your efforts in getting that money because it allowed us to move ahead. We have a

contract with an architects and engineers firm to design a suitable dam, to provide construction plans for a dam, and give us an adequate estimate of cost. Much of the contract has been completed. We have also made some good progress with that same fund in the general overall plan of the recreation facilities at Trout Pond, or we sometimes call that Trout Lake now because this will be a lake just below the pond.

It will not interfere with or raise the water level of the natural trout pond that was there.

Senator BYRD. The natural impoundment is called the Trout Pond.

Mr. NELSON. Yes, sir.

Senator BYRD. And the artificial impoundment will be Trout Lake?

Mr. NELSON. That's right.

Senator BYRD. How will its size compare with that of Trout Pond?

Mr. DROEGE. It will be quite a bit bigger. I mean Trout Pond actually is quite small, as you know when we looked at it from the air.

And Trout Lake will be, as I recall, around 15 acres and that is much bigger than Trout Pond.

Senator BYRD. These are 15 surface acres?

Mr. DROEGE. Yes.

DAM SITE

Senator BYRD. Have you had any problem which cannot be circumvented in your judgment in regard to this impoundment?

Mr. NELSON. Are you referring to technical problems?

Senator BYRD. What do your drilling explorations show? Will the earth below be solid and sound enough to support this impoundment?

Mr. NELSON. Yes, it will. The contractor has gone far enough so that we know that this is a logical place that we could construct a dam and it would be a very desirable dam from an engineering standpoint and particularly desirable from a recreational and development standpoint.

We haven't run into the problem that we have in some other places, and I am sure I know what you refer to. We had another one in Appalachia where the soil situation was such that the cost went up tremendously high and it makes it a kind of questionable project.

We could construct this dam and it would be a very desirable feature.

Senator BYRD. So you don't foresee any problem like that?

Mr. NELSON. No. The engineer has gone far enough with this contract so that we are sure that that is a feasible dam construction project.

OVERALL COST ESTIMATES

Senator BYRD. Would you indicate the overall cost estimate in regard to Trout Pond and break the estimate down into its component parts?

Mr. NELSON. Based upon the design contractor who has given us cost figures up to this time, it is estimated that the dam construction will cost $410,000. That, of course, will have to be under a contract for bid purposes, but that is the best estimate we have now.

We have estimated the related recreational facilities cost in the neighborhood of $800,000. And also approximately $250,000 will be needed for the roads within the recreation areas at Trout Pond and Trout Lake, roads and parking facilities.

Senator BYRD. This looks like about $1,460,000, roughly.

Mr. NELSON. Yes.

Senator BYRD. There might be some other costs which you did not enumerate.

Mr. NELSON. Roughly that is about the cost.

Senator BYRD. What amounts are included for this project in the budget under consideration?

Mr. NELSON. The budget that we have before the committee right now does not contain any funds for development of the Trout Lake.

Senator BYRD. Is the construction of the dam the next logical step in the development of the project?

Mr. NELSON. Yes, it is.

PRIORITY OF DAM CONSTRUCTION

Senator BYRD. So as to the steps involved in the development of this project, I take it that the construction of the dam would be the top priority item?

Mr. NELSON. That is right. We don't believe it is desirable to spend our limited recreation money on development of recreational facilities there until we can get the dam constructed so that you are perfectly right, construction of the dam is the very next logical development in this project.

Senator BYRD. Do you have a capability of proceeding with the construction of the dam this year if you had the money?

Mr. NELSON. Yes, sir.

ESTIMATED CONSTRUCTION COST

Senator BYRD. What would be the amount of money needed to proceed with construction of the dam?

Mr. NELSON. The estimate of the contractor is $410,000, that I mentioned, and that is the dam construction phase. We believe that would be the first logical step and it should be all under one contract. The construction of a dam of this size is not the type of project that can be broken down for construction in more than one contract.

Senator BYRD. In other words, the Forest Service needs $410,000 to proceed with the construction of the dam?

Mr. NELSON. If we were to proceed in this project, that is right.

Senator BYRD. Is there reasonable expectation that this cost would increase if one were to delay the construction?

Mr. NELSON. Well, our overall engineering project costs have increased as most construction has increased and so we would have to assume, although we don't know, that there would be an increase, at least the normal increase, in construction of a project of this type.

Senator BYRD. The cost isn't going to get less?

Mr. NELSON. We don't see that it would get less, no.

Senator BYRD. And you could proceed this year?

Mr. NELSON. Yes.

Senator BYRD. And you need $410,000 with which to proceed?

Mr. NELSON. Yes, sir.

Senator BYRD. And, of course, the longer we delay, the longer we put off receiving the benefits that are expected to accrue from this construction.

Mr. NELSON. That's correct, sir.

TOURIST ATTRACTIONS TO RECREATION FACILITY

Senator BYRD. Is it not anticipated that the Trout Lake recreation facility would draw thousands of tourists into that area annually and that these tourists would spend perhaps on the average of $7, $8, $10 a day.

Mr. NELSON. We can only assume that that would be exactly the case, based upon the other developments that we have in the George Washington National Forest and such places as Sherwood Lake in West Virginia.

They are tremendously popular. I have talked to people here in Washington that had to line up and wait for picnic spots. I talked to one man in the Department a few months ago. He told us his experience last year. He had to line up and wait for somebody to finish using a picnic table before he and his family could move in so he could have that table.

This is an area that is close to the population center of Washington and other urban areas and we feel positively that it is a desirable project and will have tremendous use.

BRANDYWINE FACILITY

Senator BYRD. What has been your experience with regard to the Brandywine facility?

I can recall, I believe, Mr. Droege and I were over at Brandywine.

Mr. NELSON. I think it might be well for Mr. Droege to answer. He was the regional forester as you know in charge of that area. You may want him to answer that.

Senator BYRD. He and I were there when we dedicated that recreational site.

Mr. DROEGE. We had a good crowd that day and we have had a good crowd every day during the summer season since then; far beyond the design capability of that site. Because of the terrific overuse at Brandywine and because Trout Lake will be in this same general vicinity as Brandywine, we feel sure that the Trout Lake development is needed.

Senator BYRD. You have had a good bit of overcrowding there, haven't you?

Mr. DROEGE. That's right.

Senator BYRD. Have you been able, therefore, to accommodate the numbers of tourists that have come there?

Mr. DROEGE. We have not, not the ones that would like to get in, particularly in the camping areas.

Senator BYRD. What has been your visitor load there, Mr. Droege?

Mr. DROEGE. In 1964, the first year it was open we had something around 40,000. I don't have the figures for 1965.

Senator BYRD. 40,000 the first year?

Mr. DROEGE. Yes.

Senator BYRD. Do you charge entrance fees?

Mr. DROEGE. Yes.

Senator BYRD. What is the amount of the fee?

Mr. DROEGE. I think the daily entrance fee during the 1965 season at Brandywine was 25 cents for picnicking and 50 cents for camping. This charge was made for visitors who did not have the land and water conservation sticker or a seasonal ticket for this national forest.

Senator BYRD. Is this pretty well in line with other areas in the country?

Mr. DROEGE. That is correct, yes.

Senator BYRD. Has there been any noticeable resistance to the entrance fee?

Mr. DROEGE. No; generally no. I wouldn't say there hasn't been any, but it has generally been very well accepted.

Senator BYRD. A good bit of the overflow would accommodate itself by visiting Trout Lake?

Mr. DROEGE. Oh, yes; actually it will be a more desirable site because it is bigger, and you will recall that the picnic area at Brandywine is all right in the flood plain of the dam so it doesn't have any shade trees in it. The development at Trout Lake will be in an area that already has shade.

TROUT LAKE DAM

Senator BYRD. What is the estimated length of time needed for completion of the construction of the impoundment at Trout Lake once it has begun?

Mr. NELSON. I would think that we will be able to complete the dam within a year. We figure that is the first project, and then it will take some time and funds for the recreation improvements.

DAILY EXPENDITURES OF TOURISTS

Senator BYRD. What does the average tourist spend in a day at places like we are talking about?

Mr. GREELEY. No exact study has ever been made which ascertained with certainty the daily expenditures of various classes of outdoor recreationists on the national forests. The Fish and Wildlife Service Circular 120 (published in 1960) on page 5 displays data that fishermen and hunters on all classes of land spend about $6 a day on the average. The national forest use, including as it does many children and many sports less expensive than fishing and hunting, must be tempered from this figure. For purposes of broad average we have used $3 a visitor-day as the average expenditure of all who come to recreate on the national forests. Recognizing that the average camping or picnic party frequently consists of a father, mother, and two children, this figure amounts to about $12 a day for a family or similar group of visitors.

SHERWOOD LAKE

Senator BYRD. What has been your experience in regard to Sherwood Lake? You referred to it a little earlier?

Mr. NELSON. Our experience to date both at Sherwood and, as Mr. Droege has said, at Brandywine in Hardy County has been they are extremely popular, close to the seat of population, and, as you know, Senator Byrd, the mountainous areas of West Virginia are beautiful areas.

As a whole they are steep canyons and they contain some of the finest, most desirable rivers in the East, but they do lack opportunities for development of water-based outdoor recreation that these small lakes give us. So, lakes like Sherwood and Brandywine have been extremely popular and to date really our experience is that we can't

take care of all the people that come there that like to use those areas.

Mr. Cliff pointed out we are trying to do the best we can with the funds that we have, our overall recreation funds. Earlier this morning we discussed the recreation allotment in relation to the national forest program and I believe that our recreation allotment stands about 35 percent of the estimated needs shown in the forest program for recreation in the national forests. Our overall plans have the need for this type of development in the mountains of West Virginia.

CAPACITY AT BRANDYWINE

Senator BYRD. What is your capacity at Brandywine, Mr. Droege?

Mr. DROEGE. I don't remember the exact figures but I believe it was around 40 to 50 picnic units and around 20 camping units. We will put the correct figures in the record.

Senator BYRD. Yes. All right. You might, for the record, indicate what your capacity is annually and what you actually turned away last year.

Mr. DROEGE. All right.

(The information follows:)

Development facilities at Brandywine: 60 picnic units and 17 camping units. Annual capacity during the recreation season is about 35,000. Substantial numbers of visitors were turned away last summer. Exact figures are not available but estimates are that at least as many were turned away as were able to use the area.

INCREASED NUMBER OF TOURISTS

Senator BYRD. And, of course, I presume that if you had *x* number of visitors last year, many of whom were turned away, you would expect as the years go forward to have *x*-plus each year.

Mr. DROEGE. Yes; nationally we have an increase of 10 percent or more every year.

SHERWOOD LAKE

Senator BYRD. Last year you told the committee that much needed to be done to fully develop Sherwood Lake. Would you please bring us up to date on the situation now? What funds are allocated in this budget, if any, and what funds are needed to take care of the present and immediate visitor loads?

Mr. NELSON. Senator Byrd, we keep working at the job at Sherwood Lake with the funds that we can make available, but there still remains a considerable amount that needs to be done.

The master plan indicates that additional family units are needed for camping and picnicking. We need an enlarged beach and we need a facility for group camping.

It will require some additional sanitation and administrative developments before the overall plan is finished. We estimate that about $207,000 is needed to complete facilities in the existing area and about $268,000 for additional facilities in new sections. Then there always is related to that the parking and access roads. We estimate that to be about $225,000. Overall to complete this development it will cost about $700,000.

As to what we are able to do, this coming year we plan to allot somewhere between $40,000 and $45,000 to Sherwood Lake; whereas in order to meet the real current needs, it probably would be desirable if

we could program somewhere in the neighborhood of $207,000 for the priority jobs at this stage of the game.

HILLS CREEK (EAGLE LAKE)

Senator BYRD. It is my understanding that there is a good site for a small lake on Hills Creek in Pocahontas County. I believe someone has called this Eagle Lake. We talked about this some last year. This lake would be quite close to the new Cranberry Glades Visitor Information Center for which this committee at my request included funds in fiscal year 1964, and it is also close to the beginning of Monongahela Highland Scenic Highway now under construction. This appears to me to be a very desirable development. Can you bring us up to date on the situation here?

Mr. NELSON. Yes. Last year we told you that we would make a feasibility study on a site for a proposed dam that might be created on Hills Creek. We have started to call that Eagle Lake.

This feasibility study has been completed and it confirms that a dam could be constructed on Hills Creek. You referred to it being close to the Cranberry Visitor Information Center. It is about 4½ miles and about the same distance from the highland scenic highway where it will take off from the present State highway.

Senator BYRD. You haven't adopted the cold war vernacular as yet? You are not naming your lakes after hawks and doves? You are naming them after the eagle?

Mr. NELSON. Well, I don't know exactly how that name started. I know that there is a place down the creek called Eagle School so it may be an old name in this part of the country.

ESTIMATES FOR DAM CONSTRUCTION AND RECREATION IMPROVEMENTS

Senator BYRD. Do you have estimates for the construction of the dam and the installation of the needed recreation improvements, and if so are funds included in this budget?

Mr. NELSON. This is only a preliminary survey to determine whether or not it would be feasible, but we do have some rough estimates. We estimate the dam would cost in the neighborhood of $335,000 and the plan for the installation of the needed recreational facilities would take approximately $235,000. That is based upon cost of similar type installations at other places.

And then again it would require construction of roads, trails, and parking areas, and that we set aside as a separate item because it comes from different funds of about $205,000 or about the same as the recreation improvements. That would total out to about $815,000 to put this project in. It would not be desirable to start this project without full engineering information on the dam. As at Trout Lake, we would propose a contract with an engineering firm to study the land, design the dam, prepare actual plans for the dam, and give us engineering cost estimates of construction. Such a contract in this area would cost approximately $80,000.

LAUREL FORK

Senator BYRD. Last year we discussed a similar development at Laurel Fork in Randolph County which would provide excellent recreation opportunities. As I recall, this was about a 70-acre impoundment for camping, picnicking, fishing, and swimming.

What is the status of this project?

Mr. NELSON. Here, again, we made a feasibility study. These are made with our own engineers and our own foresters, as to whether or not this would be a desirable project. We find from that data that it would be a practical and desirable development.

We do not have funds in the budget to cover any further studies or planning for this project.

Senator BYRD. There are no funds in the budget for this development?

Mr. NELSON. No, sir.

COST ESTIMATES FOR DEVELOPMENT OF AREA

Senator BYRD. What are your estimates for the development of this area?

Mr. NELSON. The estimates which I will give you, like the last one we talked about, are rough estimates and not too precise at this time, but in a general way the dam construction would probably cost in the neighborhood of $495,000 to a half million dollars.

Planning and construction costs for recreational facilities would be in the neighborhood of $220,000 based upon the number of units we feel this area would handle. The construction of the interior roads and access roads together with the engineering and planning would be in the neighborhood of $380,000. This project is a more expensive one. It totals up to about $1,100,000. Again, referring to the desirability of having the engineering contract for the design of the dam as the first step, that would cost about the same as Eagle Lake, or about $80,000.

PROJECTS IN HAMPSHIRE AND WEBSTER COUNTIES

Senator BYRD. Do you have any projects in this budget for Hampshire and Webster Counties?

Mr. NELSON. Not projects of this type, Senator. One of our problems in these counties, as you recognize, is that we have a small amount of Government-owned land.

To better this situation we have programed, from the regular Weeks law funds, money for the purchase of land. We plan to purchase about 1,700 acres in Hampshire County. We estimated the cost at about $41,000. In Webster County we are planning to acquire 1,500 acres at a cost of somewhere around $75,000.

We are also planning to use the regular Weeks law money to purchase 1,500 acres over in Randolph County, Senator, at a cost of about $47,000. Altogether in West Virginia we have programed $153,000 out of the Weeks law fund that are within this budget.

As you know from the other hearing, we plan to program a little over a million and a half dollars of land and water conservation funds in West Virginia.

LAND ACQUISITION IN WEST VIRGINIA

Senator BYRD. Last year I believe I was able to increase the amount of moneys over the House allocation from $25,000 to $100,000 for the purchase of lands in Randolph, Webster, and Pocahontas Counties. Have you been moving along very well in the purchase of those lands?

WEEKS ACT FUNDS IN WEST VIRGINIA

Mr. NELSON. We have been moving along real well with our Weeks law purchases. Our present plans are to acquire 4,000 acres at a cost of $200,000 on the Monongahela National Forest in West Virginia.

Senator BYRD. Very well.

You say you plan to spend $153,000 with the regular Weeks Act funds in West Virginia? Is this about as much as you think could be spent at this time so as to proceed methodically, and systematically, and efficiently?

Mr. NELSON. We think in connection with the purchase of land that we need to coordinate the land that we purchase under the Weeks law with those we purchase under the land and water conservation fund and we think when we consider the two together we have a very desirable program in West Virginia and it is about the size that we should have and can take care of in West Virginia this year. The Weeks law funds will be used mainly to purchase depleted lands that need restoration. Those lands in Hampshire County are in the watershed of the Cacapon River which is one of the rivers included in the wild rivers bill, as you will recall. That bill has already passed the Senate this year.

The lands over in Randolph and Webster Counties are almost strictly watershed lands and quite badly depleted. They are mostly in the Gauley River area, and we feel that those are desirable to purchase under the Weeks law fund, and that there are some real opportunities for applying national forest management to these lands to improve the situation.

Some of those are stripped mine lands, Senator, as you recall, over in the Gauley River, and they are the cheaper lands to buy, but they need to be put in public ownership because many of them are contributing to erosion and acids to the streams. As a whole, when we take the two programs together we do think we have a very desirable program, about the size that we can handle in West Virginia.

Senator BYRD. The lands that you are purchasing under the Weeks Act over in West Virginia are largely those lands that are depleted and which stand in great need of rehabilitation so as to improve the watershed condition.

Is that a fair statement?

Mr. NELSON. Yes, sir.

Senator BYRD. Aside from Trout Pond, to which of the other recreational sites which we have discussed today would you attribute the highest priority? Would you say Eagle Lake, or Laurel Fork, or which would have the highest priority if you were able to get the money this year?

Mr. NELSON. Mr. Droege has been working with that. He will answer.

PRIORITY OF RECREATIONAL SITES

Mr. DROEGE. Assuming that we are able to go ahead with a reasonable program at South Fork in the national recreation area, Eagle Lake would be the highest priority because of visitor information center and the new highway. It is pretty difficult to put a priority between the Eagle Lake and Sherwood.

Senator BYRD. Yes.

Mr. DROEGE. Where we already have an existing facility that needs expansion.

Senator BYRD. But insofar as new projects are concerned Eagle Lake has the top priority?

Mr. DROEGE. That's right.

Senator BYRD. Of course, Trout Pond is of top priority because we are already started there and need to go forward.

Mr. DROEGE. Oh, yes.

Mr. NELSON. The Trout Pond project is close to the population centers. We consider that one of the highest priorities for this type of development.

Senator BYRD. Yes. All right. My colleagues here have some questions and I would like at this time to call on them so that they will not be kept waiting. I have further questions which I would like to ask subsequently.

Senator Bartlett?

EAGLE CREEK, ALASKA

Senator BARTLETT. Thank you, Mr. Chairman.

When you mentioned name places my mind went back to a time about 45 years ago when my father in Fairbanks, Alaska, said we were going to Eagle Creek to engage in placer mining, and we set out by team and wagon for Eagle Creek, 100 miles away.

There was sort of a road for 30 miles. The rest of the way was up valleys, over mountains, through the wilderness, and we established a camp. We dug a ditch. We installed a hydraulic mining plant and we had to clean up, and we cleaned up $84 and returned to Fairbanks with $20 in one gold piece and we lived on credit.

That wasn't a very warlike creek. I want to talk about balloons. People have been telling me lately about this new balloon technique in logging, especially adaptable to steep slopes found in certain parts of the country.

Can we have a little information about that?

BALLOON LOGGING

Mr. CLIFF. Senator Bartlett, we are doing some research on balloon logging and Dr. Jemison, who is in charge of our research program will respond to that.

Dr. JEMISON. Senator Bartlett, you are correct that the balloon logging idea, when it is properly developed, will certainly be a boost to logging in steep country where the soils are not stable and where roadbuilding costs are very high such as we find in much of southeastern Alaska.

Our research project has progressed to the point where we have completed an engineering systems analysis which shows that this idea is technically feasible.

We have done some work on an economic analysis and have found that from a cost standpoint it is generally feasible. What we have yet ahead of us is to develop a system that can be made to operate efficiently. This will require additional research on balloon configurations, improvement of fabrics, a cheaper gas, improvement of ground handling equipment, safety devices, de-icing equipment, and this sort of improvement.

We have gone far enough with pilot tests to know that this is likely to be a very useful technique for logging in the type of country I mentioned.

EXPLANATION OF BALLOON LOGGING

Senator BARTLETT. How does it work, please?

Dr. JEMISON. Well, the principle involves partially suspending an overhead cable system with a tethered balloon so that the logs are either suspended, or essentially suspended, above the ground. Due to the configuration of the balloon when it is pulled in by a high-speed yarder, the whole system is given a lift like you get on an airplane wing.

The actual gas in the balloon is not depended on entirely to suspend the system. It is a combination of lift from the gas balloon and the lift generated by the high-speed yarding.

This system has many advantages. Ground disturbance is less and the distances over which you can yard are lengthened. Fewer roads are needed and you can reach timber that otherwise would be inaccessible because of steepness of slope.

We are also experimenting with what is called a parawing—a device that was developed as a part of the space program for reentry of orbiting vehicles. We think that a combination of the parawing idea with a small gas-filled balloon will give us a lifting or suspension system that will be extremely practical in logging.

Mr. CLIFF. May I just add one more thing to that?

Senator BYRD. Yes.

Mr. CLIFF. One of the key features to this, Senator, is that that balloon is a captive balloon. It is tethered to this system. We put the yarder at a road or the water edge—and we anchor the other end of the cable up on the top of the mountain where we want to get the logs from. Then the balloon is attached to this cable with a pulley system. It has a haulback line which is attached to the yarder and the balloon is pulled up and down this cable system so it can't get away. The lifting power of the balloon is used to lift the logs off the ground, and then they are pulled down the cable by the power winch. The logs are dropped at the landing and then the balloon is returned back up to the top of the slope. This is the basic design of the system.

VARYING SIZES OF BALLOON

Senator BARTLETT. And I infer that the balloon may be any one of a number of sizes depending upon the need and the location. Right?

Mr. CLIFF. That is correct.

Senator BARTLETT. And this appears to be very promising?

Mr. CLIFF. It is very promising and we think that it is especially promising in the kind of country we have in Alaska where most of the timber is within a mile or so of tidewater and where roadbuilding is expensive and you can run these cables back for a half mile or more. We don't know just how great a distance it is feasible, but we yarded at half-mile distances in our trials.

The system would eliminate a lot of costly roadbuilding and minimize soil disturbance, and it is fast and it results in better utilization and can do less damage to the soil.

Senator BARTLETT. Where did this idea come from and how long ago?

Mr. CLIFF. I don't know that we can claim credit for the original thought. We were experimenting with helicopter logging and learned that some people in British Columbia conceived the idea of using balloons and made a preliminary trial a few years ago. I think the idea was also tested out over in Sweden a few years ago, but we picked the idea up and really engineered it and applied research techniques to it to the point where now it looks like it is a very promising method of getting logs out.

CONTINUATION OF RESEARCH

Senator BARTLETT. And you are to continue your research?

Mr. CLIFF. Yes; we have some funds in this budget for continuation.

Senator BARTLETT. How much?

Mr. CLIFF. Well, as Dr. Jemison testified this morning, about $21,000.

Senator BARTLETT. Is that enough, understanding, of course, on my part that nothing is ever quite enough?

Mr. CLIFF. If we had more money we could develop this faster. We are to the point where we need to get out on more field trials and there are some problems in design of the balloon itself that need to be worked on, and I am sure that more money could be used effectively if it were available, but this is all that has been put into the project with the budget limitations we are working under this year.

SNETTISHAM HYDROELECTRIC PROJECT, ALASKA

Senator BARTLETT. Thank you very much. I would like to explore one more subject. Then I shall be done.

We coursed through the first part of January with equanimity, having understood there was going to be guns and butter, too. Then a certain message arrived on Capitol Hill entitled the budget message and changed the metaphor.

When we went to turn on the switch there was no electricity. We had been counting on first year's construction funds for an extraordinarily important hydroelectric project near Juneau, Alaska. The planning had all been completed. We had every reason to hope and believe that the budget would contain a couple of million dollars to launch construction. This job was to be performed by the Corps of Engineers. But the budget was silent on this subject. This is the so-called Snettisham hydroelectric project which, if it had been built according to schedule, could have been placed in operation in 1971 with the initial capacity of 40,600 kilowatts and an eventual capacity of 60,900.

Of course, Senator Gruening and I, and others, I assume, too, got in touch with the appropriate officials down at the Bureau of the Budget. To our consternation we learned that when this adverse decision relating to Snettisham was made, the Budget Bureau was not acquainted with the fact that a few weeks before there had been a timber sale at Juneau, Alaska, by the U.S. Forest Service at which time the last remaining stand of timber in this forest was sold to the St. Regis Paper Co.

There are already two pulp mills in southeastern Alaska—one at Ketchikan and one at Sitka. The fact that this company bid on the timber, the fact that it intends to construct a mill and pertinent facili-

ties somewhere in that general area, makes the need for Snettisham all the greater.

However, I want to say here that Juneau has been growing so rapidly, the population is increasing so constantly, that in any case there would have been a need for this hydro project, which will pay back 100 cents on the dollar. Federal money to be spent on it will be repaid in full, instead of just in part, as is the case in some hydro projects. I know the Forest Service and the Department of Agriculture have expressed a lively and continuing interest in this project for a good many years.

What I should like to ask now is, has the Department ever gone on record officially concerning this?

Mr. CLIFF. Senator Bartlett, this was a subject of discussion a number of years ago when we made a preliminary award of timber in this same general area to the Georgia Pacific Co., and they had plans for building a pulpmill near Juneau, which didn't materialize. As I remember, we did go on record, or at least we commented on the relationship between the proposed Snettisham project and the timber utilization project.

Senator BARTLETT. Was Mr. Greeley a forester up there at that time?

Mr. CLIFF. Mr. Greeley was the regional forester in Alaska at that time, and he is here, and he is very familiar with it, and I would like to have him comment on this.

Senator BARTLETT. Do you have any recollection, Art, about that?

DEPARTMENT IN ACCORD WITH SNETTISHAM PROJECT

Mr. GREELEY. Senator Bartlett, since the time that I was up there the Department has taken a position as being in accord with the objectives of the bill to authorize the Snettisham project. There is a letter which was sent to the chairman of the Committee on Interior and Insular Affairs signed by Secretary Freeman dated July 16, 1962, which comments on the bill, which then was S. 594, which was to authorize the Crater-Long Lakes division of Snettisham, and this position statement of the Department points out that the consruction of such a project would facilitate the establishment of a major industrial increase in the Juneau area and that such industrial development would make possible materially improved sustained yield management of the national forest timber, and would reduce losses from insects and diseases.

The letter goes on to point out that large quantities of firm power would be necessary for the operation of the sort of mill that would be necessary for the processing of national forest timber and that the area's existing power supply is inadequate to meet such needs.

This was recognized by the Department of Agriculture as being one of the things that would be a necessary concomitant to the sale and carrying out the processing of the timber.

Senator BARTLETT. Is there any objection on your part to placing that letter in the record at this point if the chairman will agree?

Mr. BAKER. We would be glad to do that, Mr. Chairman.

Senator BYRD. Without objection, that will be placed in the record at this time.

(The letter follows:)

DEPARTMENT OF AGRICULTURE,
Washington, D.C., July 16, 1962.

Hon. CLINTON P. ANDERSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate.

DEAR MR. CHAIRMAN: This is in reply to your request of May 18, 1962, for a report on S. 594, a bill to authorize the construction, operation, and maintenance of the Crater-Long Lakes division of the Snettisham project, Alaska, and for other purposes.

This Department is in accord with the objectives of the bill.

The bill would authorize the construction, operation, and maintenance of the Crater-Long Lakes division of the Snettisham project for the primary purpose of developing hydroelectric power to encourage and promote the economical development of and to foster the establishment of essential industries in the State of Alaska. Preference would be given to Federal agencies, public bodies, and cooperatives, in the sale of such power.

The project proposed in the plan of development of the Department of the Interior, as presented in House Document No. 40, 87th Congress, and as modified in that Department's reappraisal report of November 1961, would be almost entirely on national forest lands and could be carried out with important favorable results and negligible adverse effects upon national forest resources and uses. It would facilitate the eventual establishment of a major industry in the Juneau area for the sustained-yield harvest of extensive timber stands from nearby national forest lands. Such industrial development would make possible materially improved sustained-yield management of national forest timber, with reduced losses from insects and disease.

Large quantities of firm power would be necessary for the operation of the large mill (or mills) which would be required for processing timber harvested from national forest lands. The area's existing power supply is wholly inadequate to meet such needs. The unavailability of adequate low-cost power has been and is an important deterrent to the establishment of such operations. The project proposed could satisfy such requirements and also meet the needs of Federal agencies, public bodies, and cooperatives.

National forest lands not needed for actual use in connection with the proposed hydroelectric power project works would of course continue to be administered by the Department of Agriculture, under the principles of multiple use and sustained yield, for timber, recreation, and other national forest purposes.

This department is also interested in the project on behalf of the REA-financed system, Glacier Highway Electric Association of Auke Bay, Alaska, which is located in the market area to be served by the project. This rural electric system is experiencing very high wholesale power cost which necessarily limits energy usage by its member-consumers. The availability of power from the Snettisham project at the projected rate of 7.47 mills per killowatt hour would materially benefit this system and its consumers.

The Bureau of the Budget advises that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely yours,

ORVILLE L. FREEMAN.

ESTIMATED TIME FOR MILL COMPLETION AND COMMENCEMENT OF PRODUCTION

Senator BARTLETT. If the construction of Snettisham were to commence as we expected it to within the next fiscal year and were to proceed on schedule it would be completed, would it not, just about the time we might expect the mill to come into production?

Mr. CLIFF. I don't know what the Army Engineers' time schedule would be.

Senator BARTLETT. They would hope to have this going by 1971.

Mr. CLIFF. The pulp mill that would be built there would be completed and in operation at about that same time. They have 4 or 5 years in which to get going on this project.

Senator BARTLETT. There is no time to lose. I will say that. I won't commit you to it. Thank you very much.

Senator BYRD. Thank you, Senator Bartlett.
Senator Proxmire?

FOREST PRODUCTS LABORATORY, MADISON, WIS.

Senator PROXMIRE. Thank you, Mr. Chairman.

I think that the questions I have are primarily for Mr. Cliff. I am, as you can imagine, very interested in the Forest Products Laboratory at Madison, Wis. This is one of the very few Federal installations we have left in the entire State and we think it has done a marvelous job.

We are very proud of it. We do feel we can afford to be a little more generously funded. It is an excellent investment for the Federal Government.

On my last visit to the Forest Products Laboratory, which was in November of 1964, plans and specifications were being completed for new facilities. What is the current status of the construction program?

Mr. CLIFF. The addition to the lab is going forward. I understand the superstructure is being erected now, but Dr. Jemison may have more detailed information on that than I have.

Dr. JEMISON. Senator Proxmire, the present construction program, as you will recall, was to be phase 1 of a three-phase program that was described before this committee a year or two ago. Phase 1 would house a pulp and paper unit and a wood chemistry unit. Unfortunately, when we received the bids for the project, they were approximately a million dollars more than the funds available, and so we had to reject the bids.

ELIMINATION OF WOOD CHEMISTRY UNIT

We eliminated the wood chemistry unit, readvertised, and received a bid that we are going ahead on. We are up out of the ground. In fact, we are ahead of schedule.

Senator PROXMIRE. The wood chemistry—may I just interrupt—was elminated, period, or were you able to get a subsequent bid which included the possibility of constructing that, too?

Dr. JEMISON. No, it was eliminated completely, and we were unable with the funds available to include any part of the wood chemistry unit.

Senator PROXMIRE. Do you have plans for asking for that later?

Dr. JEMISON. Yes, when we can within the budget framework in the future.

Senator PROXMIRE. I am sorry I interrupted. You go ahead.

Dr. JEMISON. The funds for the wood-chemistry unit are not included in the budget we are considering here.

Senator PROXMIRE. I am aware it was necessary to curtail the planned construction at the Forest Products Laboratory. What effect will this have on your planned program?

I am especially interested in your expanding work in the field of water pollution control for the pulp and paper industry.

Dr. JEMISON. The fact that we didn't get the wood-chemistry unit of our laboratory in the construction program will mean some curtailment in our wood-chemistry work.

As you have suggested in your question, a great deal of the benefits that will come from a wood-chemistry research program will have a bearing on reducing air and water pollution.

PREVENTION OF POLLUTION

Senator PROXMIRE. It just seems to me that this is a program that really ought to have a high priority, in view of the great interest in the country, and the Congress, and elsewhere in preventing pollution, and the fact that this kind of research can help us enormously in making progress in this area, and it is crucial if we are going to make any real progress.

Certainly in our State, and I am sure it is true in many, many States where you have any kind of a paper industry, pulp industry, pollution is a serious problem.

Dr. JEMISON. I would have to agree with what you are saying, and to illustrate the soundness of the program I might cite that we have made very excellent progress on a new pulping method.

It is called the polysulfide method. This process not only will increase the yield of usable pulp by about 20 to 25 percent from the same amount of raw material, but it will be an odorless system, and will go a long way toward removing the chemical and organic wastes from the effluents that are produced by pulp mills.

So I think you are absolutely right. This is one of the important results that will flow from this type of research.

RESEARCH PROGRAM FOR PREVENTING POLLUTION

Senator PROXMIRE. It is my understanding that there are bills pending, and by very responsible and highly respected Senators, which will cost literally billions of dollars in this field. I mean in the field of preventing pollution.

I realize that this covers many situations in addition to pulp and paper, but with the kind of modest amount of money that this research requires, it would seem to me under these circumstances an additional appropriation makes a great deal of sense, from the standpoint of economy, strictly from the standpoint of just saving money.

In other words, if you are going to go ahead with a multibillion dollar program of preventing pollution, doesn't it seem logical that it would be wise to proceed in an area spending a very few million dollars on research which has worked out well and which seems very promising, and in an installation which has shown its competence repeatedly and which is highly respected?

Dr. JEMISON. As you probably recall, we have the planning completed for the wood-chemistry unit although we were unable to start construction.

Senator PROXMIRE. Yes, I understand you need the funds.

Dr. JEMISON. Our figures show this would cost $1,190,000.

Senator PROXMIRE. It is a lot of money, but when you are dealing with this enormous and very expensive problem which we have, it is very modest.

What are the immediate needs and costs in bringing the facilities at the Forest Products Laboratory into line with the 10-year plan approved some time ago?

NEEDS AT FOREST PRODUCTS LABORATORY

Dr. JEMISON. As I mentioned, phase 1 included the construction of the pulp and paper and the wood-chemistry wing. In addition to this,

as phase 2, as we have earlier described it, we would hope to remodel the old laboratory structure which we built in 1934, after the pulp and paper and wood chemistry units have moved into the new facilities.

This would involve approximately a $3 million project, which would cost about $190,000 to plan. We would plan on restructuring the space, particularly to provide for a forest products engineering facility, specially equipped to handle some of the design and structural unit evaluation problems that relate to use of wood in dwellings and other structures. This would be the second phase, a remodeling of the old laboratory.

Then as a third phase and one yet for the future would be provision for a solid wood products facility, a new facility, which would accommodate work in such things as veneer and plywood manufacture, adhesives, finishes, wood seasoning, packaging, fireproofing, and work of that kind.

Senator PROXMIRE. Last year the Senate approved an item for architectural planning of the use of your present building when the current construction is completed, but this item was lost in conference with the House.

How will this effect your research program?

Dr. JEMISON. We will not be able to go ahead with the planning. That would be the $190,000 I mentioned to develop plans for remodeling. Until these funds are available for planning we will be delayed in making effective use of the space in the old building.

A lot of this space, although it will be vacated, is not very usable without remodeling. It is space that was used for our pulp and paper unit where we had old equipment that occupied as many as three or four stories. This obsolete equipment will be removed, but without remodeling the space is not going to be very useful.

Senator PROXMIRE. How is the expanded building program at the laboratory related to the current problems facing the forest products industry, and to helping such problem areas as Appalachia and the Lake States?

Dr. JEMISON. As you know, Senator Proxmire, the basic problem of the Appalachian States and much of the Lake States rests on finding new or improved uses for rather low grade, often small-sized, hardwood timber.

Potentially, this resource can support a very greatly expanded economy, but we have to find ways, and the technology, to utilize this material either in improved or new uses.

We have done some work, of course, on this problem. One of the more recent things we found is that by modifying certain pulping processes for the kind of low-quality hardwoods that are found in the Lake States and Appalachia to a substantial extent, we can make them suitable for sanitary papers, creped toweling, and that sort of thing.

One 150-ton capacity pulpmill, would employ 400 unskilled and semiskilled people, about 150 of them in the woods. So this type of work does represent an opportunity for increasing the economy, based on better use of wood products.

Senator PROXMIRE. You would do it in areas where we have unemployment, by and large?

Dr. JEMISON. Yes, sir.

LA CROSSE, WIS., PROJECT

Senator PROXMIRE. I have just one final question, Mr. Chairman.

I understand that a great deal of excellent work is being done at the Forest Service's La Cross, Wis., project. However, I have received a letter from the Director of the Wisconsin State Conservation Department indicating that support is urgently needed to strengthen the scientific staff and provide more operating funds. The amount mentioned in the letter was $150,000.

Can you tell me if this money could be profitably used, if Congress provided it?

Dr. JEMISON. The program at La Crosse is a small program in watershed management, in what we call the driftless area. This is an unglaciated area that occurs in Wisconsin, Minnesota, and northeastern Iowa.

There are some very critical erosion and sedimentation problems caused by deterioration of forest lands, and the rapid runoff that occurs there. We would hope as we can in the future to strengthen this program by adding a sum such as you have mentioned, $150,000.

Senator PROXMIRE. Thank you very much, Mr. Chairman.

Thank you, Dr. Jemison, very much.

Thank you, Mr. Cliff.

RESEARCH—APPALACHIAN REGION

Senator BYRD. Thank you, Senator Proxmire.

Dr. Jemison, the Forest Service research budget requests increases for programs relating to forest products utilization and marketing, forest engineering, and forest survey—all intended for research on problems of the Appalachian region.

Is that correct?

Dr. JEMISON. Yes, Senator Byrd, that is correct. These amounts which show up as increases in our 1967 budget would put into our base the 1966 funds that we received in a supplemental appropriation that was passed in 1965.

They would enable us, if allowed, to continue the programs you mentioned at the same level as we have had them during 1966.

Senator BYRD. At Princeton you have a fine program of forest products utilization research and associated marketing research. Can you state the amounts contained in the budget proposal for each of these programs?

Dr. JEMISON. Yes. The budget before us contains $700,000 for the marketing research, which is the same amount as we had last year, and the utilization program at Princeton is represented here in this budget by $125,000.

This amount, as I mentioned, is replacement of the Appalachian—$125,000 is included in the Appalachian program.

Senator BYRD. So that you would end up with the same amount that you had last year?

Dr. JEMISON. This is correct.

Senator BYRD. Therefore, if the $125,000 item is approved for forest products utilization, it is not actually an increase; it will only replace Appalachian funds, and enable work to proceed at the same level as heretofore?

Dr. JEMISON. This is correct.

Senator BYRD. And if it is denied, of course, you will proceed on a lower level than heretofore?

Dr. JEMISON. If it were denied, we would be back to zero. That would eliminate the entire project.

Senator BYRD. Does $125,000 represent your full capability in this regard?

Dr. JEMISON. Senator Byrd, our short-term forestry research program anticipated that ultimately we would develop a utilization project at Princeton of $250,000. So this represents about half of what we ultimately hope to achieve there.

Senator BYRD. So you will be presently financed at half of the $250,000, eventually needed. Could you effectively use the total planned amount now?

Dr. JEMISON. Well, there are many pressing problems in the utilization field in West Virginia, as I indicated to Senator Proxmire in commenting in general on the utilization problems.

However, I don't believe we could effectively use an increase beyond the $125,000 at this time.

Senator BYRD. If there are still high-priority problems needing research, why should not such investigations be undertaken now?

PRINCETON FACILITY

Dr. JEMISON. You will recall that several years ago we built at Princeton a marketing research facility. A little later it was supplemented with some outbuildings to accommodate expansion of the forest products marketing program.

Now, with a modest but not severe crowding, we have been able to fit in a few people working on this utilization program,. Because of the lack of utilization research facilities we don't believe it would be wise now to add further to our utilization staff at Princeton at this time.

Senator BYRD. What is the nature of the additional facilities needed to house the full utilization research program, and what is the estimated cost?

RESEARCH ON WOOD SEASONING

Dr. JEMISON. What we need ultimately at Princeton to house our utilization research work would be a facility designed and fitted for research on wood seasoning, particularly on use of hardwoods in furniture, on flooring, and on a host of other products that can be derived from Appalachian hardwoods.

We estimate that facility would cost $300,000, and would require approximately $25,000 for planning. I believe the exact figure is $24,000 for the architectural and engineering planning.

Senator BYRD. $24,000?

Dr. JEMISON. Yes.

Senator BYRD. If the $24,000 in planning funds were provided this year, how long would it be before the laboratory would be ready for use?

Dr. JEMISON. Well, for a laboratory of this kind approximately 1 year is required for the architectural planning, and then if funds are available, it takes about 1 year to complete construction and be ready for occupancy.

Senator BYRD. How do you view this full utilization research program we have been talking about? You have indicated the need for additional facilities there, so as to facilitate your going ahead with the full program. You have indicated a need for $25,000 or $24,000—which is it?

Dr. JEMISON. $24,000 I think is the actual figure.

Senator BYRD. $24,000 to initiate planning. If this is necessary and so beneficial to an area that is economically anemic, why should we not proceed now? What are the benefits that would accrue? What do we suffer in waiting?

Dr. JEMISON. I could give quite a few examples, Senator Byrd, of the payoff that comes from utilization research. I gave one to Senator Proxmire.

We see constantly the research information that we are able to develop being picked up and used in the establishment of new industries.

I believe I commented earlier this morning that our marketing research which goes hand-in-glove with the utilization research has probably been at least in part responsible in the last year or two for about 40 new or expanded industries in the Appalachian area.

One I didn't mention this morning was the establishment, I think about June 1, in West Virginia, of a fine-hardwoods veneer factory which will employ 100 people. This is the sort of thing that comes out of this program, and I believe that with this kind of evidence of the success of the work it is a very productive program.

Appalachia, as I also mentioned earlier, is an area that has an abundance of hardwoods stands, some of them high quality, but a great many of them of low quality. They are not readily usable unless we develop an improved technology. Also we must find ways for getting these products into the market competitively.

But basically there is no real reason that we can't find out how to do this.

FOREST MARKETING AND WOOD UTILIZATION RESEARCH

Senator BYRD. The two go hand in hand, the forest products marketing research and the wood utilization research?

Dr. JEMISON. This is correct.

Senator BYRD. So at Princeton you are proceeding with one hand tied behind you, figuratively speaking?

Dr. JEMISON. We are weak with one, certainly.

Senator BYRD. Yes, and eventually you are going to have to have the other, if you realize the fullest extent of progress and efficiency, aren't you?

Dr. JEMISON. Yes, sir.

Senator BYRD. And the sooner the better, because the sooner we get the facility, then the sooner we begin reaping the rewards, these being additional forest products industry, stimulation to the economy, additional employment, more income, better utilization of the forest resources.

Is this a fair statement?

Dr. JEMISON. I would say that is a very fair statement, Senator.

Senator BYRD. Did you request the $24,000 needed for planning?

Dr. JEMISON. In the preliminary development of our budget we did. Of course, with the overall situation confronting us, as the budget

developed later on, and as you can see from our request, here, we have no construction and no planning funds in this budget.

Senator BYRD. But you did request the $24,000?

Dr. JEMISON. Yes, sir.

Senator BYRD. Do you know at what stage on down the road this $24,000 was eliminated?

Dr. JEMISON. Mr. Baker might want to answer that question, because there is in the Department an overall effort now to take a fresh look at the entire research program of the Department.

EVALUATION OF PRIORITIES IN RESEARCH

Mr. BAKER. Mr. Chairman, the Department has underway at the request of another congressional committee, an overall study to analyze, appraise, and evaluate all of the lines of research in the Department, to evaluate their priorities in relationship to each other, and their priorities in relationship to other research outside the Department of Agriculture.

Pending the completion of that analysis and evaluation, it was determined that we would hold up generally all new starts on the construction of laboratories, to be certain when we do build a laboratory that it is one that is properly designed to carry out high priority research.

Senator BYRD. There is no uncertainty as to the high priority of this facility, is there, at Princeton?

Dr. JEMISON. We rate it as high priority, Senator, but, as Mr. Baker has said, in consideration of the overall situation, it was decided to hold up on high priority as well as other activities.

Senator BYRD. Did the request get as far as the Bureau of the Budget level?

Dr. JEMISON. No; it did not.

TROUT LAKE

Senator BYRD. Returning for a moment to the subject of Trout Lake, was there a request for the construction moneys, Mr. Nelson, of 400-and-some-odd thousand dollars?

Mr. CLIFF. Let me comment on that, Senator.

When we present our budget requests, we don't identify such projects as Trout Lake individually. There are literally hundreds of individual projects in the Forest Service as a whole, and we request our recreation money as a lump sum in a line item, and we made a rather substantial request for an increase in our recreation money, and had in mind that if it were granted, we would go ahead with Trout Lake.

In the budgetary process, our original request was reduced. We have some increase in recreation, as the budget here will show, but it was not sufficient to allow us to take on the cost of an individual project as large as Trout Lake.

Senator BYRD. So the answer is that in your original request, Trout Lake was included, but not as a line item?

Mr. CLIFF. That is correct.

PLANNING FUNDS, PRINCETON FACILITY

Senator BYRD. You have the capability, then, of using the $24,000 in planning funds, if they were appropriated this year?

Dr. JEMISON. That is correct.

Senator BYRD. As you foresee it, do you feel that eventually this will have to come? We will have to have the additional facility at Princeton?

Dr. JEMISON. I think that this will be a very high priority project as we can develop our program there.

As we mentioned earlier, this is an integral part of a combined forest products marketing-utilization program that will bring a lot of value to the Appalachian States.

Senator BYRD. It will probably bring manifold dollars in return for each dollar spent thereon?

Dr. JEMISON. We certainly hope so.

Senator BYRD. On the basis of the experience that you have already had at Princeton, this would seem almost assuredly so, would it not?

Dr. JEMISON. I think that is a fair assumption; yes, sir.

Senator BYRD. It would be desirable to have this money this year, I presume, so that you could get on the road with this necessary facility.

Dr. JEMISON. Yes, if it were possible within the overall budget structure and in consideration of all needs. We certainly need it, and could use it.

It would be 2 years before a facility could be ready for occupancy if we started now. But of course the desirability of immediate funding depends, as we have said, on other projects that are in competition with it.

Senator BYRD. And with the passage of time, the estimated cost would probably rise?

Dr. JEMISON. That has generally been our experience. The construction costs are creeping up.

Senator BYRD. This little bit of butter, if provided now, might, in comparison with butter several years away, be as the cost of oleomargarine would be to butter.

In other words, we are getting the butter now for the cost of oleomargarine 10 years hence, if we proceed now.

JOB CORPS CENTERS AND PROBLEMS

Chief, what about Job Corps centers? Do you have any under your jurisdiction?

Mr. CLIFF. Yes, sir; we do. We have 47 in operation now.

Senator BYRD. Do you have any morale problems in any of those centers?

Mr. CLIFF. Yes, we have morale problems, and we have personnel problems. But I think on the whole the program is going very well.

Senator BYRD. Have you had any experience to your knowledge in any of the Job Corps camps under your jurisdiction with the undisciplined and undisciplinable youths?

Mr. CLIFF. Senator, sure, we have had problems of discipline in these camps, but not any more in my estimation than we would have with

an equal number of young people of that age and background in any other setting; as a matter of fact, probably less.

These boys are closely supervised, and on the whole, while we have had problems, we have been able to handle them as they have arisen. I think, considering everything, the educational level and the home backgrounds, the fact that these are uneducated youths, by and large, that the incidence of problems is quite low.

We talked about this a little this morning. We have had about 8,100 boys go through our camps, and we have had in the neighborhood of—what was it, Clare, 300?

Mr. HENDEE. Two hundred and fifty-seven as of last month.

Mr. CLIFF. Two hundred and fifty-seven that we had to dismiss. That is a pretty low percentage, considering the entire program. We have had some wonderful success stories, too. These boys who have come to us, underprivileged and undereducated, have been taught to read and write and do basic arithmetic, and taught basic job skills.

Some of them have been able to qualify for enlistment in the military. They qualify for military service, where prior to service in the Job Corps they could not. A number of them have gone on to jobs in industry.

We have had quite a few dropouts, of course, but the success stories that we have don't normally hit the headlines, whereas the few disciplinary problems that crop up do hit the headlines. On the whole I think the program is accomplishing the objectives.

There have been headaches and problems, but we are working these out.

SCREENING OF CORPSMEN

Senator BYRD. Is there a proper screening of these youths before they fall into your hands?

Mr. CLIFF. We felt at first, Senator, that the screening was somewhat weak. The enrollment of these boys was done by other people outside of the Forest Service or the Job Corps organization, under contract or under a fee system.

Initially the screening was not as good as we would like to have seen it. This has been improved, too. There have been standards set up for screening, criteria given to the recruiting people, and we think that screening is being improved gradually.

Senator BYRD. Who has given the screening criteria to the recruitment people?

Mr. CLIFF. Mr. Hendee, who has been working with this program very closely—that is, giving it general supervision and guidance for the Forest Service—could probably answer that better than I, but we have been working with the Office of Economic Opportunity very closely. It is my understanding these criteria were jointly developed by the conservation agencies and the Office of Economic Opportunity. Is that correct?

Mr. HENDEE. The standards for screening were worked out jointly between the Job Corps and the Department of Labor, and they have a screening standard.

However, we have down through the months since the program started given back to them experiences with various kinds of corpsmen for their use in revising the screening standards. They revised them a couple of times, and are in the process right now of taking another

look to see whether or not there are ways in working with the screeners that they could be a little more sure of those that they enroll, as to their eventual success in the program.

Senator BYRD. You say there has been an improvement lately. How late Chief Cliff?

Mr. CLIFF. Let Mr. Hendee, who is very familiar with this, comment on that, please.

Mr. HENDEE. Well, I think there are several things that get into this picture, Senator Byrd.

For one thing, our staffs that we have in these centers—and I understand the same thing is true of Interior—have more experience in handling these corpsmen. As I said, we have given back to the Job Corps our experiences with various kinds of corpsmen. We have helped the Job Corps in taking a look at their standards for screening to make sure that they are going about it in the right way.

Senator BYRD. Are you satisfied with the cooperation you have had from the Office of Economic Opportunity in this regard?

Mr. HENDEE. Yes, sir.

SUGGESTIONS TO IMPROVE SCREENING PROCEDURE

Senator BYRD. Are you satisfied that when you submitted these suggestions and these profiles of certain youths, action has been taken by the Office of Economic Opportunity to improve the screening procedure?

Mr. HENDEE. Yes; and I might add that we have offered our help in taking some of these screeners right out on the ground and letting them see our conservation centers, and see the kinds of work and the kind of environment in which these young men will be working under, and also furnishing to them complete information on the opportunities for learning a skill or learning how to work, how to get a job, how to hold a job.

These sorts of things were a gap early in the program. As to the Department of Labor and their screeners, other than a little written material that they were given, that is all they had.

But we have been able to be, I think, very helpful to the Job Corps and the screeners by furnishing them this information. We have offered to do this in any and all areas where a screener was within reach of a conservation center. Of course, you are well aware of the environment, the tremendous opportunity that we have, and the kinds of work that we have on the national forests to really help these young men learn a skill, learn good work habits, and get in a position where educationally as well as attitudewise they are more employable.

We think one of our biggest jobs in these conservation centers is to work with the Job Corps, make the program successful, and help give experience to these young men in a way that they can use it, and become more useful citizens.

SCREENING PROCESS

Senator BYRD. Do I correctly understand you to say that both the Office of Economic Opportunity and the Department of Labor participate in the screening process?

Mr. HENDEE. The Job Corps in the Office of Economic Opportunity has a contract with the Department of Labor for the screening. Actually they furnish the information on numbers to be enrolled, but the actual job of the screening is done under contract with the Department of Labor.

Senator BYRD. The Forest Service has no voice in the screening procedure?

Mr. HENDEE. This is right. When young men are scheduled to go to a particular center, a screener, through the Job Corps, furnishes a copy of this screening record on each of these corpsmen. As far as actually doing any of the work, we haven't done it. We are not lined up to do that.

Senator BYRD. Do you believe that further improvements should be made in the screening process?

Mr. HENDEE. Yes. I think everybody connected with the program realizes that proper screening is the first step, in getting corpsmen in the program.

I think that each month all of us have learned more about this particular aspect. Actually, we have made considerable progress. I would say that in recent months we have been getting better corpsmen than we were early in the program.

I think we have to realize that, if we take into the program the kind of young men that the program was set up to help, this will never be an easy program. We have to have our staff trained and equipped to be able to take uneducated, underprivileged, quite disadvantaged, and in many cases unemployable youths, as of now, help them get the right attitude toward work, teach them good work habits, teach them to read and write, teach them what the opportunities are in the world of work, and what an employer expects of an employee.

I think we are much more successful at this each month of experience. I think the environment and the opportunities and the tremendous scope and types of work that we have on the forests do offer a wonderful opportunity for success. We have recruited, or rather assigned a staff, who have an interest in youth, and who also have abilities to do these things I have just outlined.

OPERATION PROVING BENEFICIAL TO YOUTHS

Senator BYRD. I think it is all a very worthy idea, and undoubtedly it is proving to be beneficial to many of the youths who find their way into the operation.

I don't think the trouble that we hear about really comes so much from those disadvantaged youths who merely have been denied opportunity, and perhaps who come from poverty-stricken homes and humble beginnings.

I don't believe that these really constitute the problem, so much.

I see the pictures of about 16 men on the wall, there. I assume they are the various chairmen of this committee, presumably since 1789, when the First Congress was organized. I don't know whether or not the Appropriations Committee was organized at that early stage or not, but I would be willing to bet the shirt I have on that some of those men came from rather humble beginnings and were disadvantaged, and, of course, that story can be repeated ad infinitum.

Abraham Lincoln was one of those disadvantaged youths who came from humble beginnings, and a needy, poverty-stricken home. So a lot of us have come from this kind of surroundings, but there are youths who come from that type of beginnings, and youths who come from not so modest beginnings, who are problems.

We talk about dropouts. There are people who are dropouts by nature, and they will be dropouts throughout life. There are some people you are not going to be able to teach a trade or into whose minds you won't be able to inculcate very high ideals.

Effect of Troublemakers in Corps

These are the people I am talking about. They are congenital troublemakers, and they will be troublemakers as long as you keep them, and after you have dismissed them—sexual perverts, psychopaths, misfits—chronic troublemakers, as I say, hoodlums. They won't do your Job Corps camps any good.

They won't do themselves any good, and they won't do anything other than impair the progress of other youngsters there who have a potential for development and who want to make something of themselves.

Are the screening procedures such that you will get rid of this type of individual, who impairs the morale of the entire camp, who intimidates and frightens and dominates the youths who want to conduct themselves in a satisfactory way, and who are there to learn and to earn?

Are the procedures such, in your judgment, and are they being applied in such a way as to, in the future, prevent this element from coming into and disrupting your Job Corps operations?

Mr. Hendee. I think there are two things involved here, Senator Byrd: the screening out of the kind of young man that you mentioned prior to the time that he reports to a Job Corps center I think is a responsibility that would rest on the screener to follow the standards.

Now, these standards are such that a sexual deviate or a psychopath or one with any record of perjury or violent actions against people or communities would be screened out. To the extent that others get through, then the screening standards have not been followed.

Now, secondly, getting the screening report, the center director reviews this record. Occasionally he may have one that may be a borderline case. He will work with this young man to determine whether or not, on the basis of his judgment and past experience, he can change the attitude and can work with this young man.

Upon failure to accomplish this, we would discharge him for failure to meet the standards that would be required of him for living in this group situation and center.

And actually, we have had very good luck with this approach. This is what I referred to. The skills of the staff have been improving. I think where we have any doubt about it, where any of the things such as you mentioned show up, definitely those are the kinds of young men the program cannot help. I quite agree.

DISMISSAL OF YOUTHS FROM CORPS

Senator BYRD. Can you assure the subcommittee that action is being taken, and will be taken, to dismiss that type of youth immediately?

Mr. HENDEE. This includes these 250-plus we mentioned. Actually, it is probably a dozen or two beyond that, because these figures were a month or so ago. At that time we had 257.

These do include those kinds of people who for one reason or another have not fitted into the program, who do not have the right attitude, or who are disrupting the individuals or group with which they are living and working.

Senator BYRD. I had noted the day before yesterday that the Bureau of Land Management had issued an order to some of its camps, urging that this type of youth be dismissed.

Last evening, I noted that a general atmosphere of sweetness and light prevailed, and that the order had been rescinded and would stay rescinded.

I would imagine that a shock wave went through the Department, and the return probably electrocuted the man who threw the switch, but I have a feeling that the general public is going to do some electrocuting of this program if we try to sweep things under the rug and suppress the facts where they should be exposed.

Some of the bureaucrats, I am sure, and I am not talking about any present company when I say this, but some of the people in the bureaucracy who suppress these facts, and who try to sweep them under the rug, are going to be the very people whose two feet will be in the water when the electrodes connect at some future time.

This is what brings discredit to what otherwise might be a very good, wholesome program.

I would simply urge the Forest Service Chief, as an agency which, like Caesar's wife, is above reproach at this time, to be sure that it takes quick steps to get rid of any incorrigibles when they show up to disrupt the Job Corps program.

Mr. CLIFF. Mr. Chairman, I want to assure you we don't intend to sweep anything under the rug. As we testified here, we have had some of these problems, and I don't think they are any different than some that have been experienced by the Bureau of Land Management.

The difference is that we have proceeded to work them out through working with the Job Corps organization in the Office of Economic Opportunity. In this other instance they attempted to do it independently.

AUTHORITY AND RESPONSIBILITY TO PASS ON DISCIPLINARY ACTIONS

Senator BYRD. As far as the other agency was concerned, I am not sure that is quite the case. I am not positive that efforts were not made in that agency to work with the Job Corps people.

Mr. CLIFF. The Job Corps does retain authority and responsibility to pass on disciplinary actions, when they are needed.

We have done some checking on this. We find that we can get clearance to take disciplinary action in 3 hours' time from the time an incident occurs to the time the center director of the camp gets the signal to go ahead with the necessary disciplinary action. This has been about an average elapsed time. There have been some that have been longer than that.

But that is not an unreasonable delay when you are dealing with the lives of young men. We have been working with the Office of Economic Opportunity, with some encouraging results, to get more decentralization, so that we can handle some of this kind of thing without having to clear back through the channels.

So I am not discouraged about this. I realize that there is a potential for trouble in these camps, in dealing with youth of the educational level and background that they have. We have had problems as I stated before, but I am not discouraged about it. I think we have to continue to be alert, and we have to continue to do a good job.

And I agree fully with what you said, that we want to do a very good job in keeping this program clean. This is our desire, and this is our objective.

Senator BYRD. I believe that, Chief Cliff. I have no doubt of that.

Would you supply the subcommittee with the standards by which the screening is to be conducted insofar as your agency is concerned? I trust that I am asking for something that you have in a form which can be provided.

Mr. CLIFF. Yes.

LOCATIONS OF JOB CORPS WHERE DISMISSALS OCCURRED

Senator BYRD. Also indicate those Job Corps centers and their locations from which there have been dismissals and the number of dismissals in each instance. If possible, indicate in a short history, but one that is clear enough that the reader might understand, what those dismissals were for, what did they involve—youthful criminals, sexual perverts, belligerent individuals who insisted upon breaking the bones of their colleagues, those who were addicted to drugs or to alcohol, and those who were insubordinate.

Let us see what the picture is as to these dismissals. Indicate the number of times that you have asked the Office of Economic Opportunity to cooperate in tightening up the standards and the dates in connection therewith. Indicate what your policies are with regard to dismissing these youths.

You have already done this in large measure. If you have anything which is sent out to your people and which the committee could see, let us have it.

CORPSMEN—PROCESSED AND DISCHARGED

Indicate the total number of corpsmen and indicate the number that have been processed and discharged honorably, if I might use the word. Let us see how many have come in, how many have gone out, independent of those who were dismissed for the reasons which we have been discussing. Indicate also what these young people are doing, what they are building, what they are making.

RESEARCH AT PARSONS, W. VA.

Senator BYRD. I would like to get back to you, Dr. Jemison. I would like to ask you about the research program at Parsons.

Last year the Senate approved an increase of $75,000 for watershed and timber management research at this location. However, only $40,000 for the watershed portion of the program was allowed in con-

ference with the House. I gather that there are no additional funds in the budget over what you received last year for timber management research. Is this correct? Do you still need the remaining $35,000 at Parsons?

Dr. JEMISON. Senator, at Parsons we are working on methods of growing and culturing some of the higher value and less abundant species such as yellow poplar, northern red oak, white ash, and black cherry. We are making some progress in dovetailing our timber management research methods into the necessary watershed management practices. There are, of course, a number of high-priority problems that we are not working on that we would hope to get to when we can do so.

Senator BYRD. Are you saying that you could effectively use the $35,000?

Dr. JEMISON. Well, yes; we could use the $35,000 you mentioned when it could be made available in our budget; yes, sir.

Senator BYRD. How many persons do you have working in Parsons Laboratory now?

Dr. JEMISON. At the present time, Senator Byrd, we have a total of 22 people working in our Parsons Laboratory—8 scientists and 14 supporting personnel.

Senator BYRD. Would the additional moneys which we have just discussed involve additional personnel?

Dr. JEMISON. Yes. We are a little weak there on the support personnel. We would not plan to add any scientists, but to make the work of the scientists more effective we would add two or three support people.

STAFFING AT PRINCETON

Senator BYRD. In this regard, would the additional facility at Princeton entail additional personnel and, if so, to what degree?

Dr. JEMISON. Yes; if we were to get the additional facility for utilization research at Princeton that we discussed earlier we would step up our staffing rather substantially in utilization research.

As you recall, I mentioned that people we have there now give us a minor overcrowding problem. It is not serious, but if we had the additional facility we would add approximately 3 scientists and 10 supporting personnel to what we have there now, which would give us a total of 13 additional people at Princeton.

Senator BYRD. And you now have how many?

Dr. JEMISON. We now have in forest products marketing research 42, and in the utilization 8, for a total of 50.

Senator BYRD. What would be the additional operational costs annually at Princeton if you had the new facility? Can you foresee these?

Dr. JEMISON. I believe we mentioned that earlier, that to fully implement the utilization research program we would need $125,000 over and above what is included in the budget here.

MORGANTOWN LABORATORY

Senator BYRD. Yes. As to the program at Morgantown, you have a laboratory being built there. What is the present status of that laboratory construction, and what staff can be accommodated in this building?

Dr. JEMISON. We are making good progress on the Morgantown Laboratory. We are up out of the ground. The walls are going up and we believe by fall of this year it will be ready for occupancy. You asked about the capacity of the laboratory. It has been planned to house 12 scientists and approximately 24 supporting personnel, for a total of 36.

Senator BYRD. What amount is contained in the budget for this new laboratory?

Dr. JEMISON. If the budget is approved as presented here we will have $250,000 for the forest engineering research program at Morgantown. This would enable us to continue work at the same level as in 1966.

Senator BYRD. What is the projected amount in your 10-year research program for full staffing of this project?

Dr. JEMISON. We have a projected total of $360,000 in our 10-year program for the forest engineering research project at Morgantown. This would provide a staff of eight professional engineers and scientists and 16 supporting personnel or 24 in all.

OTHER PROJECTS PLANNED FOR MORGANTOWN

Senator BYRD. Are there other projects planned for Morgantown which are included in your 10-year program?

Dr. JEMISON. We have one other project included in our 10-year program for Morgantown. This is a wildlife and fish habitat management program.

Senator BYRD. Can you outline briefly what such a program would involve and state why it is important?

Dr. JEMISON. West Virginia, like all of the Appalachian States, potentially can produce a great deal of wildlife. This wildlife represents a very important forest resource, valuable for food, sport, and esthetics. Probably of equal or even greater importance, is the fact that the wildlife resources, if properly developed, represent a source of supplemental income for the great many owners of small forest properties. For such owners, as we have seen in other States, hunting leases that are feasible when the population of wildlife is high represent a real source of supplemental income.

Also, as you developed in an earlier question, I believe with Mr. Nelson, the service industries that follow a recreational enterprise that is built up like hunting certainly add to the economy of a region.

West Virginia has the potential for the production of not only deer and turkey, but large numbers of small game like squirrels and rabbits, and raccoon, I suppose. Hunters in many of the Appalachian States go in a major way for this type of hunting. Our research problem is to find out how to fit the food and cover requirements of these various species of wildlife into a timber production and land management multiple-use program so that we can make the most not only of these other resources but the wildlife, too.

As one measure of the importance of small game in West Virginia in a recent year—I think it was in 1964—of 100,000 hunter-day visits on the Monongahela National Forest, two-thirds were small game hunters. So in summary I think the wildlife resource represents a real opportunity. I believe that when we can get to it, our research program would be very productive in this field.

STAFFING OF WILDLIFE HABITAT RESEARCH PROGRAM

Senator BYRD. What amount and what staffing would be required for a wildlife habitat research program such as you outlined?

Dr. JEMISON. Our 10-year program anticipates an annual level of $140,000, which would provide for four scientists and eight supporting personnel.

Senator BYRD. Could this staff be accommodated by the new Morgantown Laboratory?

Dr. JEMISON. The new laboratory is planned in anticipation of implementing this program and could house comfortably this number of people.

CRANBERRY GLADES

Senator BYRD. How are you progressing, Mr. Droege—I will address this question to you—with the visitor information center down at Cranberry Glades?

Mr. DROEGE. Very well. It was held up this winter because they couldn't get some of the beams that were specified. Otherwise we would be further ahead, but we will be very ready to have the dedication, I am sure, sometime this fall.

Senator BYRD. Very well.

FINANCING JOB CORPS CENTERS

Returning to the subject of the Job Corps centers, Chief Cliff, explain the bookkeeping transaction on this.

Mr. CLIFF. You mean the way the money is appropriated?

Senator BYRD. Yes.

Mr. CLIFF. The money is all appropriated to the Office of Economic Opportunity and they, of course, go before another subcommittee of the Appropriations Committee to justify their budget requests. The money is transferred to the management agencies, the conservation agencies, such as the Forest Service and the Interior agencies that are managing the camps. It is allocated to us on the basis of the number of boys in the camps and the size of the camps. They give us both the construction money and the money to operate the camps. I presume this is what you want to know.

Senator BYRD. Yes. Indicate along with this other data the amount of moneys that have been spent thus far through the Forest Service in this regard.

Mr. CLIFF. Very well.

Senator BYRD. In other words, try to portray the money picture, how much has been allocated, how much has been spent, and so on. To acquire this data would require some little bit of time, a week, or 10 days, or 2 weeks, or more perhaps, so with the understanding that this is not being provided for inclusion in the printed hearing may I ask that you take enough time to blend a well-rounded presentation and we can include it in the committee files.

Mr. CLIFF. Certainly.

Mr. BYRD. And I will ask Mr. Eaton to let me know when this comes in.

CONSTANT REVIEW OF PROGRAMS

Finally, let me make it crystal clear that there is no intention, in what I have said, to imply or to charge that the Forest Service has been remiss or careless in its conduct of activities connected with the Job Corps. I just happen to believe that all agencies involved, in any way, with the Job Corps program should be encouraged to dismiss troublemakers promptly and talke all steps necessary to insure efficiency and integrity of the program throughout. There have been too many disquieting reports regarding lack of discipline at some Job Corps locations, and these embarrassments merit the concern of all of us. All appropriate agencies should, therefore, be required to scrutinize the program with utmost care and to report thereon from time to time.

Dr. Jemison, I shall do what I can to add $24,000 for Princeton and I also will make an effort to get you some construction money, Mr. Nelson, for Trout Lake.

Thank you, Chief Cliff, for your usual fine performance. The Forest Service is not excelled by any agency as to dedication, accomplishments, efficiency, and service. I commend you.

SUBCOMMITTEE RECESS

The committee will stand in recess until Monday, March 7, 1966, at 10 o'clock in the morning, at which time the testimony will be heard from the Office of Saline Water, and the Office of Water Resources Research.

The subcommittee stands in recess.

(Whereupon, at 4:11 p.m., Friday, March 4, 1966, the hearings were recessed, to reconvene Monday, March 7, 1966, at 10 a.m.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1967

MONDAY, MARCH 7, 1966

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room 1223, New Senate Office Building, Hon. Alan Bible presiding.

Present: Senators Bible and Byrd.

DEPARTMENT OF THE INTERIOR

OFFICE OF SALINE WATER

STATEMENT OF HON. KENNETH HOLUM, ASSISTANT SECRETARY OF THE INTERIOR; ACCOMPANIED BY FRANK C. DiLUZIO, DIRECTOR, OFFICE OF SALINE WATER; DR. J. A. HUNTER, ASSISTANT DIRECTOR, ENGINEERING AND DEVELOPMENT; DR. W. S. GILLAM, ASSISTANT DIRECTOR, RESEARCH; J. J. STROBEL, CHIEF, PROGRAM ANALYSIS; J. W. (PAT) O'MEARA, CHIEF, INFORMATION OFFICE; ROBERT A. STRIZZI, CHIEF, ADMINISTRATIVE SERVICES; RAYMOND DURANTE, ENGINEERING PROGRAM ANALYST; DONALD J. KEUCH, JR., CHIEF, DIVISION OF ADMINISTRATION; DALE R. ROTHROCK, BUDGET AND FINANCE OFFICER; AND JOSEPH M. BREEN, BUDGET OFFICER; ALSO SIDNEY D. LARSON, DIRECTOR OF BUDGET, OFFICE OF THE SECRETARY

1967 BUDGET REQUEST

Senator BIBLE. Gentlemen, the subcommittee will come to order.

We are very happy to have you here this morning, Mr. Secretary. We will hear you first this morning.

You may be accompanied by anyone that you desire.

Mr. HOLUM. Thank you, Mr. Chairman.

Director DiLuzio and I are very happy to have this opportunity to appear before you this morning to discuss the 1967 Saline Water budget. I will leave to Director DiLuzio and his staff the responsibility of presenting their budget in detail.

However, I wanted to participate in any discussions or questions you might consider appropriate to direct to Director DiLuzio or myself.

Senator BIBLE. Your statement will be incorporated in full in the record, Mr. Secretary.

(The statement follows:)

We are pleased to be able to be here this morning to discuss with you the Department's request for funds for operation of the Office of Saline Water during fiscal year 1967, and to review highlights of the past year's program as well as some of the accomplishments we expect to achieve in the next year.

This distinguished committee and the Congress have clearly demonstrated their solid backing of this important program designed to provide incremental sources of fresh water through economically feasible methods of desalting—a program which will benefit not only the arid and water-short areas of the United States, but all of the peoples of the world. We believe our accomplishments to date prove that the technological and economic goals necessary to establish this program as an important new tool in water supply planning are within reach.

Frank C. DiLuzio, Director of the Office of Saline Water, will present the budget request in detail. I want to state, Mr. Chairman, that the Department is pleased with the manner in which Director DiLuzio has led the Office of Saline Water forward during the past 12 months—his first year in this post. By the time this hearing has been concluded, I am confident that you will agree that the past year has been a successful one.

For fiscal year 1967, we are asking for slightly less than $31 million, an overall increase of $7,795,000 over the amount appropriated for 1966. This represents an actual increase of $8,595,000 for research and development work and a decrease of $800,000 for operation, maintenance, and construction of demonstration plants.

Through careful and judicious programing for fiscal year 1967, we believe this level of funding would permit the Office of Saline Water to make the utmost use of the technology that has been developed in the past, and move forward in the aggressive and imaginative manner directed by the President.

Last year, the Congress enacted new legislation extending the Office of Saline Water program through fiscal year 1972, and providing a vastly expanded research and development effort. This effort is aimed at the production of low-cost water in both the large-scale plants needed for densely populated metropolitan areas, as well as in the smaller plants which will be a necessity in smaller communities which also face water shortages, or have supplies that are sufficient, but of poor quality.

An exciting aspect of the new program is its emphasis upon the development of large-scale, dual-purpose water and power plants. As a beginning step in this area, the Office of Saline Water entered into contracts for conceptual design studies with 15 of the Nation's outstanding manufacturing and engineering firms. In addition, feasibility studies for large-scale, dual-purpose plants were conducted with the Metropolitan Water District of Southern California and the State of Israel. In each case, the Atomic Energy Commission was involved as well. Also included in the new program was a provision for testing large modules to produce further design data on which the construction of large-scale plants would be based.

The overall program has been moving ahead in an orderly manner. The conceptual design studies have produced worthwhile results, which are now being fully analyzed for use in designing the modules. The modules in turn are expected to begin producing results some time next year, and will be applicable directly to large plant designs.

The Israel and the Metropolitan Water District studies, which we consider landmark studies, have been completed. These studies are based on the multi-stage flash process. We believe they will lead to the construction by these entities of the first large-scale desalting plants in this Nation or abroad. Either plant will double the desalting capacity in the world. When the discussion of these two potential projects reaches a definitive stage on all points, including cooperative financial arrangements that would be appropriate for our Government to consider, we shall provide this committee with a full and complete report and make the necessary recommendations for your consideration.

As you know, the study conducted by the Bechtel Corp. for the Interior Department, the Atomic Energy Commission, and the Metropolitan Water District indicated the feasibility of a dual-purpose plant capable of producing 150 million gallons of water per day, along with 1,800 megawatts of nuclear-produced

power. The study estimates a water cost of 22 cents per thousand gallons at plant site. In the case of Israel, a 100-million-gallon-per-day plant was studied, coupled with a 200-megawatt nuclear powerplant, which would produce water at an estimated 28.6 cents per thousand gallons at a 5-percent fixed charge rate, and 43.4 cents per thousand gallons at 7-percent fixed charges.

During this past year we have used results of the Metropolitan Water District studies to appraise the possibility of drought proofing the New York metropolitan area through desalting. This is the first time desalting has been considered in a so-called humid area. The study is now being completed. Thus far we are encouraged by the prospective results.

One advantage of desalting is that it is largely immune to variations in natural rainfall. Even so, from an economic point of view, desalting is not now competitive in the New York area. Further improvements in technology, or growing competition for the use of natural available supplies could, however, rapidly alter this situation. Because of the lead time required, desalting cannot be employed to provide immediate relief from drought once it is upon us. However, it appears that desalting plants, built on a standby basis to existing systems, could have an important role to play in meeting drought situations.

As our studies on actual processes continue and we approach the question of applying desalting techniques in certain areas, the question of brine disposal, especially from brackish waters, will need further exploration and consideration.

In the continued development of the multistage, multieffect flash distillation program, we have been hampered somewhat by the lack of a large plant from which to obtain actual operating experience. This will be rectified shortly. On March 31, bids will be opened for construction of a new, 1-million-gallon-per-day plant in San Diego. Meanwhile, our work on this important process has continued by means of smaller pilot plants and conceptual designs of very large plants.

In the past year a number of other nations exhibited a vigorous interest in the desalting program. This show of interest from all over the world can best be summed up, perhaps, by pointing to the singular success of the First International Symposium on Water Desalination held here last October. This symposium was the largest international meeting ever sponsored in Wahington, D.C., by the U.S. Government, attracting more than 2,500 delegates and observers from 55 nations of the world.

More than 100 technical papers were presented covering every phase of desalting, both in the United States and elsewhere. Full disclosure of work under way in other countries, coupled with open and frank discussions of the merits of the various processes, helped to bring participants up to date on the current state of the art and will serve to eliminate duplication of effort and to stimulate scientific thinking on new approaches to the desalting problem.

Another result of the symposium was to provide a better understanding and realization of the existing interest—even from countries and areas not previously considered as potential candidates for desalting—in considering desalting as a means of meeting their constantly growing demands for municipal and industrial water supplies.

Two important agreements were signed during the symposium. In one, the Department entered into an agreement with the Saudi Arabian Government, whereby the Office of Saline Water will act as technical manager for design and construction of a plant that will desalt 5 million gallons of water per day and generate 36,000 kilowatts of electric power for the city of Jidda. The Saudi Arabian government will fund the total construction cost.

In the second agreement, the United States and Mexico, together with the International Atomic Energy Agency, will undertake a study of the feasibility of utilizing dual-purpose plants to meet the growing water and power needs in the Mexican state of Baja California and Sonora, and in portions of Arizona and California.

In speaking to those assembled at the White House for the signing of this agreement, President Johnson noted that they had come to Washington to search together for a common solution to a common problem and added:

"No event could hold more promise for the peace and progress of man. No international gathering ever met for a more important purpose.

"If science can unlock the door to an unlimited supply of pure, drinkable water, it will be an event in human history as significant as the harnessing of the atom."

In conclusion, Mr. Chairman, I want to say that the Department of the Interior is fully aware that the eyes of the water-short areas of the United States as well as every arid area in the world, are focused upon the desalting program as a possible solution to some of the present and developing water problems. We believe we have made progress in advancing knowledge and technology. We are keenly cognizant of the fact that there is a great deal of work yet to be done. With the guidance and assistance of the Congress, and the continued cooperation of industry and the scientific and engineering community we believe we will continue to make sound progress.

OSW PROGRAM PROGRESS

Senator BIBLE. You may highlight your statement in any manner you wish.

Mr. HOLUM. I recognize the committee's time is short, so I will highlight my statement.

The program has moved forward in a substantial and satisfactory mannor under the leadership of our vigorous and dynamic Director DiLuzio.

The money provided for 1966 has been applied as we reported to you a year ago and the program has been moving forward consistently under the advanced program requested and approved by President Johnson a little over a year ago. The budget we are requesting this morning is again consistent with the 5-year program President Johnson has outlined for this activity under the Department of the Interior. We are asking for 1967 substantially more money than ever before requested for this program. The director will explain it in detail.

MAJORITY OF FUNDS ARE FOR CONSTRUCTION FACILITIES

I mention, only for my own part, that most of this request is related to construction facilities we predicted a year ago were an essential part of the objectives of this program. In line with that, through 1965 and 1966 so far, we have had conceptual design studies conducted by 15 of the country's leading design firms. These designs have been presented to the Office of Saline Water and are now in the process of review and we are extracting all the good ideas and using them for the construction of the first large-scale module that will be constructed in 1967 on the west coast of the United States at the test site in San Diego which was started in 1965.

OLD SAN DIEGO PLANT SENT TO GUANTANAMO BAY

We will be constructing a plant at the same site that will replace the one sent to Guantanamo Bay.

Senator BIBLE. The plant in the San Diego area was sent to Guantanamo Bay?

Mr. HOLUM. Yes.

Senator BIBLE. Is that operation still at Guantanamo Bay this year?

NEW PLANT AT SAN DIEGO

Mr. HOLUM. Yes. And we will be replacing it this year on the west coast at the San Diego establishment.

Senator BIBLE. Is that the one you are entering into with the Metropolitan Water District?

Mr. HOLUM. That is a different one. They are furnishing the heat or energy required to run this model at San Diego. This model, however, is one of the important steps we feel it is essential we go through before we will be in a position to construct a large-scale, desalting-degenerating plant. We hope to be discussing with this committee again during this session of Congress this particular project.

INTERNATIONAL SYMPOSIUM ON DESALTING WATER

I think perhaps one of the highlights of our 1965 activities was the symposium on desalting held here in Washington. It was one of the largest gatherings ever conducted in the United States, approximately 2,400 people were registered for this symposium and 100 technical papers were presented. I think the magnitude of the symposium is highly illustrative worldwide of the programing being carried forward both here in the United States and elsewhere, and it is indicative of the leadership the United States is providing in this detail.

I want to hasten to add that there was a wonderful exchange of ideas at the symposium and the technical ideas established and exchanged between our people and people from around the world of the merits of the various processes. This helps to bring participants up to date on the current state of the art and will serve to eliminate duplication of effort and will stimulate scientific thinking on new approaches to the desalting problem.

TWO IMPORTANT AGREEMENTS SIGNED DURING SYMPOSIUM

Two important agreements were signed during the symposium. In one agreement, the Department finalized contractual arrangements with Saudi Arabia. They will be constructing a 5-million-gallon-per-day plant. Our engineering department will be providing the engineering information for the desalting to be done at this plant.

At the same time President Johnson concluded an arrangement with Mexico for a thorough investigation by Government personnel with the participation of the International Atomic Energy Agency to undertake a study of the feasibility of utilizing dual-purpose plants to meet the growing water and power needs in the Mexican States of Baja, California, and Sonora, and portions of Arizona and California.

These are in the early stages and we consider it a real opportunity to apply this rapidly emerging information to a troublesome problem both in the United States and Mexico.

STUDIES MADE ON OTHER DESALTING PROGRAMS

We have done at the same time a study on the very serious problems of the East as well as other arid areas in the world and attention is focused on the desalting program as a possible solution to some of the present developing water problems.

The results of this study are just being completed although I doubt if we will find that desalting now is the immediate answer to this hard-pressed area and certainly some exciting new ideas are emerging as to the application of large-scale desalting in the future in the humid and somewhat humid parts of our country.

LARGER DESALTING PLANTS STUDIED

We have completed studies with the Nation of Israel and the Metropolitan Water District in both cases, with the Atomic Energy Commission. These studies were conducted by the Bechtel Corp. for the Interior Department and indicate that water can be produced at plants the size we are talking about, producing 150 million gallons of water per day, along with 1,800 megawatts of nuclear-produced power. The study estimates a water cost of 22 cents per thousand gallons per day.

LOWER COST DESALTED WATER IN VIEW

Senator BIBLE. It appears to me, if my memory is good, that is a real breakthrough. I believe in earlier testimony you stated you were in the neighborhood of 50 cents per thousand gallons.

Mr. HOLUM. Yes, sir.

METROPOLITAN WATER DISTRICT STUDY

Senator BIBLE. This project with the Metropolitan Water District, you are projecting that to produce water at 22 cents per thousand gallons?

Mr. HOLUM. Yes. We are very much encouraged by the results of this study because they have been done with a very competent engineering firm that we have confidence in. While we anticipate scaling up, the order of magnitude will produce results which are very gratifying according to this study.

Senator BIBLE. How and when will you know your studies are right?

Mr. HOLUM. We are very anxious and hope we will be able to conclude arrangements with the Metropolitan Water District that we can discuss with Congress. We hope Congress will authorize and provide funds so we can actually test these engineering studies in October.

CAPACITY OF METROPOLITAN WATER DISTRICT PLANT

Senator BIBLE. What is the capacity of the plant that will produce water at 22 cents per thousand gallons?

Mr. HOLUM. A 150 million gallons per day we anticipate, will produce water for 22 cents per thousand gallons along with 1,800 megawatts of power.

STUDIES OF SOURCES OF ENERGY FOR PROPOSED MWD PLANT

Senator BIBLE. Will this use atomic energy or nuclear energy?

Mr. HOLUM. All the studies we have conducted in the past and will conduct in the future—we study all sources of energy before coming to any conclusion—this is done both in the Israel studies and in Metropolitan Water District studies—we studied oil, coal, all conventional methods of power. All studies, because of the high cost of fuel in this country has led the engineers to establish the fact that it would be an atomic plant. We are now talking of a plant in California that will use nuclear fuel.

I think I have essentially highlighted the activities.

Senator BIBLE. Yes, and your statement has been incorporated in full in the record.

I know Mr. DiLuzio's statement is full, so I want to avoid as much duplication as I can in your presentation. I think there are exciting possibilities in this entire area and I am delighted to hear that you, at least, think you are going to make some of these new breakthroughs in the foreseeable future.

Mr. HOLUM. We are tremendously gratified with the progress made in 1965 and early now in 1966. Now we are confident, Senator, that the program outlined by President Johnson in his 1967 budget that we are discussing with you this morning will lead again to real progress and a very important effort that means so much to this whole country.

SALARIES AND EXPENSES

RESEARCH AND DEVELOPMENT PROGRAM

Senator BIBLE. There will be placed in the record the budget justification for a fiscal year 1967 appropriation of $28,595,000 for "Salaries and expenses, Office of Saline Water." This is an increase of $8,595,000 over the amount appropriated last fiscal year.

(The justification follows:)

The Saline Water Act, as amended, directs and authorizes the Secretary of the Interior to conduct a research, development, and plant construction program to develop low-cost methods of producing water suitable for beneficial and consumptive purposes. The act specifies that the Secretary, acting through such agencies of the Department of the Interior as he may deem appropriate, is authorized to conduct, encourage, and promote fundamental scientific research and basic studies; undertake engineering research and technical development work through the construction and operation of laboratory equipment, modules, components, and pilot plants; recommend to the Congress the construction and operation, or participation in the construction and operation, of any desalting plant which has promise of reducing the cost of product water; study methods for the recovery and marketing of commercially valuable byproducts; and, to undertake studies necessary to determine standard costs of producing water for beneficial consumptive purposes.

On August 11, 1965, President Johnson approved new legislation (Public Law 89-118), enacted by the Congress to expand, extend, and accelerate the saline water conversion program. This new law increased the $75 million authorization provided by the Anderson-Aspinall Act of 1961 (Public Law 87-295), to $90 million for fiscal years 1962 to 1967 inclusive. This $15 million increase in authorization together with the unappropriated funds remaining under the provisions of the 1961 act, combine to provide a total authorization available for fiscal year 1967 of $35 million.

When President Johnson approved Public Law 89-118, he made it clear that he has established definite objectives for the saline water conversion program. In his remarks on August 11, the President said in part, "I may or may not be the most optimistic person in America about the progress we can make on desalting the seas. But I am—and I intend to remain—the most determined that we shall make the great breakthrough before the calendar turns to 1970."

To reach the goals the President is determined to achieve and to carry out the directive of the Congress for an expanded and accelerated program, the Office of Saline Water is conducting an agressive program for advancing desalting technology in those areas having definite promise for economic feasibility within the next few years. This is not an easy or simple task, for it involves a study and evaluation of hundreds of ideas and proposals, selecting those of scientific and economic merit and rejecting those of lesser promise. We receive many proposals that are perfectly feasible on a technical basis, but even if they are developed to their ultimate efficiency they still may not prove to be competitive with other approaches to the problem. Extensive appraisals of new or

novel approaches to the problem must be conducted in order to reduce to a minimum the investment of appropriated funds in the development of processes that will not serve to advance the state of the art. The objective of this program is to provide desalted water at the lowest possible price at the earliest possible date. As we pursue this objective, we intend to maintain a balanced program by supporting fundamental research studies which will provide information and data which we believe will provide the basis for new and improved desalting processes in the 1970's. We intend to rely less and less on unsolicited proposals, but rather on proposals we will solicit in which we will request specific information which will enable us to solve particular problems. A balance will also be maintained in studies of both large and small plant technology and between processes for desalting sea and brackish or other mineralized or chemically charged waters. This program is designed to accelerate improvement of the technology of water desalting so that within the next decade the high quality water produced by desalting processes can be a significant alternative that should—and must—be considered in meeting municipal and industrial requirements. It will not prove to be feasible in all cases, but certainly its potential should be evaluated in large or small plants, at seashore or inland locations.

A substantial engineering effort is underway to evaluate the data and information that has been acquired through research and development programs, including those conducted in the United States and in foreign countries as well. We will select from that wealth of data the technology which we believe can best be utilized in desalting units in the size range of up to 50-million gallons of fresh water daily. As a part of this effort, we are now evaluating the results of some 15 conceptual design studies made for the Office of Saline Water by some of this Nation's outstanding engineering and industrial firms. We are also reviewing the technical papers presented at the first international symposium on water desalination which was held in Washington in October 1965 and we are following up on contacts established at that meeting.

We should like to emphasize that we intend to maintain a balanced effort to meet a variety of specific needs. This requires that we continue an aggressive program to reduce the cost of desalting in small plants—those of 10 million gallons per day or less as we push ahead with our engineering development of multimillion gallons per day plants. As we advance sea water conversion technology, so also must we advance the development of processes for desalting inland brackish waters. Some of the experimental work we conduct may have application to all phases of the program, but programs for large plants, small plants, sea water plants, and brackish water plants require separate development routes.

The Office of Saline Water cannot expect that desalting plants will only be erected at locations where they will operate on "clean" sea water or "clean" brackish waters. Obviously, we will have to contend with manmade pollutants. It is also clear that presently available treatment methods cannot economically contend with some of the dissolved solids, petrochemicals, insecticides, and other contaminants that are fouling up our waters. Desalting processes are certain to find wider application than once was anticipated.

Specific actions underway or contemplated to accelerate the accomplishment of research and engineering technology for the continued development of conversion technology within a time frame that will meet the demands of our domestic population and the water-short areas of the world are as follows:

(1) Construct and operate a 1-million-gallon-per-day advanced technology plant to continue the development of the multistage, multieffect, flash distillation process. Sealed construction bids for this plant will be received on March 10, 1966. The plant will be located on property made available to the Department of the Interior by the San Diego Gas & Electric Co. The plant will be constructed in cooperation with, and support of, the California Department of Water Resources.

(2) An architect-engineer has been selected for the design of the San Diego saline water test facility, where we will construct and test modules and components which will provide operating characteristics and engineering data that must be developed to provide accurate data for the design and construction of multimillion gallons per day desalting plants.

(3) Development of plans for starting construction, or for participation in the construction of a dual-purpose plant in the range of 50 million gallons per day or larger.

(4) Acceleration of the research effort to develop entirely new desalting techniques and to improve existing processes.

(5) To speed the development of the promising reverse osmosis process through the construction and operation of a 10,000 gallons per day and a 50,000 gallons per day pilot plants.

(6) To continue the development of new processes through pilot plant operations and testing.

(7) Increased efforts to stimulate development by private industry of components and materials necessary for desalting plants, including such items as pumps, motors, deaerators, tubing, and materials of construction.

(8) Development of recommendations for prototype development when components or other elements have been sufficiently improved to warrant large-scale testing.

(9) A proposal for revising the Saline Water Act as amended, to further clarify and expand the authority of the Secretary of the Interior to construct and operate experimental facilities, to develop precise information on water economics, and to train scientists and engineers for necessary water resource studies, including economists, hydrologists, chemical, civil and mechanical engineers.

(10) When appropriate, requests for specific congressional authority to provide assistance in the construction of model and prototype plants to test the economic and operational capabilities of developing processes through the purchase of technology to advance the effectiveness of desalting plants.

(11) Continued participation in engineering and economic feasibility studies such as the studies jointly sponsored by the Atomic Energy Commission and the Office of Saline Water with (*a*) the Metropolitan Water District of Southern California and (*b*) the Government of Israel. The study sponsored by the United States Government, the Government of Mexico, and the International Atomic Energy Commission, and the contract study awarded to the State of Texas to evaluate the potential utilization of desalting technology to the future water supply of that State.

(12) Comprehensive studies of all phases of comparative water costs and needs, including an effort to develop adverse economic effects resulting from the use of substandard water as well as the value of quality water.

The organization and management structure of the Office of Saline Water has been re-cast to expedite the accomplishment of current and prospective objectives of the saline water conversion program.

DEMONSTRATION PLANT PROGRAM

Under the authorization provided by Public Law 85-883, the Office of Saline Water is proceeding, as mentioned above, with its plans for the construction and operation of a 1-million gallon per day plant of advanced technology to further develop flash distillation. Through the construction and operation of this new plant, we intend to push multistage multieffect flash distillation technology considerably beyond that obtained from the original San Diego plant. It will provide operating data on a practical scale with higher temperatures and pressures up to 350° F.; twice the efficiencies, 66 flashing stages compared to 36; and a 20–1 performance ratio in contrast to the 10–1 performance ratio of the old plant.

Successful operation of the 1-million gallon per day plant at Freeport, Tex., has resulted in accomplishing the objectives set forth for the facility. In order to make the best use of the funds invested in this plant, we plan to continue its operation by converting it to a test-bed plant. Modifications we plan for this operation will enable us to test and evaluate new flow patterns, improved equipment, and recent operating innovations.

We will continue to conduct experimental operations on the distillation plant at Roswell, N. Mex. to resolve process and maintenance problems. New techniques for the pretreatment of the feed water to avoid scale formation on the heat transfer surfaces of the evaporators will be tested. Improved components are being installed to eliminate equipment failures that have been experienced and modifications are being made to the system in an effort to improve performance and lower operating costs.

The 250,000 gallons per day electrodialysis plant at Webster, S. Dak., continues to operate with a high degree of reliability with better than 90 percent on-stream time. Continued tests of a new membrane show that the original equipment has been improved and perfected. New operating methods are being studied to further improve plant performance.

In fiscal year 1966 there has been appropriated a total of $23,151,000 which consisted of $20 million for the basic and applied research and engineering de-

velopment program, with $2,485,000 for operation and maintenance costs related to the water conversion demonstration plants and $666,000 designated to be applied to the San Diego demonstration plant replacement costs. The estimate for 1967 is $30,946,000 or an increase of $7,795,000 over the amount appropriated for 1966. It consists of $28,595,000 for research and development and $2,351,000 for operation and maintenance costs related to the water conversion demonstration plants. This represents an increase in the amount appropriated for research and development of $8,595,000 and a decrease of $134,000 for demonstration plants operation and maintenance and $666,000 for demonstration plant construction.

We should like to point out that the increase of $8,595,000 for our research and development program is a gross figure that does not accurately reflect our programed activities for fiscal year 1967. A careful analysis of the figures which appear on the following pages will reveal that we are increasing our general level of effort by only $1.5 million. The balance of the increase is for the procurement of hardware. To meet our responsibility to the President, the Congress, and in turn to the taxpayer, we believe it would be unwise for us or anyone else to proceed with plans for large plant construction until additional usable data has been refined to a point from which we can move forward with the assurance that future desalting plants will represent the most advanced extension of the art within the bounds of sound engineering extrapolation. To develop this type of information, we are faced with the requirement of constructing larger sized experimental equipment. For example, for the construction of distillation modules at the San Diego test station, we are requesting an increase of $5.2 million. Should it develop that these equipment costs require us to delete from our program contracts for new ideas or if we find it necessary to curtail important phases of our engineering program simply because they cannot be funded by the requested amounts, then we believe it is incumbent upon the Office of Saline Water to take whatever additional action we feel we can clearly justify to prevent a slowdown of activities to develop essential technological data.

Salaries and expenses

Appropriation, 1965	$10,000,000	
Supplemental appropriation, 1965	3,900,000	
Total appropriation, 1965		$13,900,000
Unobligated balance, prior year		45,208
Total available, 1965		13,945,208
Appropriation, 1966		20,000,000
Unobligated balance, prior year		1,182,110
Total available, 1966		21,182,110

SUMMARY OF INCREASES AND DECREASES, 1967

Research and development: To provide for acceleration of program		+6,999,890
Administration and coordination:		
To provide for increased pay costs for fiscal year 1966 positions	$39,000	
For related increase to research and development program	374,000	+413,000
Net increase, 1967		+7,412,890
Budget estimate, 1967		28,595,000

Analysis by activities

Activity	Fiscal year 1965 amount available	Fiscal year 1966		
		Total appropriation	Unobligated balance prior year	Amount available
1. Research and development:				
(a) Contracts and grants (non-Federal)	$11,513,808	$18,273,000	$1,182,110	$19,455,110
(b) Federal laboratories	480,900	600,000		600,000
2. Administration and coordination	768,390	1,127,000		1,127,000
Unobligated balance	+1,182,110			
Total	13,945,208	20,000,000	1,182,110	21,182,110

Analysis by activities

Activity	Fiscal year 1965, amount available	Fiscal year 1966, amount available	Fiscal year 1967, estimate	Increase (+) or decrease (−), 1967 compared with 1966		
				Total	Pay cost [1]	Program
1. Research and development:						
(a) Contracts and grants (non-Federal)	$11,513,808	[2] $19,455,110	$26,705,000	+$7,249,890		+$7,249,890
Research	5,262,470	5,135,710	6,485,000	+1,349,290		+1,349,290
Program analysis	185,799	602,700	600,000	−2,700		−2,700
Engineering and development	6,013,387	13,668,852	19,620,000	+5,951,148		+5,951,148
International conference	52,152	47,848		−47,848		−47,848
(b) Federal laboratories	480,900	600,000	350,000	−250,000		−250,000
Research	157,000	150,000	150,000			
Engineering and development	323,900	450,000	200,000	−250,000		−250,000
2. Administration and coordination	768,390	1,127,000	1,540,000	+413,000	+$39,000	+374,000
Unobligated balance	1,182,110					
Total	13,945,208	21,182,110	28,595,000	+7,412,890	+39,000	+7,373,890

[1] To provide for increased pay costs for fiscal year 1966 positions.
[2] Includes prior year unobligated balance of $1,182,110.

JUSTIFICATION, SALARIES AND EXPENSES

The Saline Water Act, as amended (42 U.S.C. 1951–1948), directs and authorizes the Secretary of the Interior to conduct a research, development, and demonstration plant program aimed at the development of low-cost means for the large-scale production of water suitable for beneficial consumptive uses. The act specifies that the Secretary shall (1) conduct, encourage, and promote fundamental scientific research and basic studies, (2) conduct engineering research and technical development work, (3) recommend demonstration plant construction and operations, or participation in such projects having promise, (4) study methods for recovery of valuable byproducts, (5) undertake studies necessary to determine standard costs of producing water in various areas for comparison with saline water processes.

The estimate of $28,595,000 is an increase of $7,413,000 over the amount available for 1966 of $21,182,000. The expenditures have been programed as follows:

(a) Research

The estimate for 1967 is $6,635,000, an increase of $1,349,000 over the amount available for 1966. The allocation of funds within this subactivity, when compared to 1966 availability, is as follows:

[In thousands of dollars]

	Available, 1966	Estimate, 1967	Increase or decrease
1. Properties of water (thermodynamics, structure of liquids, salt-water interactions, salt-salt interactions, crystal structure of ice, viscosity, diffusion, and conductance of multicomponent aqueous solutions, etc.)	1,715	1,796	81
2. Separation processes (membranes, ion-exchange materials, and electrochemical processes, hydrates, clathrates, freezing phenomena, biological and physiological separation mechanisms, etc.)	1,800	2,318	518
3. Interactions at boundaries (phase transitions, vaporization, crystallization, condensation, corrosion mechanisms, transport processes, heat and mass transport, boundary layer phenomena, extraction processes, etc.)	973	1,409	436
4. Brackish waters, salts, brine and byproducts (mineral recovery, salt or scale deposition, brine uses and disposal, separation of byproducts, multipurpose plants, materials of construction, prevention of deterioration, brackish water research and development)	798	1,112	314
Total	5,286	6,635	1,349

The following is an explanation of the above-numbered items:

1. An increase of $81,000 from $1,715,000 to $1,796,000 for further studies on the properties of water. This portion of the program constitutes the Office's basic quest for new knowledge into the laws of nature which have general applicability to any method or process of desalination. It is designed to meet the long-range objectives of the Office by supplying new data and understanding upon which revolutionary new concepts may be founded that would lead to a "breakthrough" in desalination technology.

2. An increase of $518,000 from $1,800,000 to $2,318,000. This constitutes both the largest increase and the largest portion of the research budget. The increase reflects a higher level of effort directed toward reverse osmosis technology, with particular emphasis on new membranes, improvements of cellulose acetate membranes. A more significant research program on biological membranes and their mode of function in water transport and salt rejection will be undertaken. Efforts in ion-exchange, ion-adsorption, crystallization, and vaporization research will be accelerated somewhat.

3. An increase of $436,000 from $973,000 to $1,409,000. This increase represents an accelerated research effort directed toward the development of better materials which are needed in virtually every operative desalination process. This includes research and development on better and more corrosion resistant metals and alloys, cements and concretes, plastics and polymers, membranes, protective coatings and linings, heat transfer surfaces and media, etc.

4. An increase of $314,000 from $798,000 to $1,112,000. This increase primarily represents an accelerated program directed specifically toward the problems inherent to desalting brackish waters. Brackish waters can generally be desalted at lower cost than can sea water because of their lower total mineral content They do present a wide variety of special problems, however, due to their variable composition and the fact that they are invariably saturated with minor (and generally unidentified) components.

The research activity embraces studies in all relevant areas of basic and applied science. A considerable effort is devoted to a better understanding of the kinetics and mechanisms by which heat, water molecules, and ions are transported to and across boundaries. Studies of a more applied nature relate to the development and testing of new separation processes; the investigation of means of preventing or alleviating scale and corrosion; the improvement of heat transfer coefficients; means of improving materials of construction; byproduct recovery; etc. The fiscal year 1967 program will consist of approximately 87 separate projects.

A few examples of recent accomplishments that have been achieved and may be expected from the on-going program are given below:

1. Determination of the technical feasibility of several new separation processes; e.g.:
   (1) Reverse osmosis;
   (2) Freezing;
   (3) Hydrates;
   (4) Electrode demineralizers;
   (5) Electrogravitational;
   (6) Electrosorption; and
   (7) Transport deplation.

2. The improvement of scale control methods and development of a system for simultaneous scale control and byproduct recovery.

3. The development of thermodynamic data necessary for the design of large-size desalination plants.

4. Fundamental investigations of the principles of heat, mass and momentum transport are yielding data which can lead directly to lower conversion costs because of their effect on process efficiencies, energy consumptions, and capital investment requirements.

5. Fundamental studies of corrosion and the evaluation of new materials of construction for desalination systems are pointing the way toward new materials which may result in the lowering of conversion costs through lowering of capital investment costs.

6. Establishment of new data on selective removal of individual salts or ions which indicate that recovery of byproducts may be of real interest (K, Ca, Mg, halogens, trace elements).

7. Optimum brine heater temperature. These data when fully developed will establish the optimum upper temperature limit for distillation and will guide the research relating to corrosion, scale, thermodynamic properties of saline water, byproducts, etc.

8. New data on common structural materials, including the use of concrete, alloys, etc., in plants under special conditions has been obtained. The data obtained should be of extreme value in selecting material and environmental conditions for desalination processes and plants (Israeli, MWD, etc.).

9. Corrosion control techniques have and are being developed; e.g., cathodic and anodic protection, etc.

10. One of the outstanding scientific contributions to our understanding of the inefficiencies of desalting processes has been the detailed definition of the so-called boundary layer problem. The thermodynamic characteristics and operating parameters are seriously and adversely affected by salt buildup in the boundary layer. The analysis of this effect has given us a thorough understanding of the phenomena and already has led to tangible process improvements.

11. A new phenomena during the quiet evaporation of water was recently discovered and described. A fuller understanding of the forces that operate at the liquid-vapor interface resulted. This will have application to evaporator equipment.

12. The effect of acoustic waves on heat transfer and deposition of scale from solution has been established.

13. The technical feasibility of a phosphate precipitation process for descaling water has been established.

14. The technical feasibility of lime-soda softening of sea water also has been established.

15. A novel process for recovering potassium from brines has been developed. Preliminary estimates indicate a credit of 6 cents per 1000 gallons of product water might be realized in a large capacity evaporator.

16. It has been demonstrated that recovery of potassium from brines by a second process is practical, particularly if the brines are obtained from a freezing process.

17. Both transient and equilibrium solubility of calcium sulfate in water and salt solutions have been established. Such data are essential for high temperature-high concentration plants.

18. More sensitive techniques for the detection of trace amounts of organic chemicals in sea water have been developed.

19. A novel casting method has been developed that permits considerably larger inorganic ion exchange membranes to be prepared for electrodialysis.

20. New and interesting inorganic ion selective membranes have been prepared.

(*b*) *Program analysis*

The staff functions and in-house responsibilities of this group are covered under the general heading for administration and coordination. In addition, certain feasibility and economic studies still are carried out by means of contracts.

The estimate for 1967 is $600,000, a decrease of $3,000 under the amount available for 1966. The amount requested for 1967 is the same as that appropriated for 1966. The $3,000 decrease is due to an obligated carryover in 1966 from 1965.

A. Feasibility studies, $400,000.—For participation in national and international feasibility studies on the potential applications of desalting technology. In considering the possibility of Federal participation in prototype conversion plants, engineering feasibility studies must be undertaken to determine the advances in conversion technology as a result of that participation, and to obtain the detailed data necessary to support necessary requests for congressional authorization. There is a direct relationship in the participation in the construction and operation of such first-of-a-kind conversion plants to the Office of Saline Water development program. The plant must offer a specific opportunity to advance science and technology in the desalting field, and contribute materially to low-cost desalting. These studies examine in detail for an area which has saline sources available, all aspects of the possible use of a desalting plant, which may be a dual-purpose plant, in regard to future needs for additional incremental fresh water. In these types of projects a departmental in-house preliminary study would likely precede any contracts for detailed feasibility studies, which normally would be jointly financed with the interested water-user agencies. An example of this type of study is the one which was underway during fiscal year 1966 with the Metropolitan Water District of Southern California.

B. Economic studies, $200,000.—Economic studies and surveys are authorized to determine the respective costs of producing fresh water from saline sources by leading conversion processes. These may relate to ongoing processes development efforts or deal with determinations of future desalting opportunities. Also, in this category, would be further correlation of the economics of saline water conversion for providing incremental or supplemental supplies of fresh water with the other available means of water supply.

(*c*) *Engineering and development*

The estimate for 1967 is $19,820,000, an increase of $5,702,000 over the amount available for 1966. The allocation of funds within this subactivity, when compared to 1966 availability, is as follows:

	Available, 1966	Estimate, 1967	Increase or decrease (−)
Distillation Division	$7,144,000	$10,760,000	$3,616,000
Membrane Division	3,003,000	3,900,000	897,000
Special Projects Division	1,443,000	3,200,000	1,757,000
Engineering analysis staff	360,000	350,000	−10,000
Engineering services staff	2,168,000	1,610,000	−558,000
Total	14,118,000	19,820,000	5,702,000

Distillation division

Funds available fiscal year 1966	$7,144,000
Funds requested fiscal year 1967	10,760,000
Increase	3,616,000

The efforts of the Distillation Division will be concentrated on major projects as follows:

1. The construction and testing of a large multistage flash module. Design and start construction of LTV module.

2. Development of component suitable for large and intermediate size prototype plants.

3. Testing, evaluation, and dissemination of data derived from the new 1.2 million gallons per day multistage, multieffect flash distillation plant to be built at San Diego. This plant is expected to start up in the spring of calendar year 1967.

4. Pilot plants: Construction, operation, and tests on MSF, LTV, and miscellaneous pilot plants.

5. A stepped-up program leading to the design and construction of small medium-size prototype plants, 5 to 15 million gallons per day, through heat transfer, design, and component studies.

6. Studies of advanced type distillation plants which are expected to effect a major decrease in water costs up to 50 percent by the years 1975–80.

The following table indicated the fiscal year 1966 expenditures by programs as compared with the proposed fiscal year 1967 expenditures. It will be noted that the funding for all programs has been decreased over that of fiscal year 1966 with the exception of the modular program where a large increase is necessary to cover the expensive hardware required. Because of this increase, reductions in other programs is necessary to keep within budget limitations.

Program	Available, 1966	Estimate, 1967	Increase or decrease (−)
I. Pilot plants	$2,354,000	$1,575,000	($779,000)
II. Components	1,000,000	635,000	(365,000)
III. Advanced studies	1,268,000	900,000	(368,000)
IV. Modules:			
Multistage flash—MSF	2,300,000	5,000,000	
Long tube vertical—LTV		2,500,000	5,200,000
V. Special research and development	222,000	150,000	(72,000)
Total	7,144,000	10,760,000	3,616,000

I. PILOT PLANT STUDIES AND OPERATION

Requested $1,575,000, a decrease of $779,000 from 1966.

Development work in pilot plants can be divided into three categories for budgeting and implementation:

(*a*) Planning and design.

(*b*) Construction of test vehicles.

(*c*) Operation, evaluation, and dissemination of test data therefrom.

In the planning and design category is an all aluminum plant for which design funds are requested. A number of analyses have indicated that applications exist where low-cost, low-pressure steam of waste heat is available for desalting and the plant might have characteristics of maximum brine temperature of 200° F. and performance ratios of 6 to 8. Aluminum when properly designed for its characteristics can be an economical material of construction resulting in low capital cost and long life.

Aluminum has been used in small plants and has shown satisfactory performance. It has not been applied to large plants.

The funding is requested to obtain a detail design of such a plant. The design task contemplates the preparation of a conceptual design and economic study and design of pilot plant to test out materials under service conditions.

For construction of pilot plants, funds are requested for a barge mountable flash plant to evaluate performance in highly polluted waters. This project contemplates the design and fabrication of a plant on skidmounts suitable for barge or shore operation consisting of upper stages and lower stages of a MSF plant that can be operated from high to low temperatures controlling flashdown, maximum brine temperature, and ambient sea water. Plant will be as small as is feasible to be representative of MSF operation.

The plant is necessary to determine feasibility of MSF operation in waters highly contaminated with sewage, chemical plant effluents, etc., such as would be encountered in the New York, New Jersey, Philadelphia, and Washington rivers and estuaries. The plant will be self-contained with boiler, and transportable by truck.

Funds are requested for the design and construction of a controlled flash distillation plant to be located at Wrightsville Beach. The process has been tested with the small module stages. It must be tested as a complete plant of pilot plant size. It shows great promise of reduction in capital costs and, therefore, cost of water.

Operation of pilot plants built in fiscal year 1966 and early fiscal year 1967 will require considerable funding for operation. An amount of $800,000 for fiscal year 1967 is included in the above total pilot plant requests. These pilot plants will include those now being installed by Baldwin-Lima-Hamilton at Wrightsville Beach for evaluation of scale prevention at high temperatures and also their flash chamber test module and the CUNO (AMF) multieffect-multistage pilot plants now being operated at the Millstone Point Desalting Test Station. Other pilot plants requiring operating funds are those being constructed by Union Carbide-Linde Division, Aqua-Chem, Inc. (both at Wrightsville Beach) and the barge mounted plant.

Operation of the pilot plants will provide development information in two main categories, i.e., scale control and flash chamber geometry.

(*a*) *Scale control.*—Pilot plant tests during fiscal year 1966 will develop methods for effective scale control up to evaporation temperatures of 300° F. These will include pH adjustment, sludges, and additives. During fiscal year 1967, the tests will continue in order to develop methods for effective scale control between 300° and 400° F. Contracts with Baldwin-Lima-Hamilton, W. R. Grace & Co., Dow Chemical Co., and Aqua-Chem, Inc., are now implementing these programs. Most of these tests will be made on the 25,000-gallon-per-day, high-temperature BLH pilot plant now being completed at Wrightsville Beach. Data from these tests will permit process and economic evaluation of the flash, vertical tube, and other distillation processes and will also provide data to design specific equipment to be used in large plants.

(*b*) *Flash chamber studies.*—Operation and evaluation programs of flash chamber test vehicles capable of handling high brine flows and capable of investigating several modes of flashing will be carried out in fiscal year 1967. The data obtained will provide critically needed design criteria and operating experience needed for the design of modules of production-size plants. These test vehicles will provide needed answers on chamber geometry, demisters, and venting systems. These flash projects will, in most cases, be carried out in equipment now being constructed by AMF, BLH, and Foster Wheeler Corp.

II. COMPONENT AND SUPPORT STUDIES

Requested $635,000, a decrease of $365,000 from 1966.

Components

Studies that will generate more economical performance and cost characteristics of components that would be used as parts of large plants or that are essential elements entering into the construction of large plants have been funded in 1966.

A major cost factor of a distillation plant is the heat transfer surface. An intensive effort is being made, in cooperation with industry to develop economical heat transfer surfaces. Funds for 1967 are requested to develop methods of fabrication and test heat transfer characteristics of these new types of tubing incorporating dropwise condensing promoters, fluted tubes, extended surface tubes and tubes incorporating turbulence promoters. Increases in heat transfer characteristics of heat exchange surfaces can materially decrease the surface required and thereby result in significant decreases in cost of the plant.

Materials of construction as they relate to methods of fabrication and effect the life of the plant have been funded in 1966. The major effort has been the development of concrete technology under the environmental conditions encountered in distillation plants. This technology does not exist and had to be developed. Concrete construction of plants can result in lower capital costs.

Funds for 1967 are requested to develop and test other materials of construction that are necessary for plant construction. Methods of operating procedure as they affect the corrosion rate of materials will be investigated.

Support studies

The Oak Ridge National Laboratories have been used for technical assistance and as consultants on a variety of matters of literature search, evaluation of long tubes for evaporators, evaluation of flash chamber designs, corrosion problems, and evaluation of product water treatment systems.

Funding in 1967 is requested to continue this type of assistance. The Oak Ridge National Laboratory has a wide range of professional personnel in many disciplines and can give expert advice in many fields.

III. ADVANCE STUDIES

Requested $900,000, a decrease of $368,000 from 1966.

Conceptual designs for large (250 million gallons per day) plants of the multistage flash, long tube vertical and vapor compression type will be made under 1966 funding. A number of other conceptual designs are also similarly funded. The other plants are single purpose 2 to 10 million gallons per day size, 150 million gallons per day long tube vertical common wall type and turbine studies to couple to multipurpose plants.

Funding in 1967 is requested for investigations of the application of hot water jets developed under the pilot plant program to test bed plants to replace mechanical compressors to improve reliability; to make detailed hydraulic studies of water distribution and brine circuitry in multistage flash and long tube vertical plants and to investigate the feasibility to automate large distillation plants. Funds are also requested to investigate the feasibility of combining the most advantageous features of multistage flash, long tube vertical, and vapor compression plants into a single operating plant.

Funds will also be used to investigate the suitability of the known processes of distillation to the disposal of mine waters. Mine waters are heavy pollutants and national programs aim at the removal of these sources of pollution. Funds will also be used to study the optimum design that can be made for cooling towers for heat sinks of inland distillation plants.

IV. MODULES

Requested $7,500,000, an increase of $5,200,000 over fiscal year 1966.

Modular studies

The construction of modules and test sections of a new plant which represents a large scaleup factor from present plant size is considered to be a necessary intermediate step. A module as the term is used here is a full-size, or approximate full-size, cross section of a large plant. It would consist of several full-size flashing stages with accompanying pumps, instrumentation, control, and air removal systems. In scaling from the biggest U.S. plants (approximately 1.3 million gallons per day) to a plant of the order of 50 million gallons per day, many hydraulic and mechanical problems must be solved before committing ourselves to the considerable expense of the full-scale plant. It is expected that through these modules we will be able to prove out the concepts of hydraulic flow, heat transfer, and construction techniques before committing ourselves to the large plant, thus eliminating financial risks and possible delays in the schedule.

MSF module, $5 million, phase II

The first phase of the OSW module program required that the design, architect-engineer work, and procurement of the long-term items for the first module of the large prototype multistage flash plant be funded in fiscal year 1966 to the extent of $2,300,000. The remainder of the money required in phase II for the first module ($5 million) must be available in fiscal year 1967. It is proposed that this module will be completed by January 1968.

Present plans call for one large multistage flash module which, it is believed, should be satisfactory for plants such as the contemplated MWD (150 million gallons per day) plant and Israeli (100 million gallons per day) plant. The advantage in having thoroughly tested the large components and hydraulic systems in the OSW module testing program together with the economic advantages of duplication of major components will, it is believed, dictate that these plants be essentially the same.

LTV module, $2,500,000, phase I

Conceptual design studies and development work completed at Freeport indicate that the long tube vertical (LTV) process is a strong contender with the multistage flash for production of the lowest cost water. Thus the LTV module program must be given highest priority as soon as the multistage flash module is under construction.

Conceptual design studies and pilot-plant work will have progressed to the point where the design and major component procurement of the large LTV module must be completed by the end of fiscal year 1967. This module, estimated to cost $5 million, will be funded in phases, with the remainder of the money, $2,500,000, to be included in fiscal year 1968 funds.

V. SPECIAL RESEARCH AND DEVELOPMENT

Requested $150,000, a decrease of $72,000 from fiscal year 1966.

The funds requested under this item are minimal to support, investigate, and develop, in the very preliminary stages, new concepts and arrangements of processes and arrangements which may be developed from laboratory experiments and preliminary bench work. This money is also requested in order that thorough evaluation can be made on work done in pilot plants and in component development.

Membrane division

Funds available, fiscal year 1966	$3,003,000
Funds requested, fiscal year 1967	3,900,000
Increase	897,000

Funds for the membrane program are allocated to four categories, namely, reverse osmosis, electrodialysis, common research and development, and other processes. The major increases in the membrane program occur in the reverse osmosis field. The funding for each program is detailed in the following:

I. REVERSE OSMOSIS

(*a*) *Summary of funds.*—

Available, fiscal year 1966	$1,900,000
Budget request, fiscal year 1967	2,800,000
Increase for fiscal year 1967	900,000

(*b*) *Need for increase.*—Increase in funds in reverse osmosis results from several considerations as follows: (1) Reverse osmosis is a new process which is developing rapidly, (2) it has been appraised as a process having particularly good potential among the various processes available and therefore justified strong emphasis, (3) pilot-plant construction and operation require continuous support at the same level, and (4) certain additional activities beyond the fiscal year 1966 program are required in view of the state of development. These include a larger prototype or test-bed plant, new work in membrane development, new cost and design analysis, and a more detailed investigation of water quality not previously explored. The increases or decreases in program funding are detailed below:

1. Pilot plants: Funds allocated to this activity were $900,000 in fiscal year 1966 and $725,000 in fiscal year 1967 making a decrease of $175,000.

This category covers pilot plants of 10,000 gallons per day to 50,000 gallons per day. A fund decrease results because three process designs (plate and frame, shell and tube, and spiral module) were initiated in a capacity range of 50,000 gallons per day during fiscal year 1966. Operation of these units in fiscal year 1967 will be a vital part of the program. This test operation plus the construction of one more basic process design (narrow channel concept) accounts for the funding in fiscal year 1967. The reduction results from the smaller amount of construction involved.

2. Test-bed plants: Funds allocated to this activity were $100,000 in fiscal year 1966 and $500,000 in fiscal year 1967 making an increase of $400,000.

This increase is based on progressive developments in the process which makes possible the construction of a larger prototype or test-bed plant by mid fiscal year 1967 following the preliminary design work initiated in fiscal year 1966. Experience in the construction and operation of two or possibly three 50,000-gallon-per-day pilot plants will provide a basis for extrapolation to test-bed plants of 250,000 gallons per day or larger.

3. Process development: Funds allocated to this activity were $850,000 in fiscal year 1966 and $825,000 in fiscal year 1967, hence a decrease of $25,000.

This category involves bench-scale laboratory testing and small pilot-plant operation (1,000 gallons per day) for the purpose of determining the merits of distinct design concepts, life of membranes under field operation, operating characteristics on natural saline waters, performance of membrane support materials and different membrane formulations under various conditions of hydraulics, feedwater pretreatment, etc. The program funding is at essentially the same level but with the degree of emphasis shifted from earlier design concepts (plate and frame, spiral) to more recent developments in other designs

(shell and tube, small tubes and fibers, improved permeators). Parallel emphasis will continue on sea and brackish waters which of necessity requires duplicate test equipment at both sea and brackish locations. The use of natural saline water sources as opposed to synthetic waters will be considered necessary for best results although additional costs are involved in providing these sources.

4. Membrane development: No funds were allocated to this activity in fiscal year 1966 but $200,000 are allocated in fiscal year 1967 hence an increase of $200,000.

The fundamental study of membranes is a basic research activity. However, new membranes which show potential merit as a result of the research work as well as modifications in existing membranes provide candidates for further development under the engineering program. It is evident that certain membranes now in basic research (polyelectrolyte, graphitic oxides, and thin film on rigid surfaces) will have advanced sufficiently to warrant further development in fiscal year 1967. Also, existing membranes, ion exchange membranes for example, have merit for use in reverse osmosis with certain modifications. It is for these special studies on noncellulose acetate materials that the increase in funds are to be devoted. With the more conventional cellulose acetate membrane development work of a general nature has been and will continue to be conducted under the process development work with the small pilot plants where various cellulose acetate membranes with various curing temperatures and different membranes salts have been tested.

5. Effects of water quality, pollutants, and so forth: There is no specific funding for this item in fiscal year 1966 and hence the $350,000 allocated for fiscal year 1967 represents an increase.

During fiscal year 1966 the effects of water quality were being observed in the small pilot plants operating on sea and brackish waters. These were not classed as water quality studies since they were part of an overall system evaluation and hence were not funded under this category in fiscal year 1966. In fiscal year 1967 however, specific additional studies relating to water quality will be undertaken. Included in this will be tests on brackish water at Roswell, N. Mex., where field tests supplemented by laboratory work will investigate practical means for operating on waters nearly saturated with calcium sulfate.

The treatment of acid mine waters will also be investigated as a new activity for reverse osmosis with both field and laboratory work.

6. Cost estimates, designs, and special component studies: Funds allocated for this activity in fiscal year 1966 were $50,000. In fiscal year 1967, $200,000 are allocated representing an increase of $150,000.

No cost estimates have been made for reverse osmosis comparable to the cost analyses prepared on distillation and electrodialysis. Cost analysis of projected large capacity plants and parametric designs of future plants are needed to keep abreast of progress with the smaller pilot plants. Special studies of materials or components distinctly applicable to reverse osmosis and not covered in the general pilot plant program will be funded in the category. For example, a general survey of very high pressure pumps is considered desirable.

II. ELECTRODIALYSIS

(*a*) Available, fiscal year 1966	$700,000
Budget fiscal year 1967	700,000
Difference	None

The electrodialysis development program consists of two major, parallel levels of effort. The first is the development of more efficient, low-cost membranes; the second is the investigation of methods that can be used to increase current density. Programs initiated in fiscal year 1966 emphasize basic studies in these two areas of investigation. In fiscal year 1967, results obtained from a number of the programs will culminate in the design and operation of both bench scale units and small pilot plants. Therefore, while the overall budget total for fiscal year 1966 and fiscal year 1967 remains unchanged, there is a corresponding shift in funding emphasis. Increases and decreases in the major programs are as follows:

(1) Methods to increase current density: There is a decrease from $200,000 in fiscal year 1966 to $140,000 in fiscal year 1967 as a result of shift of emphasis to pilot plant testing and membrane development. A reduced level of effort is possible since a part of the work to increase current density will be included in pilot plant investigations. Areas investigated under this program include basic studies

on membrane fouling, hydraulic improvements including component development and the effects of high temperature operation.

(2) Pilot plants: There is an increase from $150,000 in fiscal year 1966 to $160,000 in fiscal year 1967. This increase results from having only one pilot plant constructed in fiscal year 1966 as compared with having two plants operational in fiscal year 1967.

(3) Membrane development: There is an increase from $100,000 in fiscal year 1966 to $150,000 in fiscal year 1967. This increase results from additional emphasis placed on the development of thin membranes with improved properties that are suitable for high temperature operation.

(4) Process design studies: There is no change in the money ($50,000) budgeted for process design studies in fiscal year 1966 and fiscal year 1967. This is envisioned as a continuing review program which will periodically update and integrate results obtained from other, separate areas of investigation.

(5) Bureau of Reclamation: There is no change in the money ($200,000) budgeted for the Bureau of Reclamation in electrodialysis development. The Bureau carries out R. & D. in such areas as pilot plant testing, membrane evaluation and investigation of electrical "pulsing" as a means of overcoming polarization.

III. COMMON R. & D.

(*a*) Available, fiscal year 1966	$203,000
Budget, fiscal year 1967	150,000
Difference: Decrease of	53,000

(*b*) *Need for increase.*—The two major programs under common R. & D. are investigation of pretreatment systems and scale prevention methods.

(1) Pretreatment investigations: There is no change in 1967 from the $100,000 available in fiscal year 1966. Studies will be continued to evaluate and optimize pretreatment methods for various brackish waters and for various membrane processes. In addition, $120,000 is programed within the Operation and Maintenance Appropriation, for procurement and installation of equipment at the Webster plant for investigation of pretreatment.

(2) Scale prevention: There is a decrease of $53,000 from $103,000 in 1966 to $50,000 in 1967 for scale prevention methods. This results from a shift in emphasis to pilot plant operation where scale prevention will be included as part of the pilot plant programs.

IV. OTHER PROCESSES

(*a*) Available, fiscal year 1966	$200.000
Budget, fiscal year 1967	250,000
Difference: Increase of	50.000

(*b*) *Need for increase.*—In fiscal year 1966, basic studies and bench scale tests will be undertaken for transport depletion, a promising variant of the electrodialysis in which anion membranes are eliminated from the process. The increase results from construction of a transport depletion pilot plant in fiscal year 1967. Money is also budgeted to investigate other promising membrane processes which originate from work sponsored by basic research.

Special Projects Division

Funds available fiscal year 1966	$1,443,000
Funds requested fiscal year 1967	3,200,000
Increase	1,757,000

During fiscal year 1966 construction of three new crystallization pilot plants were completed. During the remainder of fiscal year 1966 these plants will be operated in addition to those plants already in operation. During fiscal year 1967 operation of these plants, and another to be built for brackish waters, will continue. The increase in funds requested for fiscal year 1967 will be in part due to operation of these crystallization pilot plants but will be required chiefly for improving the performance of their component parts and for developing engineering designs of larger crystallization plants from the pilot plant design and performance data. In addition, an increase in funds is required for the development of new promising processes, methods to dispose of brine effluent, and application of saline water conversion methods to pollution problems.

The increase consists of:

A. Crystallization processes:

Fiscal 1967	$1,550,000
Fiscal 1966	1,443,000
Increase	107,000

Operation and experimentation with freezing and hydrate pilot plants to improve the processes and obtain design data to determine the technical and economic feasibility of the processes.

1. Freezing processes:

(*a*) Wrightsville Beach Test Station and St. Petersburg, Fla.: A decrease of $193,000 due to a change in emphasis to component research and development on the direct contact freezing process.

(*b*) Roswell pilot plant: An increase of $250,000 for operation of a pilot plant on brackish waters.

2. Hydrate processes: (*a*) An increase of $50,000 to permit longer period operation of Koppers plant (fiscal year 1966, 10 months; fiscal year 1967, 12 months).

B. Component development:

Fiscal 1967	$300,000
Fiscal 1966	--------
Increase	300,000

1. An increase of $300,000 to improve the performance of components required for the crystallization processes. For example, crystallizers, wash and separation units, and compressors.

C. Application engineering:

Fiscal 1967	$350,000
Fiscal 1966	--------
Increase	350,000

1. An increase of $350,000 to support engineering work to translate crystallization pilot plant design and performance data into design and construction of larger plants.

D. New processes:

Fiscal 1967	$500,000
Fiscal 1966	--------
Increase	500,000

1. An increase of $500,000 to further develop new promising processes at the bench scale and pilot plant level. For example, some new ion exchange processes are now ready for further advanced development.

E. Brine disposal:

Fiscal 1967	$200,000
Fiscal 1966	--------
Increase	200,000

1. An increase of $200,000 to support research and development to determine methods to dispose of the brine effluent from saline water conversion plants and their effect on aquatic environment and inland areas.

F. Pollution:

Fiscal 1967	$300,000
Fiscal 1966	--------
Increase	300,000

1. An increase of $300,000 to support laboratory and field activities on the application of saline water conversion processes to pollution problems, such as acid mine drainage.

Engineering analysis

Funds available, fiscal year 1966	$360,000
Funds requested, fiscal year 1967	350,000
Decrease	10,000

The amount requested for 1967 is the same as that appropriated for 1966. The $10,000 decrease is due to an obligated carryover in 1966 from 1965.

The program of work for fiscal year 1967 is as follows:

1. Continuation of the effort for the "Technical Data Book"	$50,000
2. Continuation of the effort for engineering data acquisition, storage and retrieval	75,000
3. Process analysis of OSW's engineering effort	150,000
4. Engineering cost studies	25,000
5. Studies to determine and define component performance	50,000
Total	350,000

The above programs are defined as follows:

1. *"Technical Data Book."*—This effort is directed toward the collation of all available information pertaining to saline water conversion. It has been conducted so far for 3 years and has produced two volumes of pertinent data. By necessity, this program has to be a continuing one and is providing information on a uniform basis, which otherwise will have to be individually obtained by each of the OSW contractors, resulting in a duplication of effort and an unnecessary expense of funds by each of the contractors.

2. *Acquisition, computer storage and retrieval of engineering information for design of desalination plants of varied sizes.*—This effort is intended in order to systematize OSW's engineering and development program, and should ultimately result in a design capability of large desalination plants of varied sizes. It will be performed by collating and coding of existing data, optimization of processes, determination of scale-up factors, definition of problem areas, etc.

3. *Process analysis of OSW's engineering effort.*—This program will be directed toward the analysis of the various conversion processes, in support of the work conducted by the operating divisions and in general support of engineering and development.

4. *Engineering cost studies.*—Will involve calculations in thermoeconomics and the development of reliable cost data.

5. *Analytical studies for the determination and definition of process component performance.*—This program will be directed toward the definition of performance of the various components used in desalination.

Engineering services

Funds available, fiscal year 1966	$2,168,000
Funds requested, fiscal year 1967	1,610,000
Decrease	558,000

Engineering services has two broad responsibilities: (1) construction and operation of large pilot plants and (2) operation and construction of test facilities where small pilot plants and other test programs can be carried out. Implementation of the objectives of engineering services results in reports, specifications, and drawings based upon the construction and operation of pilot and large-size plants. Production, engineering, and cost reports are generated for use of the public.

The fiscal year 1967 funds will be applied as follows:

1. *East coast test facility, $400,000.*—The estimate of $400,000 is a decrease of $168,000 under fiscal year 1966 availability for the maintenance, operation, and modifications of the site and is due to a decrease in modification costs. The 1966 availability includes $18,000 carried over from 1965 funds. Modifications planned, consist of a hydrocarbon gas alarm system and provision for underground drainage of waste waters. Maintenance and operation expense is expected to be the same as for fiscal year 1966, with 12 pilot plants in operation. New and different pilot plants will be installed to replace in part some of the current units.

Present engineering development activities of the Office of Saline Water for process development are located at Wrightsville Beach, N.C., in a test facility where various new conversion processes can be operated at the pilot plant level under controlled, standardized conditions. The facility provides the Government a site for pilot plant testing and an east coast conversion plant. This property is ideally suited to the requirements of sea water conversion applied research and engineering development activities.

2. *San Diego saline water test facility, $210,000.*—The estimate of $210,000 is a decrease of $1,290,000 under fiscal year 1966 for construction, maintenance, and operation of the facility. It is expected that the construction of the service facilities ($1,350,000) will be essentially completed by midyear fiscal year 1967, with funds provided for in the fiscal year 1966 budget. The estimate of $210,000 for fiscal year 1967 is the expected cost for operating the test facility for 6 months. The site is adjacent to the San Diego Gas & Electric Co. powerplant where extraction steam from a turbine will be used to operate the distillation plants. Included in fiscal year 1966 is a carryover from fiscal year 1965 of $150,000 for acquisition and engineering services to build the test facility.

3. *Brackish water test facilities, $960,000.*—The estimate of $960,000 is an increase of $960,000 over fiscal year 1966 for construction, operation, and maintenance of the facilities. In fiscal year 1967 it is expected that facilities will be constructed to provide space for the construction of five pilot plants. Steam, power, raw water, brine, and product water service will be provided to each pilot plant location in the same manner that these services have been provided at the sea water test facility, Wrightsville Beach, N.C. The estimate of $960,000 includes $900,000 for the design, engineering, and construction of the brackish water test facilities. The balance of the estimate provides for management and operation of the plant for 3 months. The cost of the pilot plants are listed under the appropriate process.

The inland water sources contain naturally occurring impurities and in addition, there are other mineralized or chemically charged waters from municipal or industrial sources. Impurities not present in ocean water but of significant interest are such items as silica, sulfate, sulfite, sulfide, phosphates, detergents, and other organic chemicals. There also will be certain heavy metal chemicals such as iron and copper present in some of these waters.

There is need for a test facility to handle brackish waters in which processes up to 50,000 gallons per day can be evaluated. Such a facility would of course use natural waters obtained from wells and surface streams but would also need to have mixing facilities to prepare synthetic waters equivalent to those found throughout the arid brackish water zones of the United States. A site should be selected which has a variety of waters available that will permit mixing to simulate the various brackish waters.

4. *In-plant corrosion test program, $40,000.*—The estimate of $40,000 for the corrosion test program equals that provided in fiscal year 1966. This corrosion program is vitally important for the selection of materials used in the saline water conversion plants.

5. *Pretreatment of feed water, $60,000 decrease.*—The conversion processes—distillation and membranes—have been plagued by process problems which have interfered with the operation of plants. Analysis of the problems have shown that the silica present in the feed water is a factor. A study is being undertaken in 1966 to find solutions to the problem. This study will cost approximately $60,000 and will be completed in fiscal year 1966. No funds are budgeted for this purpose in 1967.

(*d*) *Administration and coordination*

The estimate for 1967 is $1,540,000, an increase of $413,000 over the amount available for 1966.

(1) An increase of $39,000 is for increased pay costs on fiscal year 1966 positions.

(2) An increase of $374,000 related to the increase in the research and development program.

This proposed increase will provide for the necessary planning, supervision, and administration of research and development contract funds. To effectively administer the program it is necessary to have a staff of well-qualified scientists and engineers who are able to (*a*) stimulate interest in the program, (*b*) evaluate research and development proposals, (*c*) assist in the planning and procedures of the research and development projects, (*d*) negotiate the technical portions of the

contracts, and (*e*) administer and supervise the technical performance of contractors to manage and insure prudent expenditure of funds in fulfilling the objectives of the Office of Saline Water program. The staff must evaluate results to insure termination of research or development work upon achievement of its purpose or extend it as merited. In addition, the staff must give consideration to patent matters and plan future work.

Included within the technical staff of the Office of Saline Water is an engineering analysis staff and a program analysis staff. These two staffs perform certain in-house functions and consist of professional personnel experienced in a variety of special fields involved in the activities of the Office of Saline Water including competence in the field of water resource program development and coordination. The in-house functions and responsibilities of the program analysis staff is to provide staff assistance and technical advice on various aspects of the saline water conversion program such as:

1. Participation in program planning and policy development.
2. Review of phases of the program, particularly those relating to present and future applications of desalting technology.
3. Maintaining liaison and working jointly on technical matters with both departmental and other U.S. Government and foreign agencies having saline water conversion interests.
4. Coordinating, conducting, and supervising both in-house and contract feasibility and economic studies as related to the OSW development program on the potential application of desalting to provide incremental or supplemental supplies of fresh water.
5. Undertaking special studies including those relating to information needed for budget and appropriation matters of overall program importance.

This staff provides the means of insuring continuous review of program components requiring particular attention at various times and a means of maintaining a balance of effort and coordination of programs for short-range, intermediate-range, and long-range objectives.

The in-house functions and responsibilities of the engineering analysis staff are to analyze and evaluate technical feasibility and cost data for the comparison of the various processes and unit operations. This includes studies and evaluations of specific research and development proposals to determine feasibility and of engineering developments and projects to determine whether such experimental operations should be accelerated, maintained, or dropped from the program.

In addition, the scientific activities must be supported by capable financial, legal, and administrative staffs to insure that sound business management principles are applied. The administrative staffs must be strengthened to handle the additional work generated by the increased program including contract negotiation, examination of progress payments and contractor audits, exercising accounting control over demonstration plants, pilot plants, and other Government-owned property and furnishing adequate administrative and housekeeping services to the program staff.

The estimate includes an increase of 25 positions within the "Salaries and expenses" appropriation, which includes 3 positions transferred from the operation and maintenance program, resulting in a net increase of new positions of 22. Nineteen of these positions will be additions to the Washington, D.C., headquarters staff and three positions will be in the field, one at the new San Diego Saline Water Test Facility and two at the Brackish Water Test Center. These positions will be assigned as follows:

Scientific and technical	11
Stenographic and clerical support of technical staff	7
Administrative support functions	7
Total	25
Less transfer from operation and maintenance program	3
Net increase	22

Itemization of estimate

	Actual, 1965	Estimate, 1966	Estimate, 1967	Increase (+) or decrease (−)
Program and financing:				
Total obligations	$12,763,098	$21,182,110	$28,595,000	$7,412,890
Unobligated balance available, start of year	−45,208	−1,182,110		
Unobligated balance available, end of year	+1,182,110			
New obligational authority (appropriation)	13,900,000	20,000,000	28,595,000	7,412,890
Obligations by objects:				
11 Personnel compensation	679,865	994,000	1,278,000	+284,000
12 Personnel benefits	47,236	70,000	95,000	+25,000
21 Travel and transportation of persons	56,581	75,000	115,000	+40,000
22 Transportation of things	1,016	1,000	3,000	+2,000
23 Rent, communications, and utilities	23,036	45,000	58,000	+13,000
24 Printing and reproduction	47,183	70,000	90,000	+20,000
25 Other services	9,375,338	15,210,110	22,431,000	+7,220,890
Services of other agencies	186,625	645,000	465,000	−180,000
26 Supplies and materials	10,193	14,000	20,000	+6,000
31 Equipment	4,655	8,000	20,000	+12,000
32 Land and structures	361,970	1,550,000	1,020,000	−530,000
41 Grants, subsidies, and contributions	1,969,400	2,500,000	3,000,000	+500,000
Total obligations	12,763,098	21,182,110	28,595,000	7,412,890

STATEMENT OF FRANK C. DiLUZIO, DIRECTOR OF THE OFFICE OF SALINE WATER

PREPARED STATEMENT

Senator BIBLE. Mr. DiLuzio, your full statement will be made a part of the record.

(The statement follows:)

When I appeared before you on March 2, 1965, to present the budget estimate of the Office of Saline Water, I had served as program director for just over 1 month. As I meet with you today, I have been the Director of the Office of Saline Water for just over 1 year, and while many of the ideas and concepts I had a year ago concerning the saline water conversion program are still valid, in all candor, I should like to report to the committee that some of the desalting processes were further advanced than I had realized, while others face more development work than I had anticipated. During the year a great deal of time and effort have been spent to bring our short, intermediate, and long-range goals into sharper focus, and some of our programs have been reshaped and refined in order to effectively gain the objectives we have established. Even with my rather limited direct experience with this program, I now feel that I am in a much better position to report on our activities during the past year and to more clearly define the work we have programed for fiscal year 1967.

You will recall that the Assistant Secretary for Water and Power Development, Mr. Kenneth Holum, accompanied me to the hearings before this committee last year, and reported to you of President Johnson's directive for an "aggressive and imaginative program" for this Nation's desalting effort. Responding to the President's request, the Congress enacted Public Law 89–118 to expand, extend, and accelerate the saline water conversion program.

Since the 1965 amendment is very brief, I am including it as a part of this statement for the ready reference of the committee:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to expand, extend, and accelerate the saline water conversion program conducted by the Secretary of

the Interior, the Act of July 3, 1952 (66 Stat. 328), as amended (42 U.S.C. 1951 et seq.), is hereby further amended as follows:

"(1) In section 2(b) add the words ", module, component," after the word "laboratory".

"(2) In section 8 substitute "90,000,000, plus such additional sums as the Congress may hereafter authorize and appropriate but not to exceed $185,000,000," in lieu of "75,000,000 in all," and substitute "1972" for "1967"."

With those two brief, but meaningful amendments, the two affected sections of our authorization now read as follows:

"SEC. 2. In order to accomplish the purposes of this Act, the Secretary of the Interior shall—* * *

"(b) conduct engineering research and technical development work to determine, by laboratory, *module*, *component*, and pilot plant testing, the results of the research and studies aforesaid in order to develop processes and plant designs to the point where they can be demonstrated on a large and practical scale;".

"SEC. 8. There are authorized to be appropriated such sums, to remain available until expended, as may be necessary, but not more than [$75,000,000 in all,] $90,000,000, plus such additional sums as the Congress may hereafter authorize and appropriate but not to exceed $185,000,000 (a) to carry out the provisions of this Act during the fiscal years 1962 to [1967] 1972, inclusive; etc."

It is important to call to the committee's attention that the $185 million figure in the new legislation is only a guideline set forth by the Congress for planning purposes because the language of the law specifically states "plus such additional sums as the Congress may hereafter authorize and appropriate". This means, that beginning in fiscal year 1968 we will have to return to the Congress each year for an authorization and an appropriation. With the unappropriated balance of the 1961 authorization of $75 million and the additional $15 million authorized by the 1965 amendment, we have available for fiscal year 1967 a total authorization of $35 million.

The measure of the extent of the President's interest in the desalting program is manifest in his remarks when he approved this legislation on August 11, 1965. On that occasion he said, in part:

"I believe now what I believed in 1957 about space. That the greatest mistake the political system of a nation can make is to underestimate the pace of this century's advance of human knowledge and changing capabilities. We need the research, the study, the experimentation this bill provides—but we need to do more than spend all our time learning. The time has come to set our sights, pick our targets—and act."

We have planned our program to meet the President's mandate. We have set our sights, we have picked our targets, and today we are here to request the funds that will enable us to translate planning into action and programing into hardware. For the short-range program, areas of desalting technology have been selected which we believe offer a definite promise of producing fresh water at an economically feasible cost within the next few years. This is not an easy or simple task, for it involves a study and evaluation of hundreds of ideas and proposals, selecting those of scientific and economic merit and rejecting those of lesser promise. Extensive appraisals of various processes have been conducted in order to reduce to a minimum the investment of appropriated funds and expedite the development of practical processes.

As we pursue this objective, it is important that we maintain a balanced program. We intend to support fundamental research studies that will provide information and data which we believe will form the basis for new and improved desalting processes in the 1970's. In the past we have relied heavily on unsolicited research and development proposals as the foundation of our program. This approach has enabled us to obtain and study a variety of proposals which embraced many scientific disciplines. With the fund of information we now have available, we will depend less and less on unsolicited proposals. From this point forward, we will solicit specific proposals through which we will gain data to resolve identifiable problems. In other words, we will now use a rifle to hit our targets instead of a shotgun.

We also will maintain a balance in the engineering development of large and small plant technology and between processes for desalting sea water, brackish waters, or other mineralized or chemically charged waters. Our objective is to accelerate improvement of the technology of water desalting processes so that within the next decade the high-quality water produced by these processes can be a significant alternative that should—and must—be considered in meeting muni-

cipal and industrial requirements. Desalted water will not prove to be feasible in all cases, but certainly its potential should be evaluated in large or small plants, at seashore or inland locations. It is also clear that presently available waste treatment methods cannot economically contend with some of the dissolved solids, petrochemicals, insecticides, and other contaminants that are fouling our traditional sources of supply. It is also important to note, for example, that the salinity of waste water following a single human use is increased as much as 300 parts per million. Other domestic and industrial uses add even greater amounts of salt to rapidly increase salinity levels. Since even tertiary waste treatment methods currently in use do not remove these dissolved solids, desalting processes are certain to find wider application than once was anticipated.

To meet these specific needs, we must continue an aggressive program to reduce the cost of desalting in small plants—those of 10 million gallons per day or less—and at the same time we must push ahead with engineering development programs related to multimillion-gallons-per-day plants. As we advance sea water conversion technology, so also must we continue the development of processes for desalting inland brackish waters. Some of the experimental work we conduct may have application to all phases of the program, but programs for large plants, small plants, sea water plants, and brackish water plants require separate development routes.

Specific actions underway or contemplated which will support our development schedule are as follows:

(1) Construct and operate a 1-million-gallon-per-day advanced technology plant to continue the development of the multistage-multieffect flash distillation process. Sealed construction bids for this plant will be received on March 31, 1966. The plant will be located on property made available to the Department of the Interior by the San Diego Gas & Electric Co. The plant will be constructed in cooperation with, and with the support of the California Department of Water Resources.

(2) An architect-engineer has been selected for the design of the San Diego Saline Water Test Facility, where we will construct and test modules and components which will provide operating characteristics and engineering data that must be developed to provide accurate data for the design and construction of multimillion-gallons-per-day desalting plants.

(3) Development of plans for starting construction, or for participation in the construction of a dual-purpose plant in the range of 50 million gallons per day or larger.

(4) Acceleration of the research effort to develop entirely new desalting techniques and to improve existing processes.

(5) To speed the development of the promising reverse osmosis process through the construction and operation of a 10,000- and a 50,000-gallon-per-day pilot plant, and accelerate the program of field testing this process on a variety of brackish waters.

(6) To continue the development of new processes through pilot plant operations and testing.

(7) Increased efforts to stimulate development by private industry of components and materials necessary for desalting plants, including such items as pumps, motors, deaerators, tubing, and materials of construction.

(8) Development of recommendations for prototype development when components or other elements have been sufficiently improved to warrant large-scale testing.

(9) A continuing examination of the provisions of the Saline Water Act as amended, to determine if further clarification or expansion of the authority of the Secretary of the Interior is required to construct and operate experimental facilities or to develop precise information on water economics. Also, to study the requirements and the feasibility of training water planners and water management experts by supporting programs whereby graduates with degrees in various related disciplines would undertake further studies in hydrology and other selected courses of study in order to enlarge their water supply concepts and ability.

(10) When appropriate, requests for specific congressional authority to provide assistance in the construction of prototype plants to test the economic and operational capabilities of developing processes through the purchase of technology to advance the effectiveness of desalting plants. This type of authority would be utilized to obviate the need of prototype plant construction funded totally by OSW.

(11) Continued participation in engineering and economic feasibility studies such as the studies jointly sponsored by the Atomic Energy Commission and the Office of Saline Water with (*a*) the Metropolitan Water District of Southern California and (*b*) the Government of Israel; the study sponsored by the U.S. Government, the Government of Mexico, and the International Atomic Energy Commission, and the contract study awarded to the State of Texas to evaluate the potential utilization of desalting technology to the future water supply of that State.

(12) Comprehensive studies of all phases of comparative water costs and needs, including an effort to develop information on the adverse economic effects resulting from the use of substandard water as well as data on the value of quality water.

(13) An architect-engineer has been selected for the design of the first test module to be located at the San Diego Saline Water Test Facility.

The Office of Saline Water has used and will continue to use the national laboratories and existing Government laboratories to the maximum extent possible for experimental studies and development work that best suits the capabilities of the particular facility. Through an agreement with the Atomic Energy Commission, the Oak Ridge National Laboratory is working on the development of a number of components for larger evaporator plants with particular emphasis on the development of economical heat transfer surfaces. Heat transfer surfaces in a distillation plant represent the largest single item of cost and it directly affects the performance of the plant. Other work performed for the Office of Saline Water by the ORNL include several investigations in depth to evaluate and develop information needed in the overall program in the areas of computer code, design of large plants, parametric studies and overall design of a plant to be built in the future which will incorporate many advanced features suitable for utilization in plants in the size range of 150–300 million gallons per day. We are currently negotiating an agreement through which ORNL will act as an extension of this Office to manage and coordinate a complete segment of the overall program as it relates to the development of the long-tube multiple-effect process.

We have utilized the facilities and laboratories of the Bureau of Reclamation for testing electrodialysis pilot plants and to develop data relative to the utilization of concrete for desalting plants. Studies have shown that significant savings can be made by the use of concrete in desalting structures, but when concrete is used in the severe environment found in evaporator plants, problems arise which require investigation to determine the permeability, changes of strength, and other characteristics of concrete. We are utilizing the experience of the Bureau of Reclamation in the design of large pumps. Since pumps will be one of the critical components of large desalting plants, we have asked the Bureau, in cooperation with industry, to develop designs, select materials, and determine costs of large pumping units suitable for use in large desalting plants. Reclamation has also assisted in economic studies.

We have made arrangements to obtain information and data from the plant we transferred to the Navy for their use at Guantanamo. The Navy is planning to better instrument the plant in order to obtain meaningful performance and cost data. We have offered the full support of our technical staff to assist the Navy in this effort and to provide assistance to improve product water treatment to better control corrosion in the distribution system.

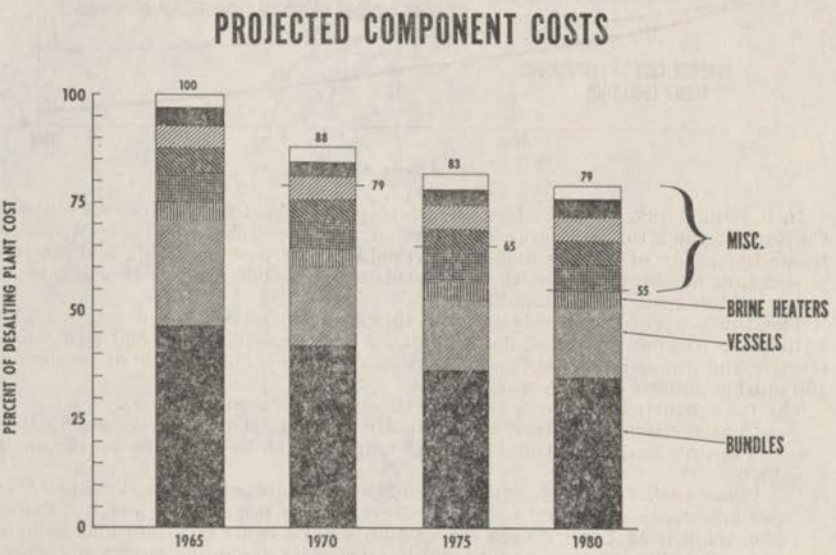
Other examples of our efforts to utilize to the fullest extent possible, the capabilities and the facilities of other Government bureaus and agencies include contracts or agreements with Pacific Northwest Laboratories in Hanford, Wash.; Bureau of Standards; and the Department of Agriculture. We are cooperating with the Corps of Engineers on the design of a desalting plant in conjunction with a barge- or ship-mounted nuclear reactor and with the Corps of Engineers on the design of portable reverse osmosis units for use in the rice paddies of Vietnam. We are also working with the Bureau of Mines and the Department of Health, Education, and Welfare to develop programs on the application of reverse osmosis to purify polluted river water and acid mine drainage. Prelimi-

nary tests have been conducted on the Potomac, the Hackensack River in New Jersey, and at an acid mine site near Kittanning, Pa.

We expect to continue to program work or to cooperate with other Government agencies in order to take full advantage of their experience and existing technology, to minimize costs, eliminate duplication of effort, and expedite results.

In the development of any desalting process, the cost and efficiency of components is as important as the process itself. Therefore, as a part of our engineering program, we must be constantly concerned with the operational characteristics of components. It is realistic to envision developments which will lower the cost of heat transfer surface by using tubes of higher performance. While preliminary studies indicate a reduction in heat transfer surface areas in the order of 40 percent, the unit cost of tubing conceivably may increase 25 percent due to the special manufacturing processes required. The resultant net reduction in the cost of tubes would then be 15 percent as shown on chart A, "Projected component costs." A similar reduction in brine heater cost can also be anticipated.

CHART A



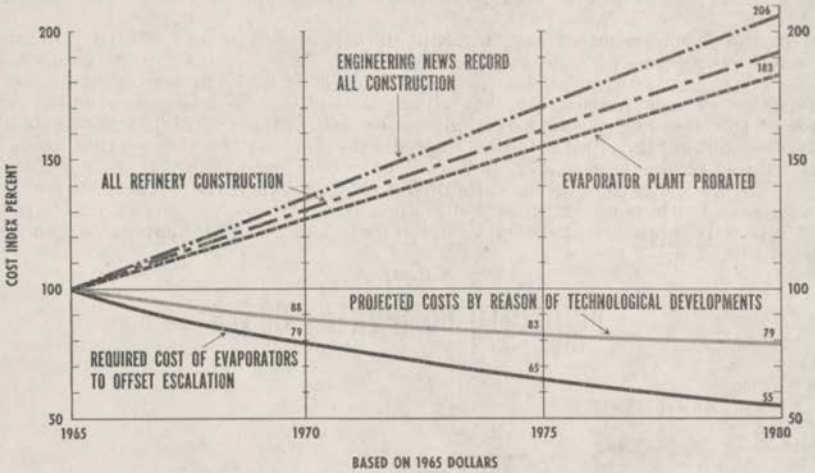
Improved flashing devices and less heat transfer surface will reduce evaporator vessel size. These developments, in conjunction with low-cost linings and the possibility of concrete vessels may reduce the cost of such equipment by approximately 35 percent.

The net effect of the reduction of cost through advanced technology of these three major evaporator components reduces the overall plant cost to 69 percent of present costs based on today's dollar.

Chart B, "Projected cost escalations" presents the effects of the decrease in costs through technological developments as they relate to the escalation of prices for the construction of the first plant of a particular size and type. The projections of escalation are based on the historical average of the past 15 years. This amounts to approximately 3 percent per year. It thus becomes evident that major advances in technology must be made simply to hold our own insofar as the future capital cost of a plant is concerned.

CHART B

PROJECTED COST ESCALATIONS



In a joint effort, sponsored by the Metropolitan Water District of Southern California, the Atomic Energy Commission and the Office of Saline Water, a feasibility study of a large nuclear-powered dual-purpose desalting and electric powerplant has been completed. We furnished this committee with a summary report of this project on January 21.

The dual-purpose plant considered in this study includes two nuclear reactors with three turbine generator units having a gross capacity of 1,800 megawatts electric and a multistage flash sea water distillation plant capable of producing 150 million gallons of fresh water daily.

The four principal conclusions of the dual-purpose plant study are:

Construction of a large power desalting plant is technically practicable. The proposed plant could be constructed and be in operation by the early 1970's.

Water costs from such a plant would be 21.6 cents per thousand gallons ($70 per acre-foot) and could be delivered to MWD's Robert B. Diemer distribution point near Yerba Linda for an additional 5 cents per thousand gallons.

A $30 million savings in site and facility costs, including power and water transmission costs, can be realized if the plant is constructed on a 43-acre manmade island 3,500 feet offshore from Orange County rather than on available on-shore sites.

The desalting cost breakthrough estimated by this study is not based on any hoped-for new technology, but rather, it represents hardheaded engineering utilization of available technology scaled up in size and optimized for power and water production.

The proposed project is now being evaluated by the board of directors of the MWD. Should they decide to proceed with the construction of the plant, the Office of Saline Water would anticipate participation through the purchase of technology, since the construction and operation of such a plant by the MWD would obviate the requirement for this Office to proceed with a large multistage flash distillation prototype plant. Our investment would be toward capital costs and the first 3 years of operation, which we believe to be a reasonable period of time to obtain technical data.

There are some who suggest that the construction of a plant of this size be delayed to await the development of improved processes. The question then becomes: How much further can we expect to lower this cost? A dramatic reduction is not reasonable to assume. As mentioned earlier, we expect to lower desalting costs through improved performance of components and cheaper materials of construction, but we face a severe challenge from creeping inflation. For example, based on past economic trends, if the construction of a

large plant is delayed for only 5 years, desalting processes will have to be 15 to 20 percent more efficient than those available today in order to produce water at costs that can be attained today.

While we intend to work diligently to lower future desalting costs, our primary emphasis will be placed on present circumstances; to select the best technology available and demonstrate it in a plant of sufficient size to gain public acceptance and establish the validity of plant economics in a mature and positive manner.

When we examine the cost of water under the conditions stated by the MWD study, and compare these costs with the price of water available from alternate sources, I think it is clear to all that desalted water is now in the economic ball park, that it is now available as an economically feasible incremental source of supply to augment—or perhaps to improve—our present sources.

As increased use depletes our natural water resources, and as the cost of developing and delivering these supplies continues to rise, desalting will become more and more important because of economics, availability, and quality.

The entire program of the Office of Saline Water is governed by just two words—low cost. The application of these two words is twofold: (1) to develop and prove out desalting technology at the lowest possible cost, and (2) to economically produce fresh water from saline sources. We can describe for you, item by item, the studies and projects we propose to undertake to develop and test new or improved methods and equipment, but to discuss the economics of water is far more difficult.

Water economics is not a science, but rather a variety of pricing practices that makes it virtually impossible to determine the true cost of water. Section 2(e) of the Anderson-Aspinall act of 1961 (Public Law 87-295), provides the following authorization:

"SEC. 2. In order to accomplish the purposes of this Act, the Secretary of the Interior shall—

> "(e) undertake economic studies and surveys to determine present and prospective costs of producing water for beneficial consumptive purposes in various parts of the United States by the leading saline water processes as compared with other standard methods."

We have a number of economic activities underway including the feasibility studies of plants for southern California, Israel, and Mexico; a contract with the State of Texas to study the potential application of desalting processes to the future water supply of Texas, and water economic studies by Black & Veatch. Studies to date are not conclusive or complete. While we believe we have had some success in determining saline water conversion costs, comparisons with other standard methods are difficult. If we are to compare economics, and we believe economic comparisons are essential, then better costing must be developed so that such comparisons can be made on a common and realistic basis.

Before I describe the budget estimate for 1967, I should like to discuss one additional point. The question is often raised: What are the respective roles of government and of private industry in the development of low-cost desalting processes? Since the Office of Saline Water is working cooperatively with industry in the development of processes and plant engineering, it is necessary to know at what point the Government should begin to phase out its activities and gradually turn them over to industry to pursue and refine.

Basic research is an important aspect of our program and one that will continue to be performed primarily by Government because it requires considerable investment without the guarantee of a commercial product. It is necessary that this basic work be consistently maintained at a reasonable level of effort if we are to develop the fundamental technology for processes of the future. As processes emerge from the laboratory and move through the pilot plant phase of development to utilization in a first generation plant, industry should be ready to take an increasingly active part in the continued development of the process. Succeeding generations of plants based on proven technology should not be the Government's responsibility unless they serve to advance the state of the art and substantially lower the cost of product water. The Office of Saline Water is not interested in constructing additional plants which utilize proven processes to reduce the cost of the product water by a few cents per thousand gallons. This is a role that industry can best perform. We will only build plants to prove out new technology and make this information and data available

in the marketplace. It will be industry's responsibility to apply this technology to the market.

Industry must undertake development programs to improve deaerators, heat exchangers, valves, pumps, etc., and develop applications of new metals and other materials of construction. There is much industrial effort still needed to reduce capital investment through better and cheaper fabrication methods, the cost of tubing and the need for cheaper and better tubing. I am confident that we can expect growing participation by industry in the development of this new technology. On our part, we will make every attempt to make research easier for industry and try to eliminate some of the guesswork, but the final fruition of this program—the construction of commercial plants around the world—will be performed by industry.

To carry out the activities we have programed for fiscal year 1967, our budget estimate is $30,946,000, an increase of $7,795,000 over the amount appropriated for 1966. It consists of $28,595,000 for research and development and $2,351,000 for operation and maintenance costs of demonstration plants. The increase for research and development is $8,595,000.

The $2,351,000 estimate for demonstration plants is a decrease of $134,000 for operation and maintenance and $666,000 for construction or a total of $800,000.

We should like to point out to the committee that the increase of $8,595,000 for our research and development program is a gross figure that does not accurately reflect our programed activities for fiscal year 1967. A careful analysis of the figures which follow will reveal that we are increasing our general level of effort by only $1.5 million. The balance of the increase is for the procurement of hardware. A major share of the hardware procurement will be for the distillation module at the San Diego Test Station.

To meet our responsibility to the President, the Congress, and in turn to the taxpayer, we believe it would be unwise for the Office of Saline Water, or anyone else, to proceed with plans for large plant construction until additional usable data has been refined to a point from which we can move forward with the assurance that future desalting plants will represent the most advanced extension of the art within the bounds of sound engineering extrapolation. If we are to provide this type of information, we are faced with the requirement of constructing larger sized experimental equipment. As a specific example, for the completion of the construction of the distillation module at the San Diego Test Station, we are requesting $5.2 million, which will provide us with the necessary hardware to develop essential technological data.

The major expenditures planned for fiscal year 1967 are as follows:

Engineering and development, $19,820,000

Engineering and Development is divided into five divisions: the Distillation Division for which we are requesting $10,760,000; the Membrane Division, $3,900,000; the Special Projects Division, $3,200,000; Engineering Analysis Staff, $350,000; and the Engineering Services Staff, $1,610,000. It is in Engineering and Development that we will invest the major share of the funds we have requested for fiscal year 1967, for it is the responsibility of Engineering and Development to construct and operate the experimental hardware through which we will obtain the engineering technology to advance existing processes.

Before we discuss the detailed breakdown of the use of these funds, for the information of the committee I should like to offer the following equipment definitions:

Module.—We consider a module to be a section of a prototype plant which simulates the operation of a complete plant and confirms essential design features. Construction and modification costs will be far less than for a complete plant. A module is only a step in the development of new technology which will not serve as a practical water source for a community, it is an engineering research tool that would be built as an OSW facility.

Prototype plant.—A plant which provides verification of the design and economics for a full-scale production plant. The plant may be of less than full-scale size and hardware modifications may be necessary to obtain optimum performance. Following the initial experimental period of operation, the plant may achieve operating levels which will meet commercial standards of reliability (a plant loading factor of 70 to 75 percent), and may, therefore, serve as a water supply source for a community. That portion of the cost associated with the development of new technology may be borne by OSW through an investment in the construction and also possibly to the first 3 years of operation, provided that

this investment not exceed 50 percent of the annual costs less interest charges on the owner's investment. The title to the plant would remain with the sponsor.

Test bed.—A plant, generally of intermediate size, used for experimental purposes. It would be so designed as to facilitate the introduction of experimental hardware and equipment into the process operation for performance testing. Such plants would be built by OSW.

Distillation division ($10,760,000)

The efforts of the Distillation Division will be concentrated on the following major projects:

1. The construction and testing of a large multistage flash module. Design and start construction of a vertical tube distillation module.
2. Development of components suitable for large and intermediate size prototype plants.
3. Testing, evaluation, and dissemination of data derived from the new 1.2 million gallons per day multistage multieffect flash distallation plant which is expected to be placed in operation in the spring of 1967. Bids for the construction of this plant will be received on March 31, 1966.
4. Construction, operation, and tests of several experimental pilot plants.
5. A stepped-up program leading to the design and construction of prototype plants in the size range of 5 to 15 million gallons per day. Studies of advanced type distillation plants which are expected to provide substantial decreases in water costs by the years 1975–80 through advanced heat transfer, design, and component development.

Membrane division, $3,900,000

While the funds requested for the Membrane Division are considerably less than for the Distillation Division, nonetheless, we have programed some very important and promising work for membrane processes development in fiscal year 1967. Funds for the membrane program are allocated to reverse osmosis, electrodialysis, and research and development common to all membrane processes. Major emphasis in the membrane program will be placed on an accelerated effort to continue the development of the reverse osmosis process. Contracts for a 10,000- and a 50,000-gallon-per-day reverse osmosis pilot plant will be awarded in fiscal year 1966. Operation of these units in fiscal year 1967 will be a vital part of the program. Additional reverse osmosis activities include a larger prototype or test bed plant, new work in membrane development, new cost and design analysis, and a more detailed investigation of the effects of feed water quality not previously explored.

Special projects division, $3,200,000

During fiscal year 1966, construction of three new crystallization pilot plants was completed. During the remainder of fiscal year 1966, these plants will be operated in addition to those plants already in operation. During fiscal year 1967, operation of these plants, and another to be built for brackish waters, will continue. Additionally, funds will be needed for improving the performance of component parts and for developing engineering designs of larger crystallization plants from the pilot plant design and performance data, for the development of promising new processes, methods to dispose of brine effluent, and application of saline water conversion methods to pollution problems.

Engineering analysis, $350,000

While this is a relatively small effort, Engineering Analysis correlates data and makes it available in a useable form for all divisions of the Office. Work programed for fiscal year 1967 includes continuation of the effort for the Technical Data Book; engineering data acquisition, storage and retrieval; process analysis of OSW's engineering effort; engineering costs studies; and studies to determine and define component performance.

Engineering services, $1,610,000

Engineering services has been assigned two broad responsibilities: (1) the construction and operation of test facilities where small pilot plants and other test programs can be conducted, and (2) the operation and maintenance of the demonstration plants at Freeport, Tex.; Roswell, N. Mex.; and Webster, S. Dak. (Appropriations for the operation of demonstration plants is a separate budget item.) In fiscal year 1967, funds will be utilized for the operation of the research and development test station at Wrightsville Beach, N.C.; the San Diego

saline water test facility in California; and for the construction, operation, and maintenance of a brackish water test facility.

Research, $6,635,000

The long-range program of the Office of Saline Water is centered in the Division of Research. Our research effort is devoted to developing an understanding of the fundamental mechanisms by which heat, water molecules, and ions are transported to and across boundaries so that these basic steps can be made fast and efficient. The research program will insure the successful exploitation of the currently most developed technology and the vigorous and imaginative pursuit of other alternatives which may well prove to be superior in the long run. The information gained from these fundamental studies will be utilized as quickly as it becomes available, but unless there is a remarkable breakthrough, which we do not foresee, most of these studies will have little impact on desalting technology until 1975 or beyond. It is a long and arduous trail from the glassware of the laboratory to the hardware of a commercial plant.

Fundamental studies of all relevant areas of science and engineering including investigations involving byproducts will continue to be emphasized. Basic research studies are conducted in four broad categories: (1) properties of water; (2) separation processes; (3) interactions at boundaries of water systems; and (4) properties of brackish waters, salts, brines, and byproducts.

Administration and coordination, $1,540,000

The budget estimate of $1,540,000 for administration and coordination is an increase of $413,000 over the amount available for 1966. In view of the sizable expansion of the program to carry out the wishes of the President and the directive of the Congress as provided by Public Law 89-118, we think the committee will agree that this is a modest increase to provide for the necessary planning, supervision, and administration of research and development contract funds.

To effectively administer the program, it is necessary to have a staff of well-qualified scientists and engineers who are able to stimulate interest in the program, evaluate research and development proposals, assist in the planning and procedures of the research and development projects, negotiate the technical portions of the contracts and administer and supervise the technical performance of contractors to manage and insure prudent expenditure of funds in fulfilling the objectives of the saline water conversion program.

Included within the technical staff of the Office is a program analysis staff. This unit consists of professional personnel experienced in a variety of special fields involved in the activities of the Office, including competence in the field of water resource program development and coordination. This staff provides the means of insuring continuous review of program components requiring particular attention, such as maintaining liaison and working jointly on technical matters with both departmental and other U.S. Government and foreign agencies having saline water conversion interests. It also provides a means of maintaining a balance of effort and coordination of programs for short-, intermediate-, and long-range objectives.

In addition, the scientific and engineering activities must be supported by capable financial, legal, and administrative staffs to insure that sound business management principles are applied. The administrative staffs must be strengthened to handle the additional work generated by the increased program.

Demonstration plant program, $2,351,000

The Freeport, Tex., plant continues to operate successfully within the objectives set forth for the facility. Modifications planned for this operation will enable us to test and evaluate new flow patterns, improved technology and equipment, and recent operating innovation.

We will continue to operate the distillation plant at Roswell, N. Mex., to resolve process and maintenance problems. New techniques for the pretreatment of the feed water to avoid scale formation on the heat transfer surfaces of the evaporators will be tested.

The 250,000 gallons per day electrodialysis plant at Webster, S. Dak., continues to operate with a high degree of reliability with better than 90 percent on-stream time. Continued tests of a new membrane show that the original equipment has been improved and perfected. New operating methods are being studied to further improve plant performance.

We welcome any questions members of the committee may have concerning any aspect of the saline water conversion program. On behalf of the entire

staff of the Office of Saline Water, I would like to take this opportunity to thank the members of this committee for the interest and support they have always provided this program.

$200 Million Program Authorization Requested

Senator Bible. Why don't you highlight the main points and lay the emphasis on your monetary needs for this year; this is quite an increase.

Mr. DiLuzio. I would like to preface my testimony by reminding the committee that we last year requested a 5-year program and a $200 million authorization, which we did not get. The Congress added $15 million to the 1961 authorization, which gave us $35 million for fiscal year 1967.

$185 Million Additional Program Authorized

We were authorized by the House and Senate to plan against a $185 million program. In this program we have a 30-month planning period. We cannot plan on a yearly basis.

We received authority to plan a $200 million 5-year program. The program is related to many kinds of plants, processes, and plant sizes.

Senator Bible. How do you get $200 million when the program says $185 million?

Mr. DiLuzio. That is $200 million less the funds added to the previous authorization and made available for fiscal year 1967. The $15 million added to the unappropriated balance of $20 million remaining under the previous authorization provides a total authorization of $35 million for fiscal year 1967. We were planning against a 1971 operating date for an extremely large plant; the MWD plant which Secretary Holum referred to in his remarks.

Program Activities

All our technology in the plant sizes is in an evolutionary process going from the Point Loma plant, which was transferred to Guantanamo, to Point Loma II. The plant we are soon going to build will be less than half the physical size of the old plant, but will produce more water.

New Plant at San Diego

The new plant will produce 1.2 million gallons of water per day. It will be a much more efficient plant.

The next step is the construction of a 17-million-gallon module which we want to test on the west coast site. That is the final step, before going to full-scale, large-plant construction.

Definition of "Module"

Senator Bible. Define the term "module."

Mr. DiLuzio. A module is a section or a slice of a full-scale plant but it does not have all the equipment for full-scale operation. We have a hydraulic system with enough evaporators to test the engineering designs and the process itself. It is a sort of a "test bed" that gives us the last bit of information we need before designing and guaranteeing the operation of the 150-million-gallon plant. It is the last step in the development before building the large plant.

FIVE DEMONSTRATION PLANTS BUILT

Senator BIBLE. How many plants do you have in the United States? As I recall, one was for the Atlantic, one for the Pacific, and one on the gulf.

Mr. DILUZIO. There were five. As you mentioned, Point Loma I was a million-gallon-per-day plant. The Freeport plant is a different type, also a million gallons per day. The one at Wrightsville Beach, N.C., on the east coast is a freezing process with a capacity of 250,000 gallons per day. The one in Webster, S. Dak., is a 250,000-gallon-per-day electrodialysis plant, which is performing quite well. Economically it is not as good as we would like.

Senator BIBLE. Each of these plants is in operation?

Mr. DILUZIO. The Point Loma plant is now at Guantanamo. Wrightsville Beach is not operating. It has been set aside until we work out some process problems through the operation of a small pilot plant. The one on the gulf coast has been operating all the time, and so is the one in Roswell, N. Mex. We had one disappear from the scene and one on standby. The other three are operating.

COST OF PRODUCING WATER AT DEMONSTRATION PLANTS

Senator BIBLE. At what figure are you producing water in these various plants?

Mr. DILUZIO. The cost at the Point Loma plant, which went to Guantanamo, was slightly over a dollar per 1,000 gallons. The last cost at Freeport is $1.25 per 1,000 gallons, or slightly higher.

The Webster plant in South Dakota is a high-cost plant for electrodialysis because it has difficult water to handle.

I can submit a record showing the cost and expense.

Senator BIBLE. It would be helpful.

Mr. DILUZIO. Yes, sir. We will furnish it for the record.

(The information follows:)

Webster, S. Dak. 250,000-gallon-per-day demonstration plant is currently operating at an approximate cost of $1.30 per 1,000 gallons of water.

WRIGHTSVILLE BEACH, N.C. PLANT

Senator BIBLE. How about the North Carolina plant, that is the newest of the five plants?

Mr. DILUZIO. It is a secondary freezing plant with which we have had trouble. We placed the large plant on standby and we are now operating a small pilot plant at the same site, to test some ideas to see what we should do to make the large plant operate. It is intact but we are not operating it.

RESEARCH IN MOST ECONOMICAL METHODS OF DESALTING

Senator BIBLE. Has the Office of Saline Water gone far enough ahead in this research to tell which method is most economical?

Mr. DILUZIO. We have come quite a way down that road, but we have not found the end yet. The economics of a process can vary widely depending on the size of the plant, the cost of energy and the type of water we are dealing with. Sea water changes and brackishness in land water changes. We can place two different processes on the same water, and we would get two different economics.

We are not yet at the stage where we know which process can handle water better than others. We are trying to determine which processes can best handle which kind of water, we can either pretreat the water, or neutralize it, so that the equipment put on the stream can cope with changing situations. We are trying to pretreat this water, or to standardize it, before using it in a plant.

SELECTION OF BEST WATER PROCESS

In any plant, we will have to use a process responsive to the special types of water. This is a difficult task. Plants have to deal with various kinds of water, with different kinds of solids in the water.

We do know that between the two processes of electrodialysis and freezing, electrodialysis is better on mildly saline water. Once the saline content of the water is above a certain point, the economics of the two processes starts crossing over and tends to favor freezing. So we have an evaluation job in the overlaps, on certain kinds of water, and we are beginning to identify certain characteristics of water that can be handled better by specific processes. We don't develop five ways to desalt seawater and get water at 40 cents or 20 cents a thousand gallons.

CONVERSION OF BRACKISH AND SEAWATER COMPARED

Senator BIBLE. In general, is it better to produce potable water out of brackish water than sea water?

Mr. DILUZIO. Generally, yes, but we run into brackish water that is very complex. It can drive a plant crazy because of its chemical constituents.

BECHTEL CORP. PROPOSAL FOR DESALTING

Senator BIBLE. Is it the Bechtel Corp. study that says you can produce 150 million gallons a day with nuclear power at 22 cents per thousand gallons?

Mr. DILUZIO. Yes, sir.

Senator BIBLE. If that assumption is correct and you have the same size plant for brackish water, could you give any indication of producing potable water from that brackish water?

Mr. DILUZIO. If we had 35,000 parts per million water compared to 2,000 or 3,000 parts per million, I doubt if this process would produce fresh water at the same costs for both conditions. A distillation process takes water out of the brine. We would probably go for an approach to take salt out of the water, not water out of the brine. In many cases we would have to take a process related to the salinity of the kind of water we are dealing with and we wouldn't use the same type of process on the two waters.

In most inland instances, we do not see the need to build a 150-million-gallon plant. We are thinking of 5 and 10 million gallons per day. We would find a problem there to locate demand for water equal to the size of the Metropolitan Water District plant. The efficiency in cost of the California plant is due to the size. The reactors produce the water cheaper and cheaper as the size goes up.

DESALTING WITH NUCLEAR ENERGY

We may find we cannot economically provide water from nuclear energy, because the size of the water plant required is not large enough and we would go to fossil fuel.

Senator BIBLE. If that is true, you are certainly expert. Can you prepare specifications for a small plant with the cost per thousand gallons of water less than 22 cents a thousand gallons?

Mr. DILUZIO. It would go up for smaller plants with the present state of the art.

METROPOLITAN WATER DISTRICT PLANT

Senator BIBLE. If you have a 150-million-gallon-per-day plant that meets the specifications indicated in the Bechtel study at 22 cents per thousand gallons, can you get to a comparable figure insofar as brackish water is concerned?

COLLOQUY ON INLAND VERSUS COASTAL DESALTING PLANTS

Mr. DILUZIO. Not very easily because in my opinion you could not take advantage of the scale up on brackish waters as you could on sea waters.

Senator BIBLE. Put the other way, the larger the plant the lower the cost?

Mr. DILUZIO. Yes, sir.

Senator BIBLE. You won't have areas inland that will take a plant that large?

Mr. DILUZIO. There is a very serious doubt that there would be an inland requirement for plants of that size. If we had a place that we could build a 150-million-gallons-per-day plant, and provide nuclear power, I would say the cost would be the same. But the point is you wouldn't be able to build that size plant inland.

PROGRAM GEARED TO PLANTS BY 1971

Our program is geared to having one extremely large plant in 1971. At the same time, we are hoping to have a process developed for brackish water. The large plant program has caught the eye of the public; that program receives all the attention. But our program development in the area of brackish water is being worked on and is just as important. Unfortunately, the people's imagination is caught by the large plant and everyone is talking about that.

Senator BIBLE. I suppose the large plant catches the imagination because the price tag is more attractive.

Mr. DILUZIO. Yes, and we have a time trying to say why we can't produce water inland for 22 cents. The only reason is that we can't scale it up to get the low cost from nuclear reactors.

ECONOMICS OF WATER

Our big plant program is geared to meet this target date. In addition, before turning to the actual budget figures, we have another problem. It is the economics of water. One of the things we have to do in our program is compare the cost of the desalted water to water from

other sources. There are several alternative sources, and, if one wants to make the best selection to provide water as cheap as possible, we must look at all the water resources.

We have to look at the water resources which come from great distances and also water reclamation, sewage water, and water used for other purposes. When we start looking at all these factors, we find the economic figures are not very firm. The figures are not as readily available as we would hope, so we are having problems with the consideration of treating water versus desalting of water. We are working hard with the Corps of Engineers and others to take a look at these economics.

San Diego II Plant

The activities we are now going through includes our plans to build San Diego II. We expect to open bids on March 31.

Cost of San Diego II plant

Senator Bible. What is the cost of that plant?

Mr. DiLuzio. The estimate is $2.15 million to build the plant. We have also selected an architect-engineer to develop the test site on the west coast. San Diego II will be located there. We are working to develop the various kinds of equipment and components to go with large plants. We are working very hard to get industry prepared to bid on the large plant installation.

Industrial participation

One thing we could be embarrassed by, is to forget that it is industry who has to build these facilities. They have to look at the program and start working internally to produce the equipment requirements. For example the 150-million-gallon plant needs 50 million feet of copper tubing. The methods used now to extrude this amount of tubing are not the best, so we want new manufacturing techniques because we think this is one area where the cost can be reduced.

Explanation of Reverse Osmosis Process

We are working very fast on reverse osmosis. This is an interesting and promising process. In this process the saline water is behind a special membrane. By applying pressure on the salt side, we force water to migrate through the membrane which will not allow the passage of salt. Water does not have to go from a liquid to a solid, or to gas. It stays in a liquid state and all we need to operate the process is pressure. We think this is an attractive process, one of the most attractive. We are going to buy two small plants, a 50,000- and a 10,000-gallon-per-day unit to run all sorts of tests on estuary waters. We have tested it on acid mine water and it did a good job.

We tried this process on the Potomac and found that it even separated bacteria from the water. We are a long way from having an operational plant which we think we can guarantee either the process or the economics but we are away down the road on the technology.

This year and next year you will see a great effort in reverse osmosis. We are confident it will do something worthwhile.

LEGISLATIVE REQUIREMENTS

We are studing our authorizing legislation to see what we might need in the way of additional authority, particularly for the construction of certain types of prototypes and certain types of test beds, because we may want to test some of the ideas in hardware and with the Demonstration Act expiring we have no way to test this hardware except in small experimental pilot plants. Some processes cannot be tested adequately at the pilot plant level; they must be tested in larger plants. We are looking at how we would do this, whether in our own plants of larger size or to participate with someone needing water. We are not prepared to talk in detail as to how we think this should develop but we are considering it.

SALINE WATER DEMONSTRATION PLANT AUTHORITY

Senator BIBLE. Would you care to enlarge for the record on your statement that the Demonstration Act is expiring? What does that mean? Is that the one that authorized the five plants?

Mr. DILUZIO. Yes; we have now built the maximum under the law. We can operate these plants for 6 more years, but we have no authority to build additional plants. We must have some kind of bill to build plants beyond the pilot plant stage. It may be possible to use the facilities at some city where they need to buy a plant. Thus, rather than build our own 150-million-gallon plant to test the economies of the process, we have offered to buy data from MWD through a contribution to the construction of the plant and the first few years of operation. This may be the cheapest and most practical way.

STATUS OF PROPOSAL TO REVISE SALINE WATER ACT

Senator BIBLE. What is the status of your proposal to revise or amend the Saline Water Act? Has that cleared your office? Is that before the Congress?

Mr. DILUZIO. No; it is under discussion now, but we don't know what form it will take.

Mr. HOLUM. President Johnson, last October, made it clear he expected to renew legislation in this field and send it to the Congress. It has not been put before the Congress yet.

Senator BIBLE. This is Interior Committee legislation?

Mr. HOLUM. Yes.

U.S. AND FOREIGN FEASIBILITY STUDIES

Mr. DILUZIO. Another thing I think is going to grow is participation with other foreign countries, States in this country, and even cities, for water studies and consulting to solve some of the problems. It takes time but we are learning a lot looking at the problems in various kinds of environments. This includes both domestic and foreign environments. We are taking the position we don't want to consider desalting programs without looking at existing service. Only when other things have been excluded because of economics, do we really talk of desalting plants. We don't want to promote a desalting plant over other ways of providing water. We think desalting plants

are feasible but the worst thing we could do is to build a plant where there are other ways of economically solving the water problem. This would be unwise.

We start off with a reasonable feasibility study, and when we do this, it means we must consider other water resources through geological surveys, and ground water surveys. It provides a multiple approach such as is currently going on with the Mexican study. We must determine the water supply availability and study water requirements in connection with time to see if they match. If they do not match, we look for means of supplying incremental water. Finally, we start talking of size of plant, process to be used, and everything that goes with it.

We don't start off saying you need a desalting plant, without looking at all the requirements and all the possibilities. We think that is the proper approach.

Design of 17-Million-Gallon-Per-Day Module

We have picked an architect to design a 17-million-gallon-per-day module. We hope to have it in operation in time to provide engineering data for the MWD plant. If we can do this we will eliminate most of the risk in building the 150-million-gallon plant.

Use of expertise of other organizations

To the extent possible, we use existing laboratories. At present we are using the Oak Ridge National Laboratory, Hanford, and the Bureau of Standards. Wherever they have expertise, we use it without having to duplicate the effort somewhere else.

We try not to take away from private industry the means of learning what this program is all about on the same time curve as we develop the data. What desalting is all about is something private industry also needs to know. We cannot take it from private plants, and put it in Government hands, because Government will not build these plants. We are very careful to keep private industry informed of all the things they will have to know to build plants at a reasonable price. We want to be sure they learn as rapidly as we do. We want to be sure they learn the means of developing good plants.

San Diego II Plant Construction

Senator Bible. By developing a program such as you are expounding now, do you enter into a cooperative agreement to replace the Point Loma plant, the one you testified would cost $2.2 million?

Mr. DiLuzio. That is completely ours, because it has some very far reaching design characteristics of a research plant. I don't think we will ever consider it as a water plant. We have a customer for the water it produces, the California Department of Water Resources. They will dispose of the water, but it is primarily designed as a data-producing plant.

Senator Bible. This is 100 percent U.S. financed and will cost approximately $2.2 million?

Mr. DiLuzio. Yes.

Senator BIBLE. This is to replace the plant that went to Guantánamo?

Mr. DILUZIO. Yes.

COST OF TEST PLANT MODULE

Senator BIBLE. In addition, you say you will have a module that you will use as the test plant leading to the larger 150-million-gallon-per-day plant?

Mr. DILUZIO. Yes, sir. It will only cost what we think the technology is worth to us, and we have participated in this only to the extent of the data which we get back from the plant will be useful. The total figure is in the vicinity of $50 million. Our share of the cost of the evaporators is in the neighborhood of $37 million.

Senator BIBLE. My question was the cost of the module.

Mr. DILUZIO. $7½ million.

Senator BIBLE. And that is 100 percent Federal?

Mr. DILUZIO. Yes.

MWD DESALTING PLANT

Senator BIBLE. What is the State of California building?

Mr. DILUZIO. That is the 150-million-gallon plant.

Senator BIBLE. That is the larger plant?

Mr. DILUZIO. Yes, if the plant is built it will utilize two reactors. Private utilities will pay for the powerplant, and the MWD the 150-million-gallon-per-day desalting plant. It will be on an artificial island near Sunset Beach, which is the best location. We would share in the cost of construction of the desalting plant through the purchase of technology.

SAN DIEGO II DESALTING PLANT

Senator BIBLE. Let's back up. You are going to California, which seems to be the center of your activity at the present time. You will spend $2.2 million or $2.5 million and replace the Point Loma plant?

Mr. DILUZIO. Yes.

Senator BIBLE. And build a pilot plant for the larger plant. That will cost $7.5 million?

Mr. DILUZIO. Yes, sir.

Senator BIBLE. And that is 100 percent Federal funds?

Mr. DILUZIO. Yes, sir.

Senator BIBLE. It will be built where?

Mr. DILUZIO. At the San Diego test site.

Senator BIBLE. At Point Loma?

Mr. DILUZIO. No; it is near the old Point Loma plant site, in the San Diego area on property made available by the San Diego Gas & Electric Co., at Chula Vista.

AGREEMENT WITH MWD AND COST OF MWD PLANT

Senator BIBLE. If that goes, what is the next step, you enter the agreement with the MWD?

Mr. DILUZIO. That's right.

Senator BIBLE. The MWD project is estimated to cost how much?

Mr. DILUZIO. Their share is $144 million.

Senator BIBLE. That is for the MWD?

U.S. SHARE OF COST OF MWD PLANT

Mr. DiLuzio. The evaporator plant itself is approximately $100 million, and of the $100 million which they spend for the hardware, we estimate our investment in the evaporators at about $37 million. This was arrived at when it was decided we would not have to build a plant if we could cooperate with MWD. We will pay $37 million for what would otherwise cost us $75 or $78 million if we built our own plant and supply the heat source to operate it.

Senator Bible. The total Federal funds in the 150-million-gallon plant is in the neighborhood of $37 million?

Mr. DiLuzio. The total participation includes other elements. OSW's share is $37 million for the evaporators plus a share of 3 to 5 years' operating costs.

Senator Bible. Let's take the second item.

Mr. DiLuzio. Hardware, $37 million.

Senator Bible. And O. & M.?

Mr. DiLuzio. That is for 5 years.

Senator Bible. That is 50 percent?

Mr. DiLuzio. Fifty percent of O. & M., less depreciation on the plant.

Senator Bible. Roughly, what is that?

Mr. DiLuzio. Something on the order of $2 million a year.

OTHER FEDERAL COSTS IN MWD PLANT

Senator Bible. What other additional costs do you have in there?

Mr. DiLuzio. We have $3.5 million for the interface between the evaporators and reactors. It will cost something like $30 million, and we felt this would require much instrumentation to balance the two systems we are interested in. We feel it is worth $3.5 million to participate, a total of $37 million, $3½ million, and $2 million per year for operation.

Senator Bible. $45 million?

Mr. DiLuzio. Yes, sir.

Senator Bible. You are talking about a $50 million package?

AEC COSTS IN MWD PLANT

Mr. DiLuzio. Yes. Without the AEC which, of course, is participating in the interface.

Senator Bible. How far along are discussions on that?

Mr. DiLuzio. We are discussing the economics, but, of course, no commitments have been made by the Office. New authorizations and appropriations will be required. Congress will see the whole package rather than piecemeal, but we are discussing the total with MWD now.

TIMETABLE FOR PRESENTATION TO THE CONGRESS OF AUTHORIZATION FOR MWD PLANT

Senator Bible. What is the timetable?

Mr. Holum. We hope to bring it before the 89th Congress.

Senator Bible. You plan to present that during the second session?

Mr. Holum. Yes, sir.

Mr. DiLuzio. Yes. For authorization but not funding.
Senator Bible. Very well. You may proceed.

Research and Development Appropriation Items

Mr. DiLuzio. I will just go through the general budget categories. The 1966 funds appropriated by the Congress for research and development was $21,182,110. The 1967 request is $28,595,000, an increase of $7,412,890. This gives the appearance of a rather substantial increase in the program and people have asked, "Can you really manage the program with that kind of an increase?

Funds for San Diego test module

The answer is definitely "Yes," because about $5,200,000 of the total increase goes to the construction of the module. This is a single piece of hardware. If you take that out you will find no dramatic increase in the program over 1966.

Senator Bible. This is the module for San Diego?

Mr. DiLuzio. Yes. Funds for research have been increased, but we think we can spend this money intelligently and I am sure we can. We have great interest in the country now, and many proposals are coming in for research. Many of these proposals we have to turn down because we just can't do them even though some of the suggestions are practical.

Use of and Funds for Demonstration Plants

In demonstration plants we show a decrease of $134,000 in operation and maintenance from last year. These plants are starting to wither away in terms of real demonstration. Now we are going to use them as test facilities. We are going to modify and try all kinds of things to get more data from the demonstration plants to prove in terms of processing that we can produce cheaper water. They will not do this because they are high-cost plants, but they taught us how to build cheaper plants to get low-cost water. They served a good function as demonstration plants, but their only worth to us is as test units. As water-producting plants they are through.

Construction Funds for San Diego II Plant

Senator Bible. Where will you use that construction money?

Mr. DiLuzio. The $666,000 is the money you have to add to the money given us by the Navy for the Guantanamo plant to rebuild the San Diego II. We had some money available and this makes up the difference.

Senator Bible. That totals $2.2 million?

Mr. DiLuzio. Yes.

Wrightsville Beach Desalting Plant

Senator Bible. How about North Carolina? You have a plant there?

Mr. DiLuzio. We have plans to modify some of the pilot plants there. The largest plant is 200,000 gallons. They are not in the magnitude of San Diego II.

FREEPORT, TEX., PLANT

We will modify the Freeport plant by installing a different kind of evaporator and run tests and find out what kind of promise the LTV has. Unless LTV shows a promise of——

LONG TUBE VERTICAL DESALTING PROCESS

Senator BIBLE. Just a minute. Tell me what the LTV means.

Mr. DILUZIO. That is the long-tube vertical.

Senator BIBLE. I get lost in those initials.

Mr. DILUZIO. We may find the long tube vertical plant has a promise of x percent over multistage flash—maybe 15 or 20 percent cost reduction or more. We don't see how we can spend money to build a long-tube vertical plant if it only shows promise of providing another way of producing fresh water from sea water within the same cost bracket as other processes.

When we start to go I think we have to go for major improvements. The decrease in pennies will have to come from what industry does. This is where I think the great industrial role lies. We set parameters of from 22 to 30 cents and they have to find the means within that.

WRIGHTSVILLE BEACH DESALTING PLANTS

Senator BIBLE. How about Wrightsville Beach in North Carolina? I am advised you are requesting funds for the design of a distillation plant?

Mr. DILUZIO. Those are pilot plants.

Senator BIBLE. How much money do you have in the budget?

Mr. DILUZIO. That is $1.5 million, $800,000 is operation and maintenance and $700,000 is construction. Not all pilot plant funds will be spent at Wrightsville Beach.

Senator BIBLE. It can be put in the record.

(The information follows:)

Of the $700,000 for construction cost of distillation pilot plants included in the fiscal year 1967 budget estimates, $500,000 is earmarked for Wrightsville Beach, N.C.

FUNDS FOR TEST MODULE IN BUDGET

Mr. DILUZIO. The need for Engineering Development funds is relatively constant except again for the $5.2 million increase because of the module. As I mentioned before, the Research Division request is increased roughly by $1.4 million. Program analysis remains the same.

Senator BIBLE. Your testimony is that if you were not designing, planning, and building this module, the budget request this year would be practically the same as that of last year?

Mr. DILUZIO. About a million and a half higher.

Senator BIBLE. The great bulk is attributed to the module?

Mr. DILUZIO. That's right. We are not leaping into great sums of money. We know exactly what it is for.

Senator BIBLE. My understanding is you are only requesting an increase of $960,000 for the items of construction, and operation and

maintenance for a brackish water test facility. And this is a million dollar item?

BRACKISH WATERS PLANTS

Mr. DILUZIO. Yes. Most of the data for plants on brackish water was extrapolation from sea water data. The experience at Webster, S. Dak., and Roswell, N. Mex., clearly indicated that brackish water is peculiar and a very different fluid which requires a lot of work to determine one or two things. What kind of process is needed to handle brackish water or what kind of pretreatment can one give to brackish waters so as to standardize on plants. In order to do this and focus on a real problem we think we must test all kinds of brackish water and determine what processes respond better than others.

Certain kinds of chemicals affect electrodialysis membranes. We would like to try reverse osmosis. We don't know how it will react in the presence of iron manganese silicates. We have gained some insight as to the acidity in water; it operates better with higher acidity, but we don't know how much. We need to make tests in these kinds of waters. I would like to centralize this operation because we think we need some original data on brackish waters, not extrapolation from sea waters which we have been dealing with. This would be worthwhile we think, for it might give clues in designing selective membranes, methods of treating water to pacify them or modify them to get a major process put through without making major changes in the plant. It is being done now piecemeal and I would like to put it all in one area.

Senator BIBLE. Where?

Mr. DILUZIO. Two or three sites are being considered, nothing has been decided at the present time, but we are looking at two or three sites to see which of these three, on the basis of straight economics, is the cheapest and best way.

Senator BIBLE. Would these be located where the present plants are in Webster, S. Dak., and Roswell, N. Mex.?

Mr. LILUZIO. Perhaps, because there is the advantage in utilizing present facilities to the greatest extent possible. Roswell may operate a year or so and disappear as a demonstration plant. There you have everything you need, water and test facilities. The same is true of Webster. We might find an area that may offer assistance. A university maybe would take some control of the station. We don't want to operate this solely on our own; we would like to work with local people, local talents in the various systems in the operation of running this station.

FUNDS FOR ADMINISTRATION AND COORDINATION

Senator BIBLE. Let me ask just a couple more questions.

You request an increase of $413,000 for administration and coordination. Why do you need this?

STAFFING FOR ADMINISTRATIVE FUNCTIONS

Mr. DILUZIO. For many reasons. One was the Office was understaffed and we are very weak in the administration and program management line. Second, all these public statements being made by the administration about the promise of desalting has brought thousands of inquiries and requests to participate in studies. This takes time and people. The third is there is a pay increase, the one passed last year. We had no money originally. The pay increase coming up is not in this figure, but we have asked for additional bodies.

Senator BIBLE. Twenty-two new bodies as I understand you.

Mr. DILUZIO. Yes.

Senator BIBLE. What are they going to do?

Mr. DILUZIO. We have a sheet I would like to submit for the record by classification. Most are technical people.

JUSTIFICATION

Senator BIBLE. The justification for the additional 22 new positions will be placed in the record at this time.

(The table follows:)

Office of Saline Water—Personnel distribution

	Fiscal year 1966				Fiscal year 1967	
	Actual employment, July 1, 1965	Actual employment, Jan. 31, 1966	Vacancies, Jan. 31, 1966	Authorized positions	Increase	Total estimated positions
Engineering and development:						
Washington:						
Assistant Director	1	2		2		2
Distillation	6	7	2	9	5	14
Membranes	3	3	1	4	2	6
Special projects	5	6	3	9	2	11
Engineering services	6	6		6		6
Fields:						
Wrightsville Beach, N.C.	19	19	1	20		20
Freeport, Tex	1	1		1		1
Roswell, N. Mex	1	1		1		1
San Diego, Calif	1	1		1	1	2
Brackish Water Test Center					2	2
Research	15	18	1	19	3	22
Program analysis	6	11	1	12	1	13
Office of the Director	2	2		2		2
Information	5	5		5		5
Division of Administration	19	21	4	25	6	31
Total	90	103	13	116	22	138
Actions, Feb. 1-23, 1966:						
Reporting for duty		2				
Actions in process		5				
Anticipated on board, Mar. 15		110				

Office of Saline Water—Authorized positions

	18	17	16	15	14	13	12	11	9	8	7	6	5	4	3	Wage board	Total
June 30, 1965:																	
Washington, D.C.	1	[1] 2	2	10	18	12	3	1	4		11	10	5	4	3		86
Wrightsville Beach						1		3	2		1		1	1	1	9	20
San Diego						1											1
Roswell						1											1
Freeport						1											1
Total	1	[1] 2	2	10	19	16	3	4	6		12	10	6	5	4	9	109
June 30, 1966:																	
Washington, D.C.	1	2	2	12	17	13	3	1	4	2	11	10	9	3	3		93
Wrightsville Beach					1	1		3	2		1		1	1	1	9	20
San Diego					1												1
Roswell						1											1
Freeport						1											1
Total	1	2	2	12	19	16	3	4	6	2	12	10	10	4	4	9	116
June 30, 1967 (estimate):																	
Washington, D.C.	1	2	2	14	19	16	4	1	8	2	11	13	11	7	1		112
Wrightsville Beach					1	1		3	2		1		1	1	1	9	20
San Diego					1	1											2
Roswell						1											1
Freeport						1											1
Brackish water test facility					1	1											2
Total	1	2	2	14	22	21	4	4	10	2	12	13	12	8	2	9	138

[1] Includes 1 Public Law 313 converted to GS–17, December 1965.

OSW STAFFING STRENGTH

Mr. HOLUM. I would like to say this office has been understaffed. Demands are tremendous both at home training on our own program, the image we have in the rest of the world, these positions are urgently needed.

Senator BIBLE. What is the total strength in Office staffing?

Mr. DILUZIO. 103. We have seven being processed for additional appointments. That would give us 110 strength. We have 116 for 1966.

Senator BIBLE. You want 138 positions?

Mr. DILUZIO. Yes. Only six are in administration. These are clerks—stenographic help. We have the complete details here.

Senator BIBLE. It can be inserted in the record or made a part of your statement.

Mr. DILUZIO. Most of the 16 are technical people for field stations, distillation, membranes, and special projects.

OPERATION AND MAINTENANCE

1967 BUDGET REQUEST

Senator BIBLE. For operation and maintenance in fiscal year 1967 the Office of Saline Water proposes a budget of $2,351,000. The justification for this request will be included in the record.

(The justification follows:)

Comparative transfer from "Construction, operation and maintenance, Office of Saline Water" and total available, 1965	$1,463,671
Appropriation and total available, 1966	2,485,000

SUMMARY OF INCREASES AND DECREASES, 1967

Operation and maintenance:	
Increase in operation and maintenance costs	+510,000
Decrease in plant modifications	−595,000
Total	−85,000
Administration:	
To provide for increased pay costs for fiscal year 1966 positions	+6,000
Decrease in administrative costs	−55,000
Total	−49,000
Net decrease, 1967	−134,000
Budget estimate, 1967	2,351,000

Analysis by activities

Activity	Fiscal year 1965 amount available	Fiscal year 1966 appropriation and available
1. Operation and maintenance	$1,229,526	$2,230,000
2. Administration	234,145	255,000
Total	1,463,671	2,485,000

Activity	Fiscal year 1965, amount available	Fiscal year 1966, amount available	Fiscal year 1967, estimate	Increase (+) or decrease (−), 1967 compared with 1966		
				Total	Pay cost [1]	Program
1. Operation and maintenance	$1,229,526	$2,230,000	$2,145,000	−$85,000		−$85,000
2. Administration	234,145	255,000	206,000	−49,000	+$6,000	−55,000
Total	1,463,671	2,485,000	2,351,000	−134,000	+6,000	−140,000

[1] To provide for increased pay costs for fiscal year 1966 positions.

JUSTIFICATION

OPERATION AND MAINTENANCE

Public Law 85–883 and as amended by Public Law 87–295 provides for the construction and operation of five saline water conversion plants to demonstrate the reliability, engineering, operating, and economic potentials of the most promising of the presently known processes.

The estimate for 1967 is $2,351,000, a decrease of $134,000 under 1966. The expenditure of funds programed for 1967 as compared to 1966 is as follows:

[In thousands]

	1966	1967	Increase or decrease (−)
(a) Operating costs:			
Freeport, Tex.	510	500	−10
San Diego, Calif.	10	500	490
Webster, S. Dak.	170	200	30
Roswell, N. Mex.	500	500	
Total operating costs	1,190	1,700	510
(b) Modifications:			
Freeport, Tex.	745	250	−495
San Diego, Calif.			
Webster, S. Dak.	95	120	25
Roswell, N. Mex.	200	75	−125
Total modifications	1,040	445	−595
(c) Administration	255	206	−49
Total estimate	2,485	2,351	−134

(a) Operation and maintenance

The estimate for 1967 is $1,700,000, an increase of $510,000 over 1966. This increase in operating costs in 1967 is due to the following factors:

Freeport, Tex.—A decrease of $10,000. The produce water corrosion studies being carried out at this plant are to be discontinued in 1967. It is estimated that the elimination of these studies will reduce operating costs by $10,000.

San Diego, Calif.—An increase of $490,000. The construction of this plant is expected to be completed the first quarter of 1967 and it is estimated that $500,000 will be required for the operation and maintenance of the plant for the remainder of the year.

Webster, S. Dak.—An increase of $30,000. This increase is due to the addition of one additional engineer to the staff of the operating contractor. This increase covers not only salary costs, but other operating costs which will be generated by this addition to the staff, such as supplies, chemicals, and small bench scale test equipment.

(b) Plant modifications

The estimate for 1967 is $445,000, a decrease of $595,000 under 1966. The plant modifications planned for 1967 as compared to 1966 are as follows:

Freeport, Tex.—A decrease of $495,000. Extensive modifications of the Freeport plant are planned for fiscal year 1966. These modifications are expected

to cost approximately $1 million. In order to fund them, the modifications will of necessity be phased to apply the $745,000 available in fiscal year 1966 for the design and first phases of the work and the completion will be phased in fiscal year 1967 utilizing the $250,000 requested. The modifications are necessary to test out new concepts on a production scale basis. It is planned that the several concepts showing promise at the pilot plant level will be proved out at the Freeport demonstration plant. One of the major concepts to be checked on the full-scale plant will be the fluted tube design which has shown much promise in the pilot plant stage. This fluted tube design is expected to reduce the heat transfer surface cost appreciably and thus decrease the cost of water produced. Several other concepts have been proposed on modular arrangements of long tube vertical evaporators which should also appreciably reduce capital costs. It is planned that these concepts be tested concurrently with the fluted tube concept. By setting up to test several promising concepts concurrently, the cost of such development work will be considerably reduced and the timespan for demonstrating their value will be reduced by twofold to threefold.

Webster, S. Dak.—An increase of $25,000. The $120,000 allocated for modifications to this plant in 1967 represents the estimated installation cost of pretreatment equipment.

Roswell, N. Mex.—A decrease of $125,000. No major changes are possible in fiscal year 1967 for the Roswell demonstration plant, within the total budget limitation. The requested $75,000 is necessary for minor changes in construction, piping, and hydraulic flow arrangement normally expected in a test bed plant.

The fiscal year 1967 development program for this demonstration plant will consist of maximum production runs of considerable duration to prove out several feed treatment methods for scale prevention and to demonstrate the suitability of the major components for long-life operation in the severe environmental conditions at the Roswell brackish water test center.

(c) Administration

The estimate for 1967 is $206,000, a decrease of $49,000 under 1966.

(1) An increase of $6,000 is for increased pay costs on fiscal year 1966 positions.

(2) A decrease of $55,000 is for a reduction in administration costs.

The request provides for the administration of the demonstration plant program, evaluating the engineering potential of the three plants in operation and the supervision of the architect, engineering, and construction work of the fourth plant. The decrease is primarily due to the transfer of three positions within the Washington, D.C., headquarters over to the salaries and expenses appropriation (research and development program). A review of positions within this appropriation has indicated that these three positions are not required under this appropriation heading and that their use within the research and development program will be more beneficial to the overall objectives of the Office.

Itemization of estimate

	Actual, 1965	Estimate, 1966	Estimate, 1967	Increase (+) or decrease (−)
Program and financing:				
Total obligations	$1,463,671	$2,485,000	$2,351,000	−$134,000
Comparative transfer from other account	−1,463,671			
New obligational authority (appropriation)		2,485,000	2,351,000	−134,000
Obligations by objects:				
11 Personnel compensation	196,149	215,000	197,000	−18,000
12 Personnel benefits	14,271	15,000	14,000	−1,000
21 Travel and transportation of persons	8,583	20,000	10,000	−10,000
22 Transportation of things	345	2,000	2,000	
23 Rent, communications, and utilities	204,776	270,000	238,000	−32,000
24 Printing and reproduction	18,516	11,000	8,000	−3,000
25 Other services	981,231	994,000	1,465,000	+471,000
Services of other agencies	7,275	18,000	13,000	−5,000
26 Supplies and materials	1,316	5,000	2,000	−3,000
31 Equipment	1,209	5,000	2,000	−3,000
32 Land and structures	30,000	930,000	400,000	−530,000
Total obligations	1,463,671	2,485,000	2,351,000	−134,000

Senator BIBLE. Is there anything else you want to add to what this statement here shows as to your justifications for that request?

Mr. DILUZIO. The $2,351,000 is for operation and maintenance of demonstration plants, including that personnel assigned to demonstration plants.

We will take a look and be sure all the facts are in the record. We note that our request for program administration, that is, salaries and expenses, is $1,540,000.

Senator BIBLE. I think you are aware the Congress always shows considerable concern any time you add people to your staff. If that is the complete justification, all right, but please give us any information we may need.

JUSTIFICATION

Mr. DILUZIO. I will be sure and read the testimony and be certain we defended that request. I think it is an investment well worthwhile. These economic studies, we are having a devil of a job getting people familiar with it, getting people to look at it in the growth sense and I am sure you will agree it is hard to lay out a program such as this. I am sure Dr. Renne will agree with that. We are working hard with Reclamation and HEW, on water pollution. We are working very hard with other agencies in their particular responsibility for water, too.

(The additional justification follows:)

The total funding of the Office of Saline Water program has been steadily increased since the enactment of the Anderson-Aspinall Act of 1961 (Public Law 87-295), and with the approval of the amendment of 1965 (Public Law 89-118), it is obvious that the program will continue to be increased at an accelerated rate to meet the directive of the President for an imaginative and aggressive program and to actively participate in the water for peace program which he announced on October 7. We cannot at this time evaluate the organizational impact of the water for peace program until it has been developed further.

Before the program expansion began, the Office of Saline Water was able to receive a number of services from administrative branches of the Office of the Secretary, such as fiscal, personnel, budget, contracts, etc. As the size of the saline water conversion program increased, these other divisions were unable to cope with the increasing services required, making it necessary that Office of Saline Water provide its own staff for these functions. Thus, a considerable percentage of the additional personnel have had to be assigned to new positions established to handle these administrative services and therefore should be discounted when evaluating the personnel increases that have been granted.

The fiscal growth of the program with its resultant expansion of the operation has not been the only factor that has increased the workload of the staff. President Johnson's interest in the program and his several statements concerning the potential utilization of desalting plants to alleviate critical water supply problems in the United States and overseas and his recent announcement of a water for peace program will again substantially increase the volume of mail and office visits by technically oriented persons as well as from citizens who are simply seeking additional information concerning the activities of the Office of Saline Water. The publicity resulting from congressional hearings and the enactment of Public Law 89-118 and the First International Symposium on Water Desalinization have had a similar result. Worldwide interest in desalting was generated by the symposium and we have been asked to provide a considerable number of foreign nations with additional information. During and immediately following the symposium members of the staff held numerous meetings with country delegations and followup requests are anticipated. Concurrently, the advent of desalted water at a reasonable cost for many areas of the world has made it necessary that OSW participate in a growing number of water resource study meetings and provide reports and data concerning the potential utilization of desalted water as a part of regional water development programs. Additionally

the work must be coordinated with other bureaus and agencies of the Department of the Interior and with HEW, Corps of Engineers, Bureau of Yards and Docks, etc., all of which place time demands on the staff. We might also mention that desalting has become of prime interest to students participating in science fairs. We receive hundreds of requests for information from students, and while most of these requests are answered by form letters, nonetheless, every letter has to be processed. Other items that have increased the general burden is the Metropolitan Water District study of a 150-million-gallons-per-day plant and the drought conditions in the Northeast.

All of the foregoing has little to do with the principal operations of the Office, which is to evaluate proposals, award contracts, monitor the results of contract developments, and plan additional technical studies.

The number of research proposals received has risen sharply. Proposals received during fiscal year 1964 numbered 239 and during fiscal year 1965 numbered 338. It is estimated that the number of proposals that will be received during fiscal year 1966 will exceed 425. Each proposal must be carefully studied and evaluated. Meritorious proposals must be assigned priorities to coincide with availability of funds, contracts must be negotiated, contractors must be visited to assure that they are performing according to the terms of their contract and to keep abreast of results being obtained.

The Office of Saline Water has been reorganized in an effort to efficiently plan and execute the accelerated program. While the organization structure seems to adequately meet the program requirements, the divisions and sections are critically undermanned. Personnel added in 1966 were employed for two purposes: first to improve the ability of the Office to maintain current review for all programs, both technical and financial, and to permit more thorough evaluations of proposals before contract award. Assignment to the fiscal area was absolutely necessary because we were several months behind in making payment to contractors.

A second area in which a significant number of people were added, but still insufficient, is program analysis. One of the primary functions of this staff is to deal with the day-to-day inquiries and necessary contacts with foreign governments, States, local municipalities, research institutions, colleges and universities related to desalination technology, and to coordinate, conduct, and supervise both in-house and contract feasibility and economic studies in order to relieve the technical divisions of these time consuming tasks. In this particular area of responsibility there has been a rapid growth of activity resulting from the fact that desalting techniques has been advanced to a point where it is becoming economically practical for a large number of circumstances.

The reductions in cost that have been achieved, together with the promise of further reductions have resulted in a large number of inquiries for possible applications to meet current water problems. The growing magnitude of this activity can be realized by the number of countries or states for which studies have been made, or which have expressed an interest in having feasibility and cost studies performed. A list of countries interested in receiving U.S. technical assistance in water desalination development includes the following:

Australia	Israel	Mexico
Saudi Arabia	Tunisia	Finland
Japan	United Arab Republic	Chile
Greece	Italy	Kuwait
Libya	Mauritania	Peru
Spain	U.S.S.R.	India
United Kingdom	Somali	

In addition, certain States of the United States are soliciting technical assistance in the appraisal of the feasibility and cost of desalination applications in cities and regions within their borders. These include the following:

New York	Arizona	California
New Jersey	Texas	New Mexico
Connecticut	Florida	South Dakota

Accordingly, the Program Analysis Staff added nine people during fiscal year 1965 and to date in 1966. Typical programs being pursued which either did not exist the year before or are greatly expanded are the MWD study, the Israeli study and the Northeast study. The OSW will soon commence to fulfill the commitment to act as the technical manager for the total plant design and construc-

tion of a 5 million gallons per day plant for the city of Jidda, Saudi Arabia, total construction of which will be funded by the Saudi Arabian Government. In addition the OSW is performing a joint study on desalting with Mexico, studies in support of United Nations' activities, and it is anticipated that studies will be initiated soon with Greece, Spain, Egypt, and other countries. These studies, while under the direction of the Program Analysis Staff, require administrative and technical support from all divisions of OSW. As an example, the Saudi Arabia commitment while being managed and coordinated by the Program Analysis Staff, will require the services of the Distillation Division for the specifications and scope of work statements for the waterplant and the services of the Engineering Services Staff for the specifications for the powerplant, buildings, intake and outflow lines. Other studies related to membranes or other processes will require the technical assistance and support of the Membranes and Special Projects Division. Concurrently, this generates work in the administrative areas, such as contract negotiation and preparation, voucher audit and payment, financial recordkeeping and fund control.

Altogether, this program will represent a large number of contracts and it is expected that as the practicality of desalted water continues to be established as a source for municipal and industrial water supply there will be a growing number of such requests for assistance. To the extent that participation in such activities provides contributions to technical and economic data advancing the desalination program, these studies should be supported. There is little value in developing technology unless it is to be applied.

Of the 22 persons requested, 3 are intended for the Research Staff. This personnel will permit Research to comply with the recommendations of the Research Advisory Committee who very strongly recommended increased work on the area of "Materials" and "Applied Science" research, as well as in the specific area of "Interactions at Boundaries of Water Systems" and "Properties of Salts, Brines, and Byproducts." One additional secretary-stenographer is requested for Program Analysis; currently with nine technical people there is proposed four clerical.

In Engineering and Development it is proposed to add three technical people to support the rapidly growing effort in Distillation and one in Membranes. In this latter area there is currently a major effort to bring reverse osmosis out of the laboratory and into the field as a practical process for water supply. A second person will be needed at San Diego where construction of the San Diego replacement plant will be in progress and the West Coast Test Center will be brought into operation. It is also planned to add two people in the area of brackish water activities to support the development of testing facilities for brackish water processes. At the present time, several of the processes, such as reverse osmosis, freezing, and electrodialysis, appear to be approaching the point of practical application to brackish water. Since brackish water varies from location to location, it will be necessary to go into the field with test equipment. However, this equipment must be given shakedown operation at some central location before it is moved into the field. One additional person is expected to be added in Special Projects to round out the technical capabilities of the group and to accommodate the increase in number of pilot plants under design and test at Wrightsville Beach for sea water, and proposed for test at the brackish test center, and in the field. Four clerical staff members are expected to be added to the total of Engineering and Development.

In the Administrative group, six additions are planned; two in Contracts, one in Accounts and Auditing, and three in Administrative Services. These additions are justified due to the increased number of contracts to be handled and the necessity of establishing a central filing system for OSW. This latter service is currently being performed by the Department concurrently with a decentralized system within OSW. As the program has expanded this system has become more and more unsatisfactory. In order to eliminate confusion and eliminate the loss of time and manpower utilization it is proposed to set up a central file and mail control to speed up the flow of mail and increase the control over mail and files.

Comparative Costs for Water in Los Angeles

Senator Bible. One thing I wish you would supply for the record, you may comment now if you have the figures in mind. But if this 150 million gallons per day plant which you visualize becomes operational in the southern California area, you will put it where?

LOCATION OF MWD PLANT

Mr. DILUZIO. Right off the coast of Sunset Beach.

Senator BIBLE. That would be on an artificial island right off the west coast, just a little north of Los Angeles?

Mr. DILUZIO. It is on an island 4,000 feet off the coast. It is a manmade island.

Senator BIBLE. When that becomes operational and you have this assumed cost of 22 cents per thousand gallons, how will that compare with the cost of water in Los Angeles, at the present time? If you don't have it readily in your mind, please supply it for the record.

Mr. DILUZIO. We will submit it. But it is higher because of the 180 million acre-feet of water being supplied to Los Angeles. The river water coming down to Los Angeles is very expensive.

METROPOLITAN WATER DISTRICT WATER RATES

Senator BIBLE. How much does the Metropolitan Water District charge for water at the present time?

Mr. DILUZIO. We better supply that. I don't know what it is.

Senator BIBLE. The Metropolitan Water District is one that I have had some previous experience with in my prior years service as an attorney in the State of Nevada. They bring tremendous amounts of water from the Colorado River and I guess from Owens Valley in the Bishop, Calif., area. I am wondering what that total cost is to the consumer or the Metropolitan Water District. You would have a distribution cost either way.

Mr. DILUZIO. We will have to get those for you.

Senator BIBLE. I don't think there is any need of making a project but the Metropolitan Water District should be able to give you that with no more than a phone call. I want to compliment both of you on an exciting presentation. I think this is an exciting field and there is great urgency for it and you will find sympathy in Congress.

Mr. DILUZIO. Thank you.

(The information follows:)

Wholesale rates charged to member districts, by type of use

Type of use	Untreated water		Filtered water		Filtered and Softened water	
	Dollars per acre-foot	Cents per thousand gallons	Dollars per acre-foot	Cents per thousand gallons	Dollars per acre-foot	Cents per thousand gallons
Normal use (M. & I.)	31	9.51	36	11.04	40	12.27
Agriculture and ground water replenishment	17	5.21	22	6.75	26	7.97

Source: MWD 26th Annual Report, 1964, p. 47.

NOTE.—These rates reflect current MWD policy and procedures. The future reduced availability of Colorado River water and the future use of State project water, imported from northern California, can be expected to necessitate future rate increases. If desalted water becomes a part of the future supply, its influence in improving the quality of Colorado River water by blending must also be considered.

OFFICE OF WATER RESOURCES RESEARCH

STATEMENT OF DR. ROLAND R. RENNE, DIRECTOR, OFFICE OF WATER RESOURCES RESEARCH; ACCOMPANIED BY EUGENE D. EATON, ASSOCIATE DIRECTOR, OFFICE OF WATER RESOURCES RESEARCH; F. WILLIAM KOOP, EXECUTIVE OFFICER, OFFICE OF WATER RESOURCES RESEARCH; DALE R. ROTHROCK, CHIEF OF BUDGET AND FINANCE; JOSEPH M. BREEN, BUDGET OFFICER; AND SIDNEY D. LARSON, DIRECTOR OF THE BUDGET OF THE SECRETARY OF THE INTERIOR

1967 BUDGET REQUEST

Senator BIBLE. We will now hear Dr. Renne.

There will be placed in the record the justification statement for an appropriation of $6,894,000 to the Office of Water Resources Research for "Salaries and expenses." This is $506,000 more than for fiscal year 1966 but there is expected to be submitted a $6,000 pay cost supplemental.

(The justification follows:)

The fiscal year 1967 budget estimate for the Office of Water Resources Research, $6,894,000, will permit continuation and limited expansion of the water resources research and training program approved for fiscal year 1966. The amount requested for annual allotments to State water resources research institutes remains unchanged at $87,500 per State, but there is an increase of $500,000 for matching grants for specific research projects, and a $2,000 decrease for administration.

Pursuant to the approved fiscal year 1966 program, there are 384 on-going research projects under the annual allotment program and an additional 71 under the matching grant program. In addition to seeking solutions to the Nation's major water problems, over 550 advanced undergraduate and graduate students are receiving training through their participation in research project investigations under the guidance of able water research scientists. The $2 million requested for fiscal year 1967 of the $3 million authorized for matching grants to institutes is responsive to a recognition by State and local interests of the urgency for finding solutions to existing water problems and their evident willingness to match, on not less than a dollar-for-dollar basis, Federal funds provided for this purpose.

The Office of Water Resources Research program activities for fiscal year 1967 place particular emphasis upon: Careful evaluation of research proposals submitted for support under the program, giving due attention to research and training needs on a national, regional, and local basis; seeking the coordination and collaboration of scientific personnel engaged in water-related research activity, as a means for improving the productivity of research efforts and investments; developing effective and efficient arrangements for the dissemination of research results emanating from the program; and, considering and adopting, as appropriate, new or revised Office and program policies, procedures, and regulations, based upon the Office's initial experiences in carrying out this new program.

Mindful of the committee's interest in and concern for avoidance of undesirable duplication of research and improved coordination of efforts among all those engaged in water-related research, our Department and our Office have taken positive action in furtherance of these objectives pursuant to Public Law 88-379. We have initiated the publication of a series of catalogs of ongoing research in water resources and are preparing a comprehensive thesaurus of keywords for the field of water resources research. As of February 1, 1966, we have been assigned responsibility for managing the new Water Resources Scientific Information Center established by the Secretary of the Interior to improve communication in water resources among the bureaus and offices of the

Department. This will involve cooperation with the State water resources research institutes and with other agencies engaged in water resources research.

Salaries and expenses

Appropriation, 1965		
Supplemental appropriation, 1965	$1,465,000	
Second supplemental appropriation, 1965	1,985,000	
Total appropriation, 1965		$3,450,000
Total available, 1965		3,450,000
Appropriation, 1966	$5,890,000	
Supplemental appropriation, 1966	500,000	
Pay cost supplemental	6,000	
Total appropriation, 1966		6,396,000
Total available, 1966		6,396,000

SUMMARY OF INCREASES AND DECREASES, 1967

Matching grants to institutes: To provide for increase in matching grants to State water resources research institutes for additional specific water resources research projects	+$500,000	
Administration:		
To provide for increased pay costs for fiscal year 1966 positions	+3,000	
To provide for addition of staff position	+18,000	
Reduction of estimate due to assignment of grant audit function to a centralized departmental grant audit staff	−23,000	
Net increase, 1967		+498,000
Budget estimate, 1967		6,894,000

Analysis by activities

Activity	Fiscal year 1965 amount available	Fiscal year 1966			
		Total appropriation	Pay cost supplemental	Transfers [1]	Amount available
1. Assistance to States for institutes	$2,985,000	$4,463,000			$4,463,000
2. Matching grants to institutes	250,000	1,500,000			1,500,000
3. Administration	202,196	427,000	$6,000		433,000
Unobligated balance lapsing	12,804				
Total	3,450,000	6,390,000	6,000		6,396,000

Activity	Fiscal year 1965, amount available	Fiscal year 1966, amount available	Fiscal year 1967, estimate	Increase (+) or decrease (−), 1967 compared with 1966		
				Total	Pay cost [1]	Program
1. Assistance to States for institutes	$2,985,000	$4,463,000	$4,463,000			
2. Matching grants to institutes	250,000	1,500,000	2,000,000	+$500,000		+$500,000
3. Administration	215,000	433,000	431,000	−2,000	+$3,000	−5,000
Total	3,450,000	6,396,000	6,894,000	+498,000	+3,000	+495,000

[1] To provide for increased pay cost for fiscal year 1966 positions.

JUSTIFICATION

GENERAL STATEMENT

The estimate for 1967 is $6,894,000, an increase of $498,000 over 1966. The increase consists of:

(1) A decrease of $23,000 due to program savings resulting from the assignment of staff audit responsibilities to a centralized departmental grant audit staff.

(2) An increase of $3,000 for increased pay costs.

(3) An increase of $18,000 for an additional staff position and related personnel benefit costs.

(4) An increase of $500,000 for matching grants to State water resources research institutes for additional specific water resources research projects.

The Office of Water Resources Research, under the direct supervision of the Secretary of the Interior, is responsible for administration of the Water Resources Research Act of 1964 (Public Law 88–379) which authorizes financial support for the establishment and maintenance of one water resources research center at a university in each State and in Puerto Rico, for water research at other colleges, universities, and centers of competence, and for promotion of a more adequate national program of water research.

The program authorized by the act has been in operation for approximately 1 year—the Supplemental Appropriation Act of 1965 provided the initial program funds, and the initial fund allotments to 14 State institutes were approved in January 1966. Now, about 1 year later, all 51 State water research institutes authorized by the act are in operation. The fiscal year 1966 programs of the State institutes include 471 research projects and provide for the training of over 550 advanced undergraduate and graduate students through their participation in research project investigations under the guidance of able water research scientists. The fiscal year 1967 budget estimate provides funds for a continuation of the program at about the same level as fiscal year 1966, but with an increase of $500,000 for matching grants to institutes. That increase together with the equivalent non-Federal matching funds will permit funding about 25 more matching grant projects than were funded with fiscal year 1966 appropriations.

In carrying out the program, and in determining the types of specific research proposals to be undertaken pursuant to the act, the Office of Water Resouces Research and the State centers are guided, in part, by the priorities identified in the reports of the Federal Council for Science and Technology entitled "Federal Water Resources Research Program for Fiscal Year 1965" and, "A 10-Year Program for Federal Water Resources Research" (1966). Priorities identified in the latter report are: (*a*) research for pefecting water resources planning, (*b*) research on economic and related aspects of water resources, (*c*), ground water research, (*d*) water quality research, and (*e*) research on water-plant-soil relationships.

These priorities, plus recognition of the relative opportunities afforded by individual projects for providing water resources training constitute the general criteria for research emphasis. However, additional reference is made to priority areas as identified in the 1962 report of the National Academy of Sciences, National Research Council, entitled "Water Resources—A Report to the Committee on Natural Resources," the 1964 report of the American Geophysical Union's Committee on Status and Needs in Hydrology, and in other reports developed by individuals and organizations knowledgeable in the field of water resources problems and related research and training needs. In certain cases, State, local, or regional water problems of special urgency generate additional priority subjects. Where that is the case, such local priorities are given full weight along with national priority rankings. Projects that are exceptionally meritorious because of the high qualifications of the principal investigators, the excellence of research design, and like factors, may be given recognition even though not readily identifiable with stated highest priority subjects.

Indicative of the attention being given to identified priority areas, approximately four-fifths of the research projects being carried forward in fiscal year 1966 fall within areas of research identified for highest priority. Thus, there is excellent awareness of nationwide as well as local priority considerations on the part of the State institute staffs.

To insure that an effective water resources research program is carried out pursuant to the act, and that actions to further improve program performance

are found and adopted, the Office of Water Resources Research conducts a variety of program-related activities. These include, but are not limited to, activties of the types outlined briefly below:

1. Providing program guidance to the State centers. Program statements deal with such matters as: national and regional water problems that need priority attention for study as well as an indication of research program elements that warrant reduced or more selective investments of available research resources; optimum project durations, giving due regard to the continuity of research center staffs—especially doctoral candidates employed on research projects; kinds of research projects most likely to provide solutions to pressing water problems and desirable training of scientists; and scope of investigational programs in relation to Federal and State water research responsibilities and programs.

2. Keeping informed about shortages of qualified researchers at specific State research centers and working with the center directors to alleviate such conditions.

3. Developing closer professional and scientific associations between State center research workers and experts working on related problems.

4. Surveying State center programs and working with center directors to insure a desirable level of participation of all disciplines that could contribute to developing solutions to water related problems.

5. Encouraging, where desirable, center directors and university officials to strengthen graduate programs in water resources, including methods of encouraging promising graduate students to plan for a career in the field of water and related resources.

6. Obtaining, through the use of expert consultants, reports on the state of the art in selected areas of water resources research, and utilizing such reports to keep the State centers informed about progress in water research programs. This will serve to insure that research programs will be aimed toward the solution of unsolved problems and will also bring to the attention of State centers those organizations and individuals that can be consulted regarding mutual research problems.

7. Keeping water resources researchers informed, through scientific research information dissemination activities sponsored by the Office of Water Resources Research, of ongoing research work, thus facilitating the avoidance of unnecessary and undesirable duplication of effort and the increased cooperation of researchers pursuing studies in similar water problem areas.

8. Mindful of the Committee's interest in and concern for avoidance of undesirable duplication of research and improved coordination of efforts among all those engaged in water-related research, our Department and our office have taken positive action in furtherance of these objectives pursuant to Public Law 88-379. We have initiated the publication of a series of catalogs of ongoing research in water resources and are preparing a comprehensive thesaurus of keywords for the field of water resources research. As of February 1, 1966, we have been assigned responsibility for managing the new Water Resources Scientific Information Center established by the Secretary of the Interior to improve communication in water resources among the Bureaus and Offices of the Department. This will involve cooperation with the State Water Resources Research Institutes and with other agencies engaged in water resources research.

Section 100

Fiscal year 1966	$4,463,000
Fiscal year 1967	4,463,000
Increase	None

Section 100 of the act authorizes allotments in the amount of $87,500 for second- and third-year program participation by one State water resources research institute in each of 50 States and Puerto Rico. The requested amount of $4,463,000 represents the amount required for such third-year program participation by 51 institutes.

Section 101

Fiscal year 1966	$1,500,000
Fiscal year 1967	2,000,000
Increase	500,000

Pursuant to section 101 of the act, an increase of $500,000 is required to provide financial support, in the form of matching-fund grants, to State water resource

research institutes for the purpose of undertaking specific water research projects. Fiscal year 1966 funds were adequate to support 71 matching fund projects at 28 State institutes. Assuming the average Federal contribution per project remains at about the fiscal year 1966 level of $21,000, the amount requested by this fiscal year 1967 estimate will permit the funding of about 95 projects.

During recent years progress in the area of water research has been grossly inadequate to meet the demands and requirements of a fast-expanding population and economy for adequate supplies of water for all purposes. The acute water supply problems that exist now, and which will intensify in immediate future years unless aggressive corrective action is taken, are clearly recognized by the public, the States, and the Congress. In view of this situation, and because the deliberations leading to the enactment of Public Law 88-379 took place over a considerable period of time, the States, through their university centers, have developed program plans and sources of financing to match Federal funds. Based upon experience to date, it is evident that funds made available pursuant to section 101 of the act will be adequate to support only a portion of the matching grant research proposals submitted by the State institutes.

The funding of matching grant projects is on a competitive basis, and approval is based upon all factors having an impact upon overall project merit and relevance to significant problems. Therefore, the Office of Water Resources Research is selective in identifying such projects for support. By doing so, a balanced program of water research is achieved—giving priority to those research areas which, in consideration of the ongoing research activities under the annual allotment program, and to other Federal programs, are deemed to warrant additional research emphasis.

Administration

Fiscal year 1966	$433,000
Fiscal year 1967	431,000
Decrease	2,000

The estimate for administration of the fiscal year 1967 program is based on experience with the many ramifications and indicated workload of the program. Funds for certain equipment purchases for the office in fiscal year 1967 will be needed and, due to the nationwide character of the program and the necessity for providing coordination as contemplated by the act, funds are required for travel and communication, and for documentation, reproduction, research coordination and scientific awareness services, and related program administration and management activities.

Personnel compensation and related benefit costs will utilize approximately 73 percent of the amount requested for this activity. The permanent staff proposed for the office for fiscal year 1967 includes a total of 21 positions. This staff (*a*) reviews applications to assure that the applicants are eligible to receive financial support consistent with the requirements of the act, that the activities for which the grants are sought have merit, that the applicants are competent to accomplish the programs or projects proposed, that the proposed expenditures have reasonable and proper relationship to the probable value of accomplishments, and that the activities are planned and will be carried on with due regard for avoidance of duplication of other research, for undue displacement of water scientists and engineers elsewhere engaged in water research, and for like substantive factors; (*b*) prepares and process grant and contract agreements, and monitors compliance with such agreements; (*c*) establishes and keeps current records and statistics relative to the program; (*d*) develops advice to water resources research centers and others relative to the research areas most important for additional attention and emphasis, as required by the act, and furnishes such other advice and assistance as will best promote the purposes of the act; (*e*) assists in the establishment and maintenance of coordination and cooperation by and between the institutes and between them and other research organizations, the Department of the Interior, and other Federal agencies, including, for example, initiating appropriate actions to avoid the conduct of unproductive paralleling research efforts by the institutes; (*f*) evaluates the progress of research carried on under the act; (*g*) prepares reports and referrals for the Secretary to make to the President and the Congress; and (*h*) accomplishes other related technical program and administrative management activities.

Itemization of estimate

	Actual, 1965	Estimate, 1966	Estimate, 1967	Increase (+) or decrease (−)
Program and financing: Total obligations (new obligational authority)	$3,437,196	$6,396,000	$6,894,000	+$498,000
Object classification:				
11 Personnel compensation	85,417	266,000	296,000	+30,000
12 Personnel benefits	5,532	19,000	21,000	+2,000
21 Travel and transportation of persons	9,537	38,000	37,000	−1,000
22 Transportation of things	22	4,000	2,000	−2,000
23 Rent, communications, and utilities	2,847	9,000	12,000	+3,000
24 Printing and reproduction	5,533	29,000	22,000	−7,000
25.1 Other services	15,223	21,000	14,000	−7,000
25.2 Services of other agencies	52,121	27,000	17,000	−10,000
26 Supplies and materials	1,328	5,000	5,000	
31 Equipment	24,636	15,000	5,000	−10,000
41 Grants, subsidies, and contributions	3,235,000	5,963,000	6,463,000	+500,000
Total	3,437,196	6,396,000	6,894,000	+498,000

Senator BIBLE. Dr. Renne, we are happy to see you again. You may have anyone join you that you would like. You may proceed.

PREPARED STATEMENT

Mr. RENNE. We have a prepared statement.

Senator BIBLE. Yes. It appears to be very short and it will be incorporated in full in the record. You may highlight the statement as to your justifications of your needs.

Mr. RENNE. I will be glad to.

(The statement follows:)

It is a privilege to appear before you and present this budget request which provides for continuation of the program to assist State water resources centers and to promote a more adequate national program of water research as authorized by the Water Resources Research Act of 1964 (Public Law 88-379).

The act recognizes the continuing need in every State and region of the United States for increased understanding and ability in dealing with water resources problems. Intermittent and permanent water shortages exist or threaten many communities and many areas. Water supply deficiencies both of quantity and of quality constitute a present or potential obstacle to community growth, and agricultural, industrial, and recreational development. For approximately one-fifth of the United States authoritative reports estimate that water supply will limit economic and population growth by 1980 unless new and improved methods are developed to increase the usefulness of available water resources. By the year 2000, comparable conditions of water supply inadequacies can be expected to be far more extensive and far more critical unless there are new and improved methods for conserving and using water.

This request for $6,894,000 is for continuation, in fiscal year 1967, of the program initiated in fiscal year 1965. In fiscal year 1966, centers in all 50 States and in Puerto Rico had water research programs operating under allotment funds (sec. 100 of the act) and 28 or a little more than half of the centers received matching fund grants (sec. 101 of the act).

This request provides for allotments to 51 water resources research centers in the amount of $87,500 per State, the same as in fiscal year 1966, as authorized by section 100 of the act, and for $2 million for specific research projects to be matched dollar for dollar by the centers from non-Federal funds pursuant to section 101 of the act. This amount is $500,000 more than the amount appropriated for fiscal year 1966, but $1 million less than the amount authorized for matching funds for fiscal year 1967, in the act.

The request includes $431,000 for program development, management, evaluation, and administration in fiscal year 1967, including funds for a total of 21 staff positions, consultant salaries, preparation and printing of water research documents such as catalogs, consultants' travel, staff travel to various research cen-

ters, and equipment, supplies, materials, communications, and other expenses associated with operation of the Office. This is $2,000 less than the fiscal year 1966 amount for these purposes.

The Office of Water Resources Research will continue to have a small staff to perform the following major functions: (1) Evaluate and manage the program of grants on the basis of the merit of the proposals and the need for the knowledge expected to be produced without undesirable duplication of other State or Federal research, or the displacement of scientists and engineers; (2) Provide coordination of the research at the research centers of the various States and with other State, Federal, and nongovernmental research; and (3) administer the program to assure effective utilization of appropriated funds and qualified manpower.

A principal purpose of the act is to stimulate and supplement present programs for research on water resources problems, and to encourage the training of scientists and engineers to work in this field. Water resources research and the training of water scientists and engineers go hand in hand. Research of the State centers is under the leadership of university faculty members having competence in the various scientific and engineering disciplines related to water resources problems. In conjunction with such research, graduate students and others seeking to secure advanced training as water scientists and engineers are engaged as assistants in the performance of such research. In this manner, the program provides for the development of new knowledge needed to deal with water problems and for the training of additional highly qualified people to work on these problems.

There is wide agreement that a critical shortage of qualified water scientists and engineers is a major element in the present critical situation. This conclusion is emphasized in special reports of the National Academy of Sciences-National Research Council, the Federal Council For Science and Technology, and in the reports of professional groups. Evidence of the increasing need for qualified water scientists and engineers is brought out almost daily in newspaper reports of new State and Federal activities to relieve conditions of water shortages, drought, floods, and water quality deterioration. Particularly needed are qualified water resources specialists for State and local governments and others responsible for dealing with local, State, and regional water problems.

It is particularly to aid in meeting this shortage of highly qualified workers that the Water Resources Research Act emphasizes the training of water scientists and engineers through their participation in the programs of water resources research centers at the State and land-grant universities. Currently, more than 550 advanced undergraduates and graduate students are receiving training through their employment on research projects under the guidance of able water research scientists.

Through their own councils, committees, and research center administrators, the State and land-grant universities have prepared research and training programs as authorized by Public Law 88-379. In addition to the 51 center universities, 26 other universities are participating in these State center programs.

An analysis of current research projects of the 51 institutes that are receiving allotments under the water resources research program shows that four-fifths of them fall within the five areas of research identified for highest priority by the Federal Council for Science and Technology in its 1966 Report "A Ten Year Program for Federal Water Resources Research." These five areas are: (1) Research for perfecting water resources planning, (2) research on the economic, legal, social, and related aspects of water resources, (3) ground water research, (4) water quality research, and (5) research on water-plant-soil relationships.

In fiscal year 1967 the Office of Water Resources Research will continue to emphasize the research coordination responsibilities assigned to the Secretary of the Interior by section 104 of the Water Resources Research Act of 1964. As a part of the program to facilitate such coordination, the Office has published, with the cooperative asistance of the science information exchange of the Smithsonian Institution, two catalogs—the first containing a listing of ongoing federally supported water resources research, and the second containing a listing of nonfederally supported work in progress. A consolidated current edition of the two catalogs is being published in fiscal year 1966, and one is planned for publication in fiscal year 1967. These catalogs fulfill a highly important need for a document that disseminates current water resources research information to all persons engaged or preparing to engage in such research.

The Office of Water Resources Research is mindful of this committe's interest in eliminating undesirable and wasteful duplication, and of the need for improved coordination of efforts among all those engaged in water-related research if this is to be accomplished. The Department of the Interior and our office have taken positive steps in furtherance of these objectives pursuant to Public Law 88-379. In addition to the issuance of the research project catalogs, a comprehensive set of key words in water resources research for more adequate and effective indexing and information retrieval is in preparation. Special bibliographies are also being prepared.

Finally, our office recently was assigned responsibility for managing the new Water Resources Scientific Information Center established by the Secretary of the Interior to improve communication in water resources research among the bureaus and offices of the Department. This will involve cooperation with the State water resources research institutes and with other agencies engaged in water resources research.

Although the program has operated less than a full calendar year, there is widespread interest in this water research and training effort. The Office of Water Resources Research receives each week a large number of inquiries and communications from throughout the country, and many visitors who wish to discuss one or more aspects of the program with staff members. This continuing strong interest indicates a growing awareness of some of our more serious water problems and of the possibilities of finding satisfactory solutions for them.

First Full Year of Operations

Mr. Renne. As you know, this is the first full fiscal year of operation. State water research institute programs started last January with funds provided by the first Supplemental Appropriation Act of October 1965. We started with 14 of the State research institutes then, and when additional funds were available through the second Supplemental Appropriation Act of May 1965, we funded the remaining 37. So at the end of June 1965, all 51 of the State research centers, including Puerto Rico, were in operation.

Full State Allotments in 1967

Our current budget calls for the full amount of the $87,500 annual allotment to each of the 51 centers and the 1967 request is the same, $87,500. That is the amount authorized in the act. This amount is to be increased, as you know, under authorization in 1968, to $100,000, but the authorization for 1966 and 1967 is the same, being $87,500.

Our request for fiscal 1967 for the allotment for each of the 51 State research centers or institutes, is $87,500 each. There is no change from 1966.

Now, the matching funds are authorized by the second part of title I. As you know, title II is not yet operative so we have just title I.

Senator Bible. Title I is the matching?

Mr. Renne. Section 100 is the allotment and section 101 is the matching. Both are under title I. Under the matching-grant authorization, section 101, we are requesting $2 million for fiscal 1967, which compares with the $1½ million made available for 1966; $1 million regular 1966 appropriation and a half million in the 1966 supplemental. So while the act authorizes $3 million in fiscal 1967 matching funds, the request is for $2 million.

Senator Bible. Why?

Mr. Renne. Because of developments that occurred in the latter part of the calendar year which put pressure throughout the Government to maintain ceilings and cut back wherever possible. Some of

these occurred late in the calendar year just prior to presentation of the President's budget.

STATE PROPOSALS EXCEED $2 MILLION

Senator BIBLE. The purpose of the question is that you made the point in your statement that the funds you are seeking will be adequate to support only a portion of the matching grant research proposals submitted by the State research institutes. What I understand you to say is that you presently have before you proposals from the various States on a matching basis in excess of the $2 million?

Mr. RENNE. We have already an unfunded group of meritorious projects that total $2,081,000, or over $2 million. On April 1 we will be receiving this year's additional matching fund requests, which, added to the $2 million-plus of unfunded backlog that are now in our files, unfunded because of no funds, we will have whatever comes in on April 1 plus the $2 million unfunded projects. We may have $4 million or $5 million of project requests from institutes that were based on $3 million authorization. We would probably have $3 million or better of projects submitted by April 1. This is the target date by which the institutes must have their projects into us.

1966 UNFUNDED PROJECTS

At the same time, the 1966 projects unfunded, unless the institutes withdraw them or otherwise have committed the funds they held in reserve for matching, will still be in the pot for full consideration. So we will have, I am quite sure, a large number of requests, considerably more than the funds we will have available.

FUNDING UNDER TITLE II OF THE ACT

Senator BIBLE. As I understand it there was no funding under section 200 for 1966?

Mr. RENNE. Title II?

Senator BIBLE. Title II.

Mr. RENNE. Title I, section 101 is called matching; title II is called contracts, grants or any other method of operation.

Now the title I, section 101 matching is in operation. We had a quarter of a million in fiscal 1965 and $1½ million in 1966, so we have a total of $1¾ million projects now funded, a total of 87 projects in operation.

REDUCED APPROPRIATION IN 1967

We have nothing funded under title II which would involve contracts, grants, or any combination that seemed to fit the individual circumstances.

Senator BIBLE. Let me ask this, then, did you request this additional amount of money in your Department—in other words, where was the item lost?

Mr. RENNE. We requested the full authorization of $3 million for matching funds for 1967.

Senator BIBLE. You were allowed only $2 million?

Mr. RENNE. That is correct.

Senator BIBLE. Where did you lose this item, within your Department or the Budget Bureau?

Mr. RENNE. No.

Senator BIBLE. You lost it along the way?

Mr. RENNE. We lost it along the way but the Department was OK in the beginning

Senator BIBLE. It is a perfectly valid question. In 95 percent of the cases we know where it is lost. But you made a request for the full $3 million and you were granted $2 million and if you get $2 million, you are going to be extremely short on the proposal before you for State institutions.

Mr. RENNE. Yes, sir.

Senator BIBLE. You may proceed.

GENERAL ADMINISTRATIVE EXPENSES

Mr. RENNE. In the case of the Office of Water Resources Research here in Washington, the budget for that Office is being reduced from $433,000 total in fiscal year 1966 to $431,000 in fiscal year 1967. This means a $2,000 reduction in the administrative operations. We will have, if the budget is approved, a total ceiling of 21 staff members. We have 20 at the present time. The additional person has been made possible by adjustments in the budget because of certain economies; for example by having audit and fiscal review work done by the Office of Survey and Review in the Department. I think that is an economy because our work is rather small in total and the Office of Survey and Review has this kind of responsibility in many of the States where we are operating. The Secretary has felt this would be a more economical way of doing it and so directed us, and this made it possible for us to absorb one extra person and still have a lower total budget in 1967 by $2,000 than in 1966.

Briefly, that is the financing. I would like to give you just a brief progress report on the program if you want that, or maybe you want to ask questions on the budget side at the present time.

STAFFING OF OFFICE

Senator BIBLE. I have a couple of additional questions; I don't think you covered this. You may have covered them in your prepared statement which I have not read through, but I think I would be interested in knowing your total strength is what—21 people?

Mr. RENNE. Twenty currently and twenty-one proposed.

WATER RESOURCE SCIENTIFIC INFORMATION CENTER

Senator BIBLE. Tell me about the Water Resources Scientific Information Center, which you established just last month, early in February.

Mr. RENNE. That's right, early in February.

Senator BIBLE. Of what personnel is it composed?

Mr. RENNE. As you know from the very beginning we have had very keen interest in eliminating unnecessary and wasteful duplication. Our first job was to get out a catalog of all federally supported water resources research. Part 1 of the volume I catalog covered federally financed or federally supported projects in part or in whole, water research all over the country. Part 2 of the volume I catalog

covered nonfederally supported projects, and the two parts of the catalog covered more than 2,000 ongoing water research projects.

In addition, we contracted for certain work to be done, such as a set of water resources indexing and retrieval terms for more adequate information reference filing and recordkeeping, for checking against possible duplication of research. We have also contracted for some bibliographies to show what has been done in current fields or is being done. Even so, with these it is still felt to be inadequate and the Department of the Interior, through the science adviser, Dr. Bates, after careful study over a considerable period of time, recommended the establishment of a Natural Resources Scientific Information Center, NRSRC.

One part of that proposal is a Center for Water Resources Scientific Information. Secretary Udall approved the proposal from the science adviser and director that management of the water resources part of the Center be undertaken by the Office of Water Resources Research. The Secretary's memorandum was dated January 25, effective February 1, and we have been working out the details.

Computer Worked by Bureau of Reclamation

The plan that is now proposed is to have about seven people—three professionals and four supporting staff—in Washington, and the rest of the work would be contracted through the Bureau of Reclamation Information Storage and Retrieval Center at Denver. In other words, the computer for this work is there; it is an information center using the latest card systems for indexing and retrieval of information.

It has been operating there for more than 3 years, and Reclamation has developed know-how. We felt in the beginning we should contract with them since they had the experience already and we could get a job done at least cost rather than attempting to set up a whole new agency here in Washington.

As I understand it, Reclamation is proposing 17 new individuals in Denver to work on this contract. In our office there would be seven individuals, three of whom would be professionals and four supporting people.

Does that answer your question?

Senator Bible. Yes. I think that is a satisfactory answer.

Matching Grant Projects Authorization

I want to go back to one point. I don't know that I am clear on it yet. That is, last year on the first part of section 1, you were authorized $3 million under section 1, is that correct?

Mr. Renne. The trouble is there are two sections of title I.

Senator Bible. Yes. I am talking of the authorization of $3 million.

Mr. Renne. The matching fund.

Senator Bible. That is section 101 of title I?

Mr. Renne. That is correct.

Senator Bible. That is what I'm talking about. I just want to get on the right train. As I understand it, you are authorized matching funds to the extent of $3 million.

Mr. RENNE. Fiscal 1965 was $1 million. Fiscal 1966 was $2 million.

Senator BIBLE. I am talking about authorization first, not funding.

Mr. RENNE. Fiscal 1965 authorization is $1 million; fiscal year 1966 authorization is $2 million; fiscal year 1967 authorization is $3 million; 1968 is $4 million, and 1969 is $5 million.

It starts with $1 million in 1965 and goes to $5 million in 1969. Right in the middle, for 1967, the authorization is $3 million.

Senator BIBLE. In 1966, you were authorized $2 million and were funded $1.5 million?

Mr. RENNE. Right.

Senator BIBLE. This present year coming up, fiscal 1967, you're authorized to spend $3 million. You are asking for $2 million. You said you had requests based on last year's request of $2-million-some-odd-thousand. You said about April 1?

Mr. RENNE. We set April 1 as the date when any new proposals would come to us, they are now being prepared, but some have not been completed. Some have been completed but we have not received them because April 1 is the deadline and on that date we will have a large number of projects come in from the States.

FUNDS REQUIRED TO MATCH STATE PROPOSALS

Senator BIBLE. I may have fussed up this record as to the point I want to make or ask you, but that is, how much money would you require to meet the proposals that you have for fiscal year 1967? Would you need $2 million; $2.5 million, or authorization of $3 million?

Mr. RENNE. For the ones we have, we need $2.1 million.

Senator BIBLE. You say some may fall by the wayside?

Mr. RENNE. They will certainly be replaced by others because 14 of the States have not submitted any matching fund requests yet. In many of the States the legislatures were not meeting and had no opportunity to provide non-Federal matching funds. Now they are meeting and are in full stride and we are getting increasing numbers of projects.

For example, in 1966 we had a fivefold increase compared with 1965. We have not received the 1967 requests yet.

Senator BIBLE. I understand.

Mr. RENNE. But we have the $2.1 million.

Senator BIBLE. And some may fall by the wayside?

Mr. RENNE. Yes.

ADVISING COMMITTEE OF REQUESTS RECEIVED IN APRIL 1966

Senator BIBLE. By April 1, you will know how many proposals you have under section 101, title I, by April 1?

Mr. RENNE. Yes.

Senator BIBLE. I'm not asking you to look in the crystal ball. If you know by that date or a day or two after, it is only 3 weeks away, then give us a markup. I will ask Paul Eaton to keep in touch with you and please give it in a letter to the committee when you know. Sometime before markup, I think you should have a firm figure as to the amount of requests with the $3 million authorizations before you.

Mr. RENNE. I want to just reemphasize that the $2.1 million does not represent the total submitted. It represents the ones unfunded that we consider meritorious, and, if we had funds, we would fund them.

Senator BIBLE. I understand. That is because if they are going to exceed your authorization, you have to cull some out and I think what you are going to say is April 1, 1966; I have $2 million worthy proposals which I think should be matched. If you say that and we concur, we have to give you that much more money than you are asking.

I think we have the record clear. If you give that to us in a letter directed to Chairman Hayden as soon as you can develop it, we will appreciate it.

Mr. RENNE. Yes, sir.

Senator BIBLE. Two other questions.

TITLE II PROGRAM

Section 200 of the Water Resources Research Act authorizes an appropriation of $1 million in fiscal 1967 to make grants, contracts, and matching to educational institutions other than those which the State water research institutes are located. Why has no request been made to carry out this section of the act?

Mr. RENNE. I will have to answer that pretty directly. We made a request and after the adjustments that $1 million is not in the budget. In addition, as you know, the wording in section 200 has in it provisions of precongressional clearance for each individual project with which the President took exception and asked for amendments. The Senate made those amendments. The House held hearings about 3 weeks ago, but there is no action yet on title II, so that even though we have now more than $4.6 million of projects, 75 different projects, that have been submitted by research organizations in the hope that title II would be available, we have not had any action on it.

Senator BIBLE. Thank you. I think that is a good answer to that question.

OVERHEAD COSTS

Under date of October 12, 1965, I wrote you requesting information relative to the current policy of the Office of Water Resources Research which precludes the use of Federal funds to pay for certain overhead costs, with regard to research centers, in carrying out research and training activities under the Research Act of 1964. Under date of January 20, this year, you gave me a complete report on the problem and I am going to make my letter as well as your letter with the accompanying table, a part of the hearing record.

(The correspondence follows:)

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF WATER RESOURCES RESEARCH,
Washington, D.C., January 26, 1966.

Hon. ALAN BIBLE,
U.S. Senate,
Washington, D.C.

DEAR SENATOR BIBLE. This is in further response to your October 12, 1965, letter in which you requested information relative to the current policy which precludes use of Federal funds to pay for certain overhead costs (indirect costs and employee fringe benefit costs) incurred by State water resources

research centers in carrying out research and training activities pursuant to the Water Resources Research Act of 1964.

The policy referred to in the paragraph above was established pursuant to the legislative discussions and hearings leading to the passage of the act. That legislative history mentions, at various places, the cooperative Federal-State nature of the program. It also mentions the anticipated non-Federal support of certain research program costs. Relating thereto, the following pertinent portions of the legislative history are quoted for your ready reference:

"Implicit in the bill, furthermore, is an obligation to provide a substantial amount of non-Federal financing for any State water resources research institute. This assures that such centers will be established in response to valid needs recognized by the States in which they are located." (Excerpt from Secretary Udall's letter of January 3, 1963, to the chairman, Committee on Interior and Insular Affairs, U.S. Senate. S. Rept. 117, Apr. 8, 1963, p. 16.)

"We were unsuccessful in our attempt to permit, provision for employee retirement contributions out of section 100(a) grants. The House felt that since the employees would be employees of a college or university, it should handle provision for their retirement. While I prefer the authorization in the Senate bill which parallels agricultural research arrangements, I do not believe this will impede the program. It it does, we can consider the matter later." (Cong. Rec., p. 15326, July 2, 1964, excerpt from a colloquy on the conference report on S. 2, printed in the Record at the request of Senator Clinton P. Anderson.)

"When a university contributes such costs (i.e., a fair value of the services, facilities, or other contributions a university may make toward carrying on the research) they are recognized as part of its matching in agriculture research and will be in this program." (Cong. Rec., p. 15326, July 2, 1964, excerpt from a colloquy on the conference report on S. 2, printed in the Record at the request of Senator Clinton P. Anderson.)

It is our understanding that the following conditions apply to the handling of indirect and fringe benefit costs in the cooperative State research service (CSRS) program. State agricultural experiment stations receiving funds through the CSRS program are permitted to utilize indirect cost elements to match Federal dollars to the extent that such indirect cost elements are identifiable with experiment station programs. Indirect costs not identifiable with experiment station programs, such as a percentge of the cost of operating a student union or the immediate office of a university president, are not used to match Federal dollars in the CSRS program. Most States traditionally contribute more funds to the CSRS program than does the Federal Government, with the average ratio being approximately 3.7 (State) to 1.0 (Federal). Individual State ratios vary from 1 to 1, to over 16 to 1. As pertains to the handling of employee fringe benefit costs in the CSRS program, such costs are allowable costs in proportion to the Federal-State salary contribution to the program, however, Federal funds used to pay retirement benefits are limited to 5 percent of the Federal contribution to salary costs.

In our November 8, 1965, letter to you we advised that we were seeking information from each State center concerning the effect this policy has on the financial management aspects of center and university operations. We have now received responses from nearly all of the State centers.

Approximately three-fourths of the centers expressed varying degrees of dissatisfaction with the current policy whereas the remaining centers felt that the policy was generally satisfactory. These dissatisfactions were expressed in terms of a range of considerations, some of which were:

Not consistent with other Federal programs;

Contrary to university policy to accept grants not covering overhead costs;

Presents cumbersome bookkeeping and accounting problems;

Burdens overall university research programs;

Makes the program less attractive than other research programs;

Overhead costs are an unavoidable part of total research costs and policy requires university to commit other funds to handle such costs; and

Legislature restricts use of State funds for fringe benefits where salary is not paid from State funds.

Although the funding of overhead costs is of concern to most of the centers, their broadest single objection to the current policy relates to the funding of the employee fringe benefit portion of overhead costs, such as retirement or social security, health benefits, etc. Several centers indicated that such fringe benefits are inherent in employment contracts and, therefore, are as much a direct cost

as are salaries; however, because they are not now permitted to fund fringe benefit costs from the Federal water resources research allotment, they are obligated to include such costs in other portions of the total university budget.

As previously indicated, approximately one-fourth of the centers did not object to the current policy. These centers evidently were able to resolve with little or no difficulty, at the local university level, any problems which may have arisen. Also, certain of the center reports indicated that the current policy makes a degree of State financial participation in the program obligatory and such participation is in the best interest of a sound Federal-State cooperative water research program.

Shown below, in consolidated form, are data we received from 45 of the 51 State centers relative to the extent of estimated overhead costs attributable to participation in the fiscal year 1966 water research program pursuant to section 100 of the act. The amount of the Federal allotment to these 45 centers was $3,937,500 (45×$87,500). Data by States are shown on an enclosed sheet.

Amount of overhead cost paid from non-Federal funds

(1) Employee fringe benefits costs	$185,488
(2) Indirect costs	1,091,336
Total	1,276,834

From the above, it appears that the non-Federal investment in the program authorized by section 100 of the act is approximately one-third of the Federal investment. The formulas used by nearly all of the centers in developing estimates of overhead costs were prepared pursuant to guidelines contained in Bureau of the Budget Circular A–21.

Overhead costs for approved individual matching-grant projects, pursuant to section 101 of the act are approximately the same, percentagewise, as are overhead costs relating to the annual allotment program. However, in the case of such matching grants, the centers are permitted to apply such costs as contributions supplied from non-Federal sources to help match the amount of the Federal grants. The centers have applied overhead costs in this manner for virtually all matching-grant projects we have approved to date. Nevertheless, according to their reports to us the present policy as it applies to matching grants does, at some centers, cause problems somewhat similar to those noted above for the annual allotment program such as:

The procedure results in cumbersome bookkeeping and can even discourage submission of work projects;

A corresponding university budget is required to accommodate these overhead costs;

There is a handicap in soliciting non-Federal matching funds for nonproductive expenses;

Legislature restricts use of State funds for fringe benefits where salary is not paid from State funds; and

Contrary to university policy to accept research grants not covering overhead costs.

At this time, the Department of the Interior does not have any recommendation regarding amendment of the basic act relative to fringe benefit or indirect costs. Possibly after further experience with the program, the Department may wish to make such a recommendation.

If there is any further information we can provide you relating to this matter, please let us know.

Sincerely yours,

ROLAND R. RENNE, *Director.*

Estimates of overhead costs paid from non-Federal funds pursuant to participation by State water resources research institutes in the program authorized by sec. 100 of the Water Resources Research Act of 1964

States	Fiscal year 1966 allotment	Fiscal year 1966 overhead costs (estimated)		
		Indirect	Employee benefits	Total
Alabama	$87,500	$12,390	$5,110	$17,500
Alaska	87,500	20,320	3,613	23,933
Arizona	87,500	24,150	4,312	28,462
Arkansas	87,500	21,418	3,592	25,010
California	87,500	19,410	1,248	20,658
Colorado	87,500	29,000	2,500	31,500
Connecticut	87,500	26,040	1,960	28,000
Delaware	87,500	4,094	1,589	5,683
Florida	87,500	30,509	3,453	33,962
Georgia	87,500	29,216	4,235	33,451
Hawaii	87,500	17,500	2,232	19,732
Idaho	87,500	27,464	10,664	38,128
Illinois	87,500	33,954	6,100	40,054
Indiana	87,500	33,242	2,330	35,572
Iowa	87,500	38,217	1,778	39,995
Kansas	87,500	31,652	4,271	35,923
Kentucky	87,500	17,500	2,839	20,339
Louisiana	87,500	18,020	4,944	22,964
Maine	87,500	11,000	4,650	15,650
Maryland [1]				
Massachusetts	87,500	20,000	3,625	23,625
Michigan	87,500	35,722	8,174	43,896
Minnesota	87,500	28,000	5,000	33,000
Mississippi	87,500	22,930	5,145	28,075
Missouri	87,500	39,550	3,149	42,699
Montana	87,500	25,800	4,375	30,175
Nebraska [1]				
Nevada	87,500	41,493	5,366	46,859
New Hampshire	87,500	31,000	4,500	35,500
New Jersey	87,500	27,400	4,560	31,960
New Mexico	87,500	16,800	5,392	22,192
New York	87,500	25,373	750	26,123
North Carolina	87,500	70,000	3,790	73,790
North Dakota	87,500	17,500	3,695	21,195
Ohio	87,500	22,625	5,332	27,957
Oklahoma [1]				
Oregon	87,500	21,754	3,959	25,713
Pennsylvania [1]				
Puerto Rico [1]				
Rhode Island	87,500	13,125	6,017	19,142
South Carolina	87,500	26,000	4,100	30,100
South Dakota	87,500	13,000	3,000	16,000
Tennessee	87,500	16,800	3,240	20,040
Texas	87,500	17,416	2,415	19,831
Utah	87,500	26,371	5,616	31,987
Vermont [1]				
Virginia	87,500	16,185	6,820	23,005
Washington	87,500	34,417	4,302	38,719
West Virginia	87,500	8,000	5,100	13,100
Wisconsin	87,500	26,259	5,677	31,936
Wyoming	87,500	2,720	979	3,699
Total (for 45 States)	3,937,500	1,091,336	185,498	1,276,834

[1] No reply.

OCTOBER 12, 1965.

DR. ROLAND R. RENNE,
Director, Office of Water Resources Research,
Department of the Interior, Washington, D.C.

DEAR DR. RENNE: Several days ago I had a conference with Dr. Armstrong of the University of Nevada. Among other matters, he raised a question about the possibility of seeking an amendment to the Water Resources Research Act of 1964, which would authorize the utilization of Federal funds to care for certain overhead costs incurred by the various centers for water resources research.

Dr. Armstrong pointed out that under the arrangements currently in effect at the University of Nevada some $13,000 a year is being utilized from the regents

fund to care for these overhead costs. On Dr. Armstrong's return to Reno, he asked Hugh Shamberger to correspond with me directly relative to this matter. I am enclosing a copy of Mr. Shamberger's letter and the attachments thereto.

I would appreciate your advising me as to what the situation is at the other centers and also giving me any recommendations you might have concerning a possible amendment to the basic act.

This request is for exploratory purposes only as I, of course, am not aware of the magnitude of the problem, and I am therefore not sure at this point whether or not the Congress would entertain such an amendment. Please let me know what the situation is with respect to other centers which fund State projects in a similar manner.

Cordially,

ALAN BIBLE.

UNIVERSITY OF NEVADA,
Reno, Nev., October 7, 1965.

Hon. ALAN BIBLE,
Senator from Nevada,
Senate Office Building, Washington, D.C.

DEAR ALAN: Pursuant to President Armstrong's request, I am writing you in reference to the utilization of overhead costs in the allotment and matching grant research projects under the provisions of the Water Resources Research Act of 1964.

I am enclosing a copy of a letter from Dr. Renne, under date of March 16, 1965. You will note on page 3 a statement to the effect that Federal funds available from allotments and matching grants under title I may not be used for fringe benefits or overhead costs, and that such funds may be applied as contributions supplied from non-Federal sources to match a grant of Federal funds.

As we interpret this provision, overhead costs and fringe benefits can be used to match Federal funds but such matched funds must be spent on the project.

If you feel that there is any question in this interpretation, I will be glad to take it up further with the Office of Water Resources Research.

With kind personal regards, I remain,

Sincerely yours,

HUGH A. SHAMBERGER,
Associate Director.

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF WATER RESOURCES RESEARCH,
Washington, D.C., March 16, 1965.

Mr. HUGH A. SHAMBERGER,
Associate Director, Desert Research Institute,
University of Nevada, Reno, Nev.

DEAR MR. SHAMBERGER: Consistent with paragraph number one of my January 25, 1965, letter to President Armstrong, under authority delegated to me by the Secretary of the Interior and pursuant to paragraph 504.4(a) of the rules and regulations, your center is determined to be eligible to apply for and receive matching grant funds for specific projects under subsection 101(a) of the act dependent upon the availability of funds appropriated by the Congress, subject to applicable provisions of the rules and regulations. Eligibility to receive an allotment pursuant to section 100(a) of the act when funds for that purpose are available is dependent on our receipt of the information identified in paragraph No. 5 of the January 25 letter.

We are enclosing herewith five copies of a proposed continuing agreement setting forth the general terms and conditions of this cooperative program. This continuing agreement applies to grants pursuant to section 101 of the act in addition to the allotment program under section 100. We trust that this continuing agreement is satisfactory. Three signed copies should be returned to this office.

Please note the blank spaces on page 1 of the memorandum of agreement. These should be filled out by you with the title of whoever is duly authorized to act on behalf of the institute or center. For example, if the director of the institute or center is such authorized person, the third whereas would read somewhat as follows:

"Whereas the director of the water resources research institute, duly authorized by and acting on behalf of the university of ——— and its water resources research center, herein called the Institute * * *."

That same individual should sign for the Institute on page 5. However, please note the additional requirement on page 5 for another signature with respect to acceptance of the terms of article 8 of the memorandum of agreement, which signature should be that of an official authorized to act for the university as a whole.

In connection with project No. V included in your request, we note that your proposal covers the "first phase" of the project, but that no description of the "first phase" is provided. Furthermore, the period for which matching funds ($11,000) are requested appears to cover only a two quarter period although you indicate that the "first phase" will cover a 2-year period. At this stage of the program, it appears desirable that each research undertaking be designed so that within not more than 2 or 3 years it will produce a publication or report identifiable with the objectives of the Water Resources Research Act of 1964. Therefore, we would appreciate receiving from you a description of the first phase of this project and an expression as to the feasibility of producing a report or publication relating thereto.

As you know, we can provide no assurance that additional Federal funds (sec. 101) will be available and approved to support project No. V in subsequent years. Therefore, in addition to a description of the first phase of the project, we will need your assurance that it will be carried to completion by using annual allotment (sec. 100) or other funds if additional (sec. 101) funds are not made available for the project.

Also in connection with project No. V, it is noted that project costs have not been divided between grant and non-Federal funds as required by paragraph 503.1(c)(10) of the rules and regulations.

In connection with project No. VII, "phase 1" of that project, which is defined in your request, has an expected duration of 24 months; however, matching funds ($11,825) have been requested only for two quarters. For this project also, we need your assurance that, as a minimum, "phase 1" will be carried to completion even though additional matching funds (sec. 101) may not be made available for the project.

In connection with project No. III, are we correct in assuming that the budget as set forth in your request will carry the project through to completion? Page III–1 of your request indicates the project duration to be February 1965, to December 31, 1966. However, the project-related budget runs only through the second quarter fiscal year 1966, or through December 31, 1965. Perhaps it is intended that page III–1 should read, in item 2, "December 31, 1965" rather than "December 31, 1966."

For each of the eight projects included in your February 12, 1965, application for a grant of matching funds pursuant to section 101(a) of the act, there are enclosed five copies of a matching grant agreement. We have made these agreements effective as of the date we determined that there was compliance with the requirements of the rules and regulations. Please return three signed copies of each of these agreements to us at your earliest convenience. The individual authorized to act for the center should sign these copies.

A supply of vouchers is enclosed. You may use this form if you wish, or substitute your own form which includes the information called for in the attached form. However, please note that for the first voucher submittal a zero dollar figure would be entered in some items, such as 2B, 3A, and 3D of the enclosed voucher form. Three copies of each voucher should be sent to this office. The amounts and dates of such vouchers will be in accordance with the approved project financial plans, and may cover obligations incurred beginning with the effective date stated in the matching grant agreements. A separate voucher should be submitted for each research project.

One or two of the State institutes or centers have indicated some misunderstanding concerning the use of Federal funds in this program. For purposes of clarification, therefore, we wish to point out that Federal funds available from allotments and matching grants (under title I of the act) may not be used for the cost of retirement, health, or other employee fringe benefits, or for indirect or overhead cost items, such as accounting, general business management, heat, lights, use of space, or similar services. Such costs may, however, be applied as contributions supplied from non-Federal sources to match a grant of Federal funds under section 101 of the act. We also wish to point out that, as indicated

in sections 503.1(b) and 505.3 of the rules and regulations, Federal allotment and matching grant funds may not be used either directly or indirectly to pay the cost of permanent buildings, and such cost may not be included as contributions supplied from non-Federal sources to match a grant of Federal funds under section 101 of the act.

We have executed the allotment agreements for all of the projects on the assumption that you will conform projects III, V, and VII to the preceding comments and will supply the information requested. If this is not acceptable to you, please defer any obligations on those three projects (III, V, VV) until agreement can be reached on them.

Promptly upon receipt of the above-mentioned signed documents we will process the voucher for disbursement.

With respect to the proposed research project V on analysis of water and rock samples (Jerome and Weyler), you are requested to communicate with Dr. David W. Ellis, of the Water Resources Research Center, University of New Hampshire, at Durham, relative to avoidance of duplication with his work on trace analyses by atomic fluorescence spectroscopy.

With all good wishes.

Sincerely yours,

ROLAND R. RENNE, *Director.*

RECOMMENDATION REGARDING FINANCING OF OVERHEAD COSTS

Senator BIBLE. The problem was originally called to my attention by Hugh Shamberger, the associate director of the research center in Nevada, and Dr. Armstrong. At the time you wrote me on January 20, Dr. Renne, I believe you concluded by saying you had no recommendation, you might want further experience in the program before making a recommendation. I don't know if you have anything you care to add on the question I asked, because it seems to me this is a problem in all the States.

Mr. RENNE. Since writing you the letter, we held our first meeting with all the directors of the 51 centers, on January 24 and 25. They were all there in person or, in a couple of cases, they had their representatives attend. This was a 2-day meeting here in Washington and we discussed many operating as well as policy matters. There seems to be little change in directors' opinions from those we reported in our letter to you, Mr. Eaton, you attended, and Mr. Koop, and you may have something to add.

Mr. EATON. The meetings were in panels with the center directors who occupied positions comparable with Hugh Shamberger at the University of Nevada. The information provided in the January 20, 1966, letter is a good current statement of the situation and the problems of all 51 of the centers.

I believe we have not developed anything new or different to add to that.

Senator BIBLE. Very fine, because it is a very full and very satisfactory letter as far as position is concerned. It was well covered and if nothing new has been covered, we stand on your letter of January 20, 1966.

The meeting was close to that and you developed no further information.

You might tell me briefly how your program is working.

PROGRAM PROGRESS

Mr. RENNE. We are pleased with the progress made and we feel the program and institutions have been strengthened. We have 384 research projects under the allotment, and the 87 matching projects.

That makes a total of 471 projects. I believe the main achievement is a sharpening or focusing more directly on the major problem areas that need most research.

The Office of Science and Technology and the Federal Council for Science and Technology have been working for some time on the areas that need research emphasis. Four-fifths of our projects fall into the top-priority problems groups. We feel we are on the right track. By mutual consideration and consultation and visits, and by policy statements, we have prepared, we think, the total program is now being focused for the most part on the principal problem areas that are of most significance to the country in solving water problems.

We feel gratified with the response from the centers and universities. Of course, in the beginning there were all sorts of problems in tooling up. That was done in 1965, in getting the necessary equipment and so on, but most of the centers have a committee made up of representatives of the major disciplines for advice and consideration of proposed projects.

On top of that, an advisory committee operates in many of the States and it is interested in the water resources research program. When a project comes to us it has had some pretty good consideration back at the grassroots and a good deal of attention has been focused on the top priorities.

Senator BIBLE. I know from my firsthand visits in Nevada at the Research Institute that they think a wonderful job has been done in this program, and they are quite excited at the hopes for the future. I know this problem of water resource research is certainly needed.

TIMETABLE FOR WATER RESEARCH OPERATIONS

Is this a program in which it is possible to put a timetable? I know that is a hard question.

Mr. RENNE. Well, we have tried to get the investigators to focus their projects pretty sharply, so the bulk of them run not to exceed 3 years and on an average they are about 2 years. We have tried to focus on a phase and take it by steps so we would have a shorter interval in which to sit down with them and consider the whole project and whether we are going to increase our support, or whether we are going to finish up and get into another area. We are more fluid by this technique.

NINETY-FIVE PERCENT OF PROJECTS ARE 3-YEAR OPERATIONS

At first I think there was a feeling we were too tough, but 95 percent of our projects are within 3 years' duration and we feel this is a real advantage in getting them to sharpen up the areas they are going to research and we will get more effective results sooner.

Senator BIBLE. Is there a time limit on the authorizing act?

Mr. RENNE. No.

Senator BIBLE. It is open ended?

Mr. RENNE. Yes.

Senator BIBLE. The reason I ask is that in university planning in bringing expertise into this field, you must have some idea how long it is going to last because if they got the greatest research man in the world and brought him out to do research, he might be reluctant if he only had a 3-year contract.

Mr. RENNE. I think it is a continuing partnership.

Senator BIBLE. The only thing with the Presidential budget, is they are trying to eliminate some of these things. This is one of the problems you run into. I understand you can't give the people back home any assurance of eternity, but, at least, you can give them some idea of how long they might run. But, if I understand your response, you are indicating this is a 3-year program?

Mr. RENNE. No; not the program. Individual projects mostly are not over 3 years long; not the program.

I think the university centers regard the allotment in good faith as a cooperative partnership with the Federal Government in which this minimum support, which becomes $100,000 at its maximum in 1968, is a continuing one. This gives them the basis for continued operation of a center and a minimum program, a nucleus of staff. In addition to that, the matching funds are nationally competitive, and this will be decided each year. But the ongoing program through the center, which brings together different disciplines which had not been done previously, is looked upon as permanent, I don't mean indefinitely in generations, but they would have the opportunity to get good staff members because of the good faith in continuance of this part of the program for several years.

Senator BIBLE. And in addition, I suppose because of the great field that needs to be explored and developed in this field of water resources. This could go on for 10, 20, 30 40, 50 years?

Mr. RENNE. We are going to have need for water research for quite a while, but I don't want to confuse you with regard to the short-term phases.

QUESTIONS SUBMITTED BY SENATOR BYRD

Senator BIBLE. Senator Byrd wanted to question you, Dr. Renne, but he could not stay with us. However, he did ask me to secure for him the information he wanted. I will insert his questions in the record and you may provide appropriate responses.

Mr. RENNE. Very well.

(The questions and answers follow:)

WATER RESOURCES RESEARCH

UNIVERSITY OF WEST VIRGINIA

Question. Dr. Renne, I understand that the West Virginia University now has in operation a water resources research center. Could you explain the Federal funds that are allotted to West Virginia for this center?

Answer. Your understanding is correct. The University of West Virginia, in accordance with the provisions of the Water Resources Research Act of 1964 (78 Stat. 329) established in 1965 a universitywide water resources research center to sponsor and coordinate activities in this field in West Virginia. The university president appointed Prof. Chester L. Dodson to be director of the institute. Under his leadership and with the collaboration of the deans and professors from the various university departments a research program was developed, and it was approved by the Office of Water Resources Research.

To implement that program and in accordance with the provisions of the 1964 act, an allotment for support of the West Virginia Water Resources Research Center in the amount of $52,297 was made for fiscal year 1965; and $87,500 has been allotted to it for fiscal year 1966. The appropriation requested for fiscal year 1967 includes funds to make a further allotment of $87,500 for that fiscal year. The 1964 act authorizes appropriations sufficient to make allotments of $100,000 per year annually beginning with fiscal year 1968.

Question. Can you tell me the projects that are underway at this center?

Answer. Yes, sir. In addition to using a portion of the $87,500 allotment for administration of the center, coordination of the research, and like activities, nine individual research projects are now being supported by the allotment to University of West Virginia. As you can see from the following tabulation a very broad range of problems of concern to the State are being researched. These include projects on acid mine drainage effluent, the design of small structures, research on water supply and hydrology, and like important matters of significance to the development of the State of West Virginia. I submit herewith a listing of the titles of the nine water research projects now being supported by the allotments to the West Virginia University Water Resources Research Center:

Fiscal year 1966 program of the University of West Virginia Water Resources Research Center

State	Agreement No.	Proposal No.	Title	Fiscal year	
				Starting date	Termination date
West Virginia	14-01-0001-819	Administration			
		A-001-WVA	Ecological and physiological relationships of Monongahela River fish populations to acid mine pollution.	1965	1967
		A-002-WVA	Acid mine drainage microbiological studies (Wilson).	1965	1968
		A-003-WVA	Runoff studies on small watersheds	1966	1968
		A-004-WVA	The hydrologic design of small drainage structures in West Virginia.	1966	1967
		A-005-WVA	An investigation of the distribution and abundance of vascular aquatic plants in the Monongahela River basin above Point Marion, Pa., with special reference of the influence of water quality on these plants (Clarkson).	1965	1968
		A-006-WVA	Influence of topographic features on rainfall in West Virginia (Dickerson).	1965	1968
		A-007-WVA	Algal relationships to the recovery of acid mine streams (Bennett).	1965	1967
		A-008-WVA	Geochemical behavior of iron and manganese in a reservoir (Lake Lynn, W. Va.) fed by streams containing acid mine drainage (Corbett).	1965	1966
		A-009-WVA	Geochemical and sedimentological analysis of the Tygart River Reservoir (Collin).	1965	1967

WATER RESEARCH

Question. Could they be expanded?

Answer. Yes, sir. As you are well aware, there are many additional water problems important to West Virginia that need research as a basis for working out practical solutions. There also are a number of scientists and engineers at West Virginia institutions of higher education who are well qualified to undertake additional research if additional funds were available for its support.

SECTION 101, TITLE I

Question. I understand that West Virginia is not sharing in section 101 of title I of the act. Is this just because the State has not been able to put up the matching funds?

Answer. You are correct that West Virginia is not sharing in the section 101 funds. The act requires "such moneys when appropriated, shall be available to match, on a dollar-for-dollar basis, funds made available to institutes by States or other non-Federal sources to meet the necessary expenses of specific

water resources research projects * * *." It is our understanding that up to the present time the required non-Federal funds have not been available and that therefore West Virginia has not been able to qualify for any of the section 101 matching funds.

Question. Have you heard of any projects that are being lost because this program is not being used?

Answer. You realize, I am sure, that because non-Federal funds are not available for matching purposes, no section 101 projects can be submitted to us from West Virginia. It is our understanding that several meritorious research proposals on important West Virginia water problems have been formulated by the center and that they have not been submitted to us because of the lack of the non-Federal matching funds required.

TITLE II PROGRAMS

Question. If the House approves the amendment, thus boosting the authorization of title II to $10 million at the end of the fifth year, what will that mean for West Virginia? How will the center at West Virginia University benefit?

Answer. Enactment of legislation along the lines of S. 22 and its implementation by appropriations could affect West Virginia in several ways. For one thing, such a title II authorization would make possible provision of support by "grants, contracts, matching, or other arrangements with educational institutions, private foundations or other institutions; with private firms and individuals; and with local, State, and Federal Government agencies * * *." This would mean that support could be provided through such a title II program on the basis of the technical merit of a project and the State, regional, or national significance of the problem to be researched without necessarily requiring the dollar-for-dollar matching requirement. It would also make possible the support of additional projects as a consequence of the additional funds whose appropriation would be authorized under title II. Another result would be to make eligible for consideration research proposals from competent research organizations and individuals at other academic institutions or nonacademic organizations. This, of course, could include the center at West Virginia University.

ESTABLISHMENT OF CENTER AT MARSHALL UNIVERSITY

Question. Is it possible to establish another center at another university such as Marshall University?

Answer. The 1964 act provides in section 100 that the annual allotment is to assist each participating State in establishing and carrying on the work of a competent and qualified water resources research center or equivalent agency at one college or university in that State. The same section of the act also provides that other colleges and universities within the State may participate in the work of the institute. As a consequence, in a number of the States, several universities participate in the work of the water resources research center. However, allotment funds are available for only one center per State regardless of how many universities in that State participate in the work of the center.

APPALACHIAN WATER RESOURCES RESEARCH PROJECTS

Question. Do you have any other projects in mind for Appalachia?

Answer. The water resources research program in West Virginia, as in the other States of Appalachia (and all other States have also established water resources research centers that are carrying on research programs) has an abundance of problems confronting it. Some of these problems are inherent in the physiographic nature of the region. Rugged and precipitous headwater areas form torrential rivers and destructive floods. Flood control by reservoir impoundments in many cases would be at the expense of very limited valley areas whose highest use is for urban and industrial development and for agriculture. A challenging field for research is the development of improved systems for flood control and flood protection under these conditions.

Research also is needed as a basis for the development of the full potential of water-based recreation and tourism. Closely associated with this is preservation of water quality which is an important factor in recreation. Acid mine water is one of the important elements in water quality, and we are still a long ways from having enough knowledge for physically and economically practical acid mine water control. Other equally complex and important problems arise in connection with industrial and agricultural development of the State's resources.

SUBCOMMITTEE RECESS

Senator BIBLE. You have been a fine witness, Dr. Renne. It has been good to hear all of you. If there is nothing further we will stand in recess until 10 o'clock tomorrow morning when we will hear from the Office of Federal Coal Mine Safety Board of Review and the Smithsonian Institution.

(Whereupon, at 11:25 a.m., Monday, March 7, 1966, the hearings were recessed to reconvene at 10 a.m., Tuesday, March 8, 1966.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1967

TUESDAY, MARCH 8, 1966

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room 1223, New Senate Office Building, Hon. Robert C. Byrd presiding.

Present: Senators Byrd, Bartlett, and Mundt.

FEDERAL COAL MINE SAFETY BOARD OF REVIEW

STATEMENT OF GEORGE C. TREVORROW, MEMBER, AND ROBERT J. FREEHLING, GENERAL COUNSEL

1967 BUDGET REQUEST

Senator BYRD. The subcommittee will be in order. This morning we will have testimony from the following witnesses with reference to the Federal Coal Mine Safety Board of Review: George C. Trevorrow and Robert J. Freehling.

There will be placed in the record the statement in justification of the budget estimate for the Federal Coal Mine Safety Board of Review for fiscal year 1967. This agency requests $61,400, which is $10,100 less than the amount appropriated in fiscal year 1966. There will be requested, however, an additional $1,000 to meet pay increase costs.

(The justification follows:)

The Board is requesting an appropriation of $61,400, of which $44,797 is for personnel compensation and $16,603 is for other obligations. This amount is $10,100 less than that appropriated for fiscal 1966 (before enactment of Federal Employees Salary Act of 1965), and reflects the determined effort by the Board to confine its expenses to the essential minimum required to fulfill its statutory responsibilities.

CREATION OF THE BOARD

The creation of the Board is provided for in title II of the Federal Coal Mine Safety Act, Public Law 552, 82d Congress, which act became effective on July 16, 1952, and reads in pertinent part, as follows:

"SEC. 205. (a) An agency is hereby created to be known as the Federal Coal Mine Safety Board of Review, which shall be composed of three members who shall be appointed by the President, by and with the advice and consent of the Senate."

In brief, the present act amends the Federal Coal Mine Inspection and Investigation Act of May 7, 1941, Public Law 49, 77th Congress, by authorizing

representatives of the Bureau of Mines to control certain dangerous conditions and practices which might result in major coal mine disasters, and by creating the Board to which operators may apply for relief from orders issued under the act.

ORGANIZATION OF THE BOARD

The original Board was appointed by the President on August 21, 1952. It opened its offices on September 24, 1952, in Washington, D.C.

ADJUDICATORY DUTIES AND WORKLOAD OF THE BOARD

It is the duty of the Board to hear and determine applications filed with it by coal mine operators seeking annulment or revision of, and temporary relief from, orders issued by the Bureau of Mines, pursuant to section 203 or 206 of the Federal Coal Mine Safety Act. Appeals from Board orders may be taken to the U.S. courts of appeal and then to the Supreme Court. In performing its adjudicatory functions, the Board is required, in docketed cases, to conduct public hearings (which, in accordance with the statute, are generally held close to the mine involved); to resolve interlocutory matters; to render final decisions and orders; and to certify records on appeals to the courts. All such actions of the Board, under the specific mandate of the statute, must be taken "as rapidly as practicable" in order to effectuate the underlying safety purposes of the act.

As to the workload, from July 16, 1952, the effective date of the act, through July 31, 1965, the Bureau of Mines issued more than 1,700 orders subject to appeal to the Board, a considerable number of which are still outstanding. During this period, the Board received 31 formal applications for review of orders, and hearings extending from 1 to 12 days were required in each litigable case. Also during this period, the Board handled a substantial number of disputes which were settled by informal, voluntary actions of the parties, rather than by the filing and litigation of formal appeals. The number of orders issued by the Bureau of Mines has been increasing and the Board estimates that from 150 to 160 orders, all subject to appeal to this agency, will be issued in 1967 under the present act.

OTHER DUTIES OF THE BOARD

Apart from its adjudicatory functions, the Board must perform the broad range of activities of any independent, quasi-judicial agency in the executive branch of the Government. Such activities include, among others, the preparation and adoption of administrative orders and regulations; the maintenance of records, files, and supporting data; the submission of administrative reports to other executive departments and agencies, and to the Congress; the prompt handling of inquiries and correspondence; the analysis of, and detailed reporting on, proposed and pending legislation relating to the Board; the participation in hearings before committees of Congress; and the discharge of other advisory and information responsibilities.

PERSONNEL COMPLEMENT

In addition to the three Board members, who are compensated on a when actually employed basis, the Board will seek to perform its duties with a full-time staff reduced from four to three employees. To accomplish this reduction, the General Counsel of the Board, in addition to his already assigned functions and responsibilities, will be delegated certain duties of the executive secretary, and other duties of the latter position will be performed for the Board, on a reimbursable basis, by a separate agency in the Government. Such reduction in staff, which is being undertaken on an experimental basis, will be reconsidered, of course, if it impedes the successful accomplishment of the statutory mission of the Board.

PROGRAM AND PERFORMANCE

Coal mine operators, affected by orders issued by Federal coal mine inspectors, may appeal to the Board for annulment or revision of, and temporary relief from, such orders. During 1965, a total of 153 orders were issued. When operators appeal, hearings are held, and the Board rules upon the applications. It is estimated that there will be 150 to 160 orders subject to appeal to the Board in 1967. The recommended appropriation includes an amount estimated to be sufficient to cover necessary administrative expenses and to handle an expected

caseload estimated on the basis of the average actual annual caseload for the past 12 years.

Statement relating 1965, 1966, and 1967 programs

[In thousands of dollars]

1965 program (total costs)	68
Increases in cost of salaries, personnel benefits, and various other items	+5
1966 program (total costs)	73
Decrease in number of employees	−12
1967 program (total costs)	61

Analysis by activities

Activities	1965	Decreases	Increases	1966	Decreases	Increases	1967
Administration and adjudication (total program costs)	68		5	73	12		61

REQUIREMENTS FOR FISCAL YEAR 1967

The estimate for funds needed to operate the Federal Coal Mine Safety Board of Review in 1967 is $61,400, of which $44,797 is for personnel compensation and $16,603 is for other obligations.

JUSTIFICATION FOR PERSONNEL COMPENSATION

The following summary table presents the essential facts with respect to this item:

	1965 actual	1966 estimate	1967 estimate	Estimated change in 1967 from 1966
Number of positions:				
Permanent	4	4	3	−1
Intermittent	3	3	3	
Total positions	7	7	6	−1
Personnel compensation:				
11.1 Permanent positions	$55,302	$54,280	$37,567	−$16,713
11.3 Intermittent positions	4,950	6,700	7,200	+500
11.5 Other personnel compensation	14	30	30	
Total personnel compensation	60,266	61,010	44,797	−16,213

JUSTIFICATION FOR OTHER OBLIGATIONS

The following summary table and statements present the essential facts with respect to these items:

	1965 actual	1966 estimate	1967 estimate	Estimated change in 1967 from 1966
Other obligations:				
12.0 Personnel benefits	$4,165	$3,952	$3,088	−$864
21.0 Travel and transportation of persons	1,235	2,700	2,700	
22.0 Transportation of things		10	10	
23.0 Rent, communications, and utilities	987	1,000	1,097	+97
24.0 Printing and reproduction	207	350	430	+80
25.0 Other services	240	3,290	8,290	+5,000
26.0 Supplies and materials	421	498	498	
31.0 Equipment	262	190	490	+300
Total of other obligations	7,517	11,990	16,603	+4,613

DETAILED STATEMENT

12. *Personnel benefits.*—It is estimated that $3,088 will be required under this object to cover the Government's contribution, to accordance with existing legislation, to employees' group life insurance, group health benefits, retirement, and FICA taxes.

21. *Travel and transportation of persons.*—It is estimated that $2,700 will be required for this object.

22. *Transportation of things.*—It is estimated that $10 will be required for this object.

23. *Rent, communications, and utilities.*—It is estimated that $1,097 will be required under this object to cover the cost of hearing room rent, local and long distance telephone services, telegraph service, and postage.

24. *Printing and reproduction.*—It is estimated that $430 will be required for this object to cover the printing cost of administrative forms, letterheads, envelopes, and findings and orders and other issuances of the Board.

25. *Other services.*—It is estimated that $8,290 will be required for this object to cover the cost of budgeting, and complete payroll, accounting and fiscal reporting services performed for the Board by General Services Administration. Also included in this object are the estimated cost of employee health services provided by the Public Health Service, etc.

26. *Supplies and materials.*—It is estimated that $498 will be required to cover the cost of all supplies that are normally used in an office.

31. *Equipment.*—It is estimated that $490 will be required for incidental equipment as needed, and repairs to equipment.

PREPARED STATEMENT

Senator BYRD. Your prepared statement may be printed in the record in full and I would appreciate it if you would highlight it for the committee.

Mr. TREVORROW. Yes, sir.

(The statement follows:)

The Board is requesting an appropriation of $61,400 for fiscal year 1967. This amount is approximately $10,000 less than that now appropriated for fiscal year 1966, and reflects the continuing determination of the Board to perform its statutory duties at the minimum expense consistent with its assigned responsibilities.

As you are aware, the Board is an independent, quasi-judicial agency, engaged in a broad range of adjudicative and administrative activities under title II of the Federal Coal Mine Safety Act. The agency is tripartite in nature and its members are appointed by the President, with the advice and consent of the Senate.

The present members of the Board are Edward Steidle, dean emeritus, College of Mineral Industries, Pennsylvania State University, serving as public representative and chairman; Charles R. Ferguson, director, Safety Division, International Union, United Mine Workers of America, representing the coal mine workers; and George C. Trevorrow, safety director, Bituminous Coal Operators' Association, representing the coal mine operators.

The duties and responsibilities of the Board are outlined in the budget estimate submitted to your committee. However, for your information, some further details regarding the operations of the Board will be provided in this statement.

As to its adjudicative duties, the Board serves as a buffer between the Bureau of Mines and the coal industry, mainly to resolve disputes concerning orders issued by the Bureau under title II of the Federal Coal Mine Safety Act. That act, as you will recall, is a comprehensive and highly integrated program adopted by Congress in 1952, essentially to reduce the incidence of major coal-mine disasters from explosions, fires inundations, and man-trip and man-hoist accidents. To accomplish this end, the act vests enforceable authority in the Bureau to order mines classified as gassy, and to order mines closed because of imminent danger of disaster, or because of failure to correct specific violations of the act within the time provided thereof. In addition, the act provides broad authority in the Board to resolve conflicts with regard to the propriety and scope

of such orders, and to grant interim relief if warranted. Moreover, in so-called State-plan areas, the act delegates power to the Board alone to annul mine closing orders posted by the individual or joint inspectors.

Over 1,750 orders, and 22,500 related findings of violations, have been issued by the Bureau under the act, including 146 new orders, and almost 1,000 new findings of violations, issued during the last calendar year. These orders and related findings are the principal sources of controversies which are presented formally or informally to the Board for decision or settlement. Under the specific requirements of the law, the Board must be prepared, at all times, to act promptly in resolving these disputes, in order to prevent unnecessary economic hardship and to avert the devastation of a major coal-mine disaster.

As previously mentioned, disputes are presented formally or informally to the Board for decision or settlement. In a formal or "docketed" case, the Bureau of Mines must first actually close the mine or classify it as gassy. Then, the Board, upon appeal, is required immediately to hear and determine any request for temporary relief; to dispose of other interlocutory motions and questions; to conduct de novo hearings on the merits; to prepare and issue a final decision and order; and, if review of Board action is sought by the Government or an operator, to certify the record to the U.S. court of appeals. Further appeal may also be taken by a party to the Supreme Court of the United States. Such formal litigation is unavoidable in certain instances, and an increase in the number of formal cases is anticipated, because of certain procedural changes which have now been effected by the Bureau of Mines.

However, this litigation is obviously time-consuming and disrupts not only the mine operations, but also the enforcement of the act and the strict compliance with its provisions. Therefore, the Board members, as a matter of considered policy, seek to minimize the need for resort to such litigation, and devote their efforts more often to resolving disputes by the voluntary actions of the parties, without the docketing and processing of formal appeals. These actions in informal cases, sometimes referred to as advice cases, take a variety of forms including, for example, meeting with counsel and the parties on past cases and alternate procedures; serving as intermediary with the Bureau to resolve misunderstandings; devising and suggesting new operating programs; anticipating conflicts or areas of disagreement; expediting changes in mining operations; and, by an expressed readiness to redress sound grievances, aborting the issuance of unreasonable or arbitrary final orders. In the Board's opinion, such activities constitute a highly productive exercise of its adjudicative authority and implement the effective operation of the entire act.

The committee might be interested, at this point, in the statistics concerning the impact of the law under which the Board functions. During the period since the adoption of title II of the Federal Coal Mine Safety Act in July 1952, major disasters have been reduced by 65 percent, and the number of miners killed in such disasters has been reduced by over 75 percent, compared with the same period before the act was passed. The savings in lives cannot be calculated in money terms, but the savings in property can be measured in the millions of dollars each year. Although this record is impressive, even more can be accomplished in preventing disasters and conserving lives and property in the coal mines, if legislation to extend the scope of the act, which has passed the House and is pending before the Senate, is promptly adopted by Congress.

Apart from its adjudicative duties, the Board is also responsible, as an independent, quasi-judicial agency, for the many other legal, administrative, and related activities of any such agency in the Federal Government. For instance, the Board must prepare numerous administrative orders and reports; draft rules, regulations, and procedural forms; maintain records and supporting data; promptly answer inquiries and correspondence; and fulfill other public information requests and requirements. Moreover, the Board must attend congressional hearings; submit regular reports to Congress; and, upon request by the Office of the President or by Congress, analyze, and report and make recommendations on, proposed and pending legislation and programs.

The Board proposes to carry out its present statutory duties and responsibilities, during the next fiscal year, with a personnel complement consisting of the three Board members, who are compensated on a w.a.e. basis, and a full-time staff reduced from four to three employees. This reduction in staff is being undertaken on a trial basis, after intensive consideration by the members of the Board. It will, of necessity, be reconsidered if, in practice, it seriously hinders

the Board in accomplishing its mission of safeguarding human lives and property under the Federal Coal Mine Safety Act.

To repeat, the budget of $61,400 for fiscal year 1967, submitted for your approval, represents a reduction of approximately $10,000 from that now appropriated for the current fiscal year. You are again assured that the Board will limit its expenditures to the least amount required to fulfill its statutory responsibilities.

ADJUDICATION DUTIES OF BOARD

Mr. TREVORROW. My name is George C. Trevorrow and, with your permission, I would like to read a short summary of our written statement.

Senator BYRD. Very well.

Mr. TREVERROW. The Board is requesting an appropriation of $61,400 for fiscal year 1967. This request is about $10,000 less than the amount appropriated for the current year.

As you will recall, the Board is an independent agency, composed of three members appointed by the President, with Senate approval. It is engaged in a broad range of quasi-judicial and administrative activities under title II of the Federal Coal Mine Safety Act.

The adjudication duties of the Board, as detailed in the budget estimate and additional statement already before your committee, require the consideration of disputes which arise under title II, and which are submitted to the Board, formally or informally, for decision or settlement. Besides these adjudication duties, the Board is responsible for the many administrative and other legal activities of any separate, quasi-judicial agency in the executive branch of the Government.

ACCOMPLISHMENTS AND PLANS

You will be interested in statistics showing the impact of the statute under which the Board functions. The records show that the number of miners killed in major disasters has been reduced by over 75 percent, since adoption of the act in July 1952. More specifically, there has been a reduction of almost 1,000 in lives lost in such disasters since the passage of the act. While these figures are impressive, much remains to be done, and far more will be accomplished in conserving lives and property in the coal mines, if legislation extending the scope of the act, which has passed the House and is before the Senate, is promptly adopted.

To repeat, the budget for 1967 reflects a reduction of approximately $10,000 from that appropriated for the present fiscal year. This saving would be effected by reducing the full-time staff of the Board from four to three employees. The duties of the position to be eliminated will be performed in part by another agency of the Government, on a reimbursable basis, and the remaining duties will be added to those already assigned to a present Board employee.

This reduction is being undertaken on an experimental basis and will, of necessity, be reconsidered if it substantially impedes the Board in fulfilling its responsibilities under the Federal Coal Mine Safety Act.

Senator BYRD. I note that you are reducing your full-time staff from four employees to three. You indicate in your justification

statement that a part of the duties of the Executive Secretary will be performed by another agency on a reimbursable basis. Which duties are these and which agency will do the work?

Mr. TREVORROW. I will refer that to Mr. Freehling, our General Counsel.

ACCOUNTING AND BUDGETARY ACTIVITIES

Mr. FREEHLING. GSA will perform a substantial part of our accounting and budgetary activities, under contract. The rest of the administrative and other activities of the position will be performed by myself as General Counsel, in addition to my other duties.

Senator BYRD. In the event the legislation to which you have referred as having been passed by the House is passed by the Senate, will it create any impact on your activities, Mr. Trevorrow, which you will not be able to take care of under the budget as requested?

Mr. TREVORROW. The only thing in the present form, the bill calls for two additional members to represent the small mine operators, the small mineworkers. The other parts, I think, would not be materially affected. Those mines at the present time are inspected by the Federal inspectors under the Bureau of Mines so that should not substantially increase the number of inspectors.

As I can see it, it will be only in the salaries of the Board members—not the salaries, they are on a per diem basis. There should not be a material increase.

Senator BYRD. There will be no material impact on your Board?

Mr. FREEHLING. If I may interject, there is a possible impact, depending on how much litigation arises from the mines now exempt. There might be an increased caseload, but you can't project that until you see how much controversy arises under the new act.

NUMBER OF MINES PRESENTLY EXEMPT

Senator BYRD. How many mines are presently exempt, say, in West Virginia? Can you state this for the record?

Mr. TREVORROW. There are about 6,000 underground title I mines in the United States. I would say around 3,000 in West Virginia. They are the title I mines.

Senator BYRD. What do you mean by title I mines?

Mr. TREVORROW. Where less than 15 men are regularly employed underground.

Senator BYRD. How many do you say are in West Virginia?

Mr. TREVORROW. Somewhere around 3,000; I have not seen the figure. Mr. Freehling has corrected me. He says about 1,500 underground title I mines in West Virginia.

Senator BYRD. Would all these be affected by the new law?

Mr. TREVORROW. Yes.

Senator BYRD. All right. Thank you very much, gentlemen.

TUESDAY, MARCH 8, 1966.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

INDIAN HEALTH ACTIVITIES AND CONSTRUCTION OF INDIAN HEALTH ACTIVITES

STATEMENTS OF DR. ERWIN S. RABEAU, CHIEF, DIVISION OF INDIAN HEALTH; ACCOMPANIED BY DR. CARRUTH J. WAGNER, CHIEF, AND DR. ANDREW P. SACKETT, DEPUTY CHIEF, BUREAU OF MEDICAL SERVICES; DR. KAZUMI KASUGA, DEPUTY CHIEF; HENRY V. CHADWICK, EXECUTIVE OFFICER; ROBERT A. COHEN, CHIEF, CONSTRUCTION AND MAINTENANCE BRANCH; CHARLES C. JOHNSON, CHIEF, OFFICE OF ENVIRONMENTAL HEALTH; AND SOL ORDEN, CHIEF, FINANCIAL MANAGEMENT BRANCH, DIVISION OF INDIAN HEALTH; DR. LEO J. GEHRIG, DEPUTY SURGEON GENERAL, AND G. RICHARD CLAGUE, DEPUTY CHIEF FINANCE OFFICER, PUBLIC HEALTH SERVICE; AND ROBERT C. HARRIS, PRINCIPAL BUDGET EXAMINER, OFFICE OF THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE

1967 BUDGET REQUEST

Senator BYRD. The subcommittee will now hear testimony from the Division of Indian Health.

There will be placed in the record the justifications for a budget estimate of $73,448,000 for Indian health activities in fiscal year 1967. This is $7,255,000 over the amount appropriated thus far for fiscal year 1966.

(The justifications follow:)

INDIAN HEALTH ACTIVITIES

The Division of Indian Health has the responsibility of providing total medical care services to approximately 380,000 Indians and Alaskan natives. These health services are of a comprehensive type which include prevention, treatment, and rehabilitation services on an individual, as well as a community basis.

Services in 1967 will be provided through a system of 49 hospitals, their outpatient clinics, 46 health centers (which includes centers at larger Bureau of Indian Affairs boarding schools) and at about 300 other locations which include health stations and satellite field clinics. Services will also be provided through contractual arrangements with non-Federal hospitals, private physicians, dentists, and State and local agencies.

Despite the steady improvement in the health status of the Indian and Alaskan native beneficiaries, they still bear excessive burdens of disease, illness, accumulated disability, and premature death. The health status of American Indians and Alaskan natives is comparable to that found in the general population of a generation ago.

Most illnesses and 17 percent of the deaths are due to infectious diseases and their residuals. These diseases include gastroenteritis and the dysenteries, influenza, pneumonia, tuberculosis, otitis media, and trachoma.

Health problems among these peoples reflect the extreme hardship of their physical environment, social isolation, varying levels of education, and limited economic opportunity in the places they live.

Gross insanitary conditions, poor and crowded housing, lack of available safe water supplies, inadequate nutrition based on impoverished socioeconomic status, and the emotional problems inherent in a cultural transition support the high rates of infectious diseases, emotional problems, and mental illnesses.

The latest available data (1963 and 1964) indicate significantly higher mortality rates among Indians and Alaskan natives than among the general population. Indian mortality rates for selected causes as compared to those for all races, are as follows:

Infant deaths per 1,000 live births

Indian excluding Alaskan native: About 1.6 times higher.
Alaskan native: Over two times higher.

Infectious diseases (rates per 100,000 population)

Tuberculosis mortality, Indian and Alaskan native: About five times greater.

Gastroenteric diseases

Indian: About five times greater.

Influenza and pneumonia

Indian excluding Alaskan native: About two times greater.
Alaskan native: Nearly three times greater.

Incidence rates for many of the infectious diseases show even greater disparities:

(New active) tuberculosis: Indian: About seven times higher; Alaskan native: About 23 times higher.

Dysentery (amoebic and bacillary): Indian: About 49 times greater.

Measles: Indian: About three times greater.

These health deficiencies and the need for resources and methods for nurturing acceptable health practices to overcome the existing problems are recognized by both the Public Health Service and its Indian and Alaskan native beneficiaries. Their growing recognition of the benefits of modern medicine and health practices is amply demonstrated by their increasing use and acceptance of available health services and the more active participation of tribal councils and individual members in health affairs.

Hospitalization and clinic services

Hospital admissions continue at a high rate and reached about 92,000 in 1965. Leading reasons for hospitalization, outside of the Alaskan native hospitals are (1) deliveries, (2) respiratory conditions, (3) accidents, (4) diseases of the digestive system, and (5) nervous system and sense organs (eye and ear, etc.). In Alaska, respiratory illnesses rank first, deliveries second, accidents third, diseases of digestive system fourth, and eye and ear fifth.

Pediatric workload is high, comprising between 34 and 38 percent respectively of the Indian and Alaskan native general hospital discharges. Readmissions, especially among the very young children up to 5 years of age, are high (attributed to a great extent to the home environment, lack of sanitary facilities, exposure to reinfections, malnutrition, neglect, accidental injuries). Of the pediatrict discharges from Indian general hospitals, 70 percent involve hospital episodes of children under 5 years of age.

Outpatient visits and workloads at all hospital clinics, field health clinics and stations are increasing, especially the immunization workloads.

In March of 1965 the Division of Indian Health completed its program plan for fiscal year 1967. This plan was initiated at the service unit level and consolidated into a comprehensive plan with Indian cooperation and consultation. This plan identifies the existing health deficiencies among the beneficiaries served and the major areas in which programs must be strengthened to meet these deficiencies.

The Division's objectives and plans for 1967 to combat the major health problems among Indians and Alaskan natives are contained in the 1967 budget as follows:

I. HEALTH PROBLEM

To combat the high morbidity among mothers and children and high infant mortality.

Objective and plan

1. Reduce complications of pregnancy from 25 percent in 1966 to 23 percent in 1967 by:

(*a*) Intensifying and expanding educational efforts to bring 55 percent of expectant mothers under medical supervision before the third trimester of pregnancy as opposed to 50 percent in 1966.

(*b*) Increasing the number of hospital deliveries to 97 percent of registered births as opposed to 96 percent in 1966.

(*c*) Increasing the number of prenatal patients followed up in the home by a public health nurse to 40 percent with special priority to high-risk patients and women with first pregnancy as opposed to 30 percent in 1966.

(*d*) Increasing the number of postnatal medical examinations to 55 percent of all deliveries as opposed to 51 percent in 1966.

(*e*) Providing public health nursing services to 45 percent of postnatal patients as opposed to 40 percent in 1966.

(*f*) Providing specialized MCH medical direction and supervision to at least three areas.

2. Decrease morbidity and mortality in infants under 7 days of age and between 7 and 28 days by:

(*a*) Intensifying care of premature infants and those born of high-risk mothers, with followup in home by public health nurses within 1 week after discharge from hospital.

(*b*) Expanding educational efforts toward improving food habits and encouraging breast feeding and/or proper formula preparation.

(*c*) Improving PKU screening of infants.

(*d*) Improving maternal child health services through staff education in obstetric and/or pediatrics (4 percent professional hospital nursing staff and 15 percent of trained practical nurse staff in 1967 versus 3 and 10 percent, respectively, in 1966).

3. Decreasing morbidity and mortality in postneonatal (28 days through 11 months) period, primarily through reduction in the high incidence of infectious disease among infants and children by:

(*a*) Establishing additional well-child health clinics in strategic locations so that 70 percent of infants will receive three health examinations during the first year of life as opposed to 65 percent in 1966.

(*b*) Intensifying effort to increase to 80 percent the number of infants brought under public health nursing care as opposed to 75 percent in 1966.

(*c*) Improving recording and reporting in clinics and outpatient departments to obtain reliable statistical data for program planning and evaluation.

(*d*) Intensifying the immunization program to 70 percent of infants properly immunized in 1967 and 70 percent of the children before entering school. This compares with 60 and 65 percent, respectively, in 1966.

(*e*) Emphasizing education in health matters in all facilities and in home and community contacts; motivating hygienic practices, providing clinics on feeding of children, interpreting relationship of healthful living and child care to incidence of frequently occurring communicable diseases.

(*f*) Improving epidemiological techniques through specialty instruction of 105 staff members throughout the Division as opposed to 90 in 1966.

4. Providing for early identification and treatment of crippling conditions among children by:

(*a*) Perfecting existing "Registers" and improving case-finding methods.

(*b*) Establishing speech and hearing therapy programs having 80 percent of needy children under care by 1967.

(*c*) Utilizing all available resources including Federal State, and local agencies for the education and rehabilitation of handicapped children.

5. Provide and implement a comprehensive school health program by:

(*a*) Providing 50 percent of preschool children with physical examination before entering school as opposed to 35 percent in 1966.

(*b*) Providing 90 percent of beginners not previously examined with physical examinations and thereby maintaining 1966 level.

(*c*) Maintaining periodic examination of schoolchildren: vision and hearing tests for all school-age groups.

(*d*) Planning with BIA and the school faculties for the integration of health in school instructions.

II. HEALTH PROBLEM

To combat high rates of morbidity and mortality due to accidents.

Objective and plan

1. Establish routine for identifying accidents more definitively by type (cause of injury) and extent to which they occur, and by place of occurrence: highway, home, school, place of employment or health facility, to assess significance of circumstances and areas on which it is feasible to focus effort by:
   (*a*) Improving a system for gathering more definitive statistics on the real nature and extent of the problem, divisionwide, and extend this system beyond the area of hospitalized individuals.
   (*b*) Processing records mechanically and analyzing the data on accidental injuries.
   (*c*) Improving application of epidemiological principles for identifying the health problem in precise terms through staff training.
2. Reduce the mortality and the extent and severity of morbidity and residuals of accidental injuries by:
   (*a*) Developing in-service training programs for DIH personnel on effective care and treatment of injuries at the scene of the accident and at hospital and clinics.
   (*b*) Establishing adequate rehabilitation services through use of DIH facilities, other Federal hospitals and available State and local resources.
3. Effect reduction in accidents in hospitals and other health facilities by:
   (*a*) Strengthening safety programs in Division of Indian Health facilities by:
      (1) Continually reviewing, updating, and improving all DIH facility fire and disaster plans and conducting disaster drills at least once a year.
      (2) Providing for an annual inspection and reporting system which identifies deficiencies.
      (3) Continually correcting all hazards or deficiencies on detection or identification as soon as possible.
      (4) Evaluating the effectiveness of active safety committees conducting regularly scheduled meetings at all facilities.
      (5) Promoting patient education on accident prevention and expanding and exploring new and better educational courses and materials.
      (6) Reemphasizing the need to report and review each patient accident and medication error to determine the cause and prevent repeated occurrence.

III. HEALTH PROBLEM

To combat oral health problems.

Objective and plan

1. Reduce the abnormal loss of teeth among beneficiaries by:
   (*a*) Preventing and treating dental decay and periodontal diseases.
2. Reduce the incidence of dental decay by preventing the development of new decay in persons less than age 18 by:
   (*a*) Topically fluoridating the teeth of 82,000 patients as opposed to 76,000 in 1966.
   (*b*) Adding fluoride to 42 percent of the community water systems as opposed to 37 percent in 1966.
   (*c*) Adding fluoride supplement to the diets of 14 percent of persons less than age 10 where water supply is deficient in fluorides (12 percent in 1966).
3. Reduce the prevalence of dental decay by restoring decayed teeth by:
   (*a*) Increasing operative services to 215,000 services as opposed to 202,000 in 1966.
   (*b*) Increasing the number of persons treated in the program through:
      (1) The creation of greater demand for services and cooperation through health education among staff and community.
      (2) The distribution of services to centers of population having the greatest need and desire for services.
      (3) The extension of referral systems.

(4) The identification and treatment of special groups.

(c) Developing and training more efficient personnel by:

(1) Training and placing 26 dental assistants as opposed to 24 in 1966.

(2) Training of 28 dental teams at two facilities thereby maintaining 1966 level.

(3) Short course training of eight dental personnel thereby maintaining 1966 level.

(4) Long-term training of three dental personnel as opposed to two in 1966.

(5) DIH internship training of dental interns at two facilities.

4. Reduce the prevalence of periodontal disease by:

(a) Treating conditions that predispose to periodontal disease.

(b) Reducing the calculus index by age group.

(c) Improving oral hygiene through education and instruction in home care.

(d) Improving the alinement of the developing dentition to prevent traumatic occlusion, food impaction, and food accumulation.

(e) Correcting periodontal disease among beneficiaries by treating 1,000 cases in persons less than age 18.

5. Reduce the extent of damaged oral tissues by restoring oral structures damaged by disease, trauma and/or malformations by:

(a) Replacing lost teeth with fixed and removable appliances.

(b) Determining causes of oral pathology and oral trauma and treat all cases found.

IV. HEALTH PROBLEM

To improve the dietary practices and level of nutritional health of beneficiaries.

Objective and plan

1. Incorporate nutrition services in plans of action for other health problems: reduction of high infant mortality and high morbidity among mothers and children, preventive measures in oral health problems, prevention and treatment of chronic illness and infection.

2. Implement plan for measuring nutritional health by:

(a) Collecting measurable nutritional status data through the Division's reporting system.

(b) Extending dietary surveys to gather base line data for dietary practices in three additional service units.

(c) Continuing and extending studies of infant hemoglobin levels and food intakes in two more service units.

3. Emphasize education of beneficiaries and staff through:

(a) Extending and intensifying nutrition consultation to Division staff, Bureau of Indian Affairs, parochial schools, and other related agency personnel in each area.

(b) Continuing and extending planned teaching of nutrition for beneficiaries and nutrition classes for staff in five additional service units.

(c) Continuing and amplifying planned teaching of nutrition for patients in 20 percent of the hospitals.

V. HEALTH PROBLEM

Identification, prevention, and treatment of community mental health problems.

Objective and plan

1. Initiate the determination of mental health status through the collection of base line mental health data by:

(a) Operation of a community mental health project for Pine Ridge Service Unit, Aberdeen Area.

(b) Development of a definitive reporting system.

(c) Development of techniques for instruction of DIH and related agency staff in the application of positive mental health concepts to all community health activities in the Pine Ridge project.

2. Provide services for acutely ill and focus upon preventive and rehabilitative needs within on-going health programs by:

(a) Continuation of mental health services within current program activities and considering the feasibility of hospitalizing emergent mentally ill in DIH medical centers.

VI. HEALTH PROBLEM

To overcome the limited and inadequate care of the chronically ill and handicapped.

Objective and plan

1. Identify the chronic diseases and handicapping conditions occurring in all age groups of the beneficiary population by:
   (*a*) Initiation and evaluation of reporting systems.
   (*b*) Continuation of registers for selected chronic diseases and handicapping conditions and extension to include additional diseases and conditions as problems are further identified.
2. Provide early detection of chronic diseases and handicapping conditions by:
   (*a*) Improving examination techniques through in-service training of personnel so that congenital malformations and birth defects in infants are detected before leaving the hospital.
   (*b*) Establishing well-child conferences at all DIH hospitals and health centers with emphasis on early correction of defects.
   (*c*) Continuing routine chest X-rays on all hospital admissions and periodic X-rays on staff in all areas.
   (*d*) Continuing screening programs for detection of diabetes, cancer, etc., in all areas.
   (*e*) Promotion of improved referral system and study of communications problems.
3. Provide comprehensive care and rehabilitation for long-term care patients by:
   (*a*) Continuing utilization of all available resources to provide long-term care and rehabilitation services.
   (*b*) Extending medical services to all beneficiary inhabitants of nursing homes.
   (*c*) Continuing to upgrade quality of restorative care through in-service training of personnel.

VII. HEALTH PROBLEM

To combat adverse physical environment, unsafe water, and food handling, and inadequate waste disposal.

Objective and plan

1. Make available basic sanitation facilities (water supply and waste disposal) to an additional 5 percent of the Indian and Alaska native families by:
   (*a*) Initiating an estimated 39 sanitation facilities projects during the fiscal year.
2. Cooperate with the Public Housing Administration and the BIA Federal Housing Program by construction of sanitation facilities to serve all Federal Indian housing construction initiated during the fiscal year through:
   (*a*) Constructing sanitation facilities to serve an anticipated 2,000 units of new Federal Indian housing.
3. Provide advisory and consultative services necessary for the evaluation and maintenance of the highest possible level of environmental sanitation in Federal institutions serving Indians to an extent of 75 percent of the known need by:
   (*a*) Conducting a biennial environmental health survey of 50 percent of the major facilities (services provided 24 hours a day) and 25 percent of the minor facilities (services provided less than 12 hours a day) that have not been surveyed during the last 2 years.
   (*b*) Conducting semi-annual inspections at 30 percent of the food service operations in Federal facilities serving Indians.
4. Improve general sanitation conditions and practices in Indian homes by meeting an overall 56 percent of the need for services and consultation by—
   (*a*) Conducting comprehensive environmental sanitation surveys at 30 percent of the individual Indian homes.
   (*b*) Providing advisory and consultative services to Indian groups on sanitation at all Indian celebrations needing such services.
   (*c*) Preparing and distributing educational materials and conducting training courses that will assist in continued use, operation, maintenance and repair of 100 percent of the constructed and installed sanitation facilities in Indian homes and communities.

(*d*) Conducting followup surveys on operation and maintenance of 85 percent (representing 95 percent of population served) of the completed community facilities constructed under the Indian Sanitation Facilities Construction Act.

(*c*) Conducting followup surveys on 80 percent of the completed individual facilities.

The amount of $73,448,000 in appropriated funds is requested for 1967. This represents an increase of $6,278,000 over 1966 estimated availability and will be used for the above objectives to permit further progress toward the goal of Federal programs for Indians which is to provide them with the means to attain economic and social self-sufficiency within the mainstream of American life. In order to achieve this goal it is necessary to improve the health of the Indian communities to the highest possible level and provide the Indians with a general understanding of the nature and purposes of scientific medicine.

Hospital health services

The 1967 estimate provides for a program increase of $2,761,000. This increase will permit (1) increase in employment and other related costs commensurate with increased quality of patient care and workload changes; (2) funds for the establishment of an Alaska nonbeneficiary program; (3) funds for the establishment of a pediatric residency program, a health records training program and a COSTEP training program; (4) additional funds for the maintenance of facilities; (5) increased funds for consultant services; (6) additional funds for equipment requirements; and, (7) the transfer of 70 positions from the Division of Indian Health 1967 employment base to the Bureau of Indian Affairs in accordance with the memorandum of agreement transferring reimbursable common services, utilities and facilities on Mount Edgecumbe, Alaska, from the Public Health Service to the Bureau of Indian Affairs.

The budget for 1967 provides for (1) a net increase in the average daily patient census of 40 patients per day (increase of 55 general medical and surgical patients and decrease of 15 tuberculosis patients); (2) an increase in hospital admissions of 1,350; (3) workload resulting from an increase in births of 200; and (4) an increase in outpatient visits of 23,000.

Contract medical care

An increase of $1,076,000 will provide for contract hospitalization of an additional average daily load of 26 patients, representing an increase of 21 general patients, an increase of 10 neuropsychiatric patients, and a decrease of 5 tuberculosis patients, as well as higher per diem contract hospital costs.

Field health services

The 1967 estimate provides for a program increase of $1,377,000. This increase will permit an increase in employment and other related costs for the extension and improvement of preventive health services to Indian communities.

Administration

The 1967 estimate provides for a net program decrease of $121,000 resulting from a minor program increase of $28,000 and a program decrease of $149,000 because of the transfer of construction functions from the Division of Indian Health to the Office of the Surgeon General.

Indian health activities

Appropriation, 1965	$62,940,000
Total amount available, 1965	62,940,000
Appropriation, 1966	66,193,000
Transferred to "Office of Surgeon General, salaries and expenses" (42 U.S.C. 226)	−11,000
Transferred to "Operating expenses, Public Buildings Service" (79 Stat. 531)	−10,000
Proposed supplemental for civilian pay raise	730,000
Proposed supplemental for military pay raise	268,000
Total amount available, 1966	67,170,000

SUMMARY OF INCREASES AND DECREASES, 1967

Hospital health services: To provide for mandatory increases, and program increases for additional staff; establishment of Alaska nonbeneficiary program, health records training program, pediatric residency program, and COSTEP training program; additional maintenance of facilities and consultant services; new and replacement equipment and includes the transfer of 70 positions to the Bureau of Indian Affairs	+$3,561,000
Net change, hospital health services	+3,561,000
Contract medical care: To provide for mandatory increases and additional workload and price increases	+1,081,000
Net change, contract medical care	+1,081,000
Field health services: To provide for mandatory increases, and program increases in the preventive health activities of sanitation, dental, public health nursing, health education, and field medical services	+1,698,000
Net change, field health services	+1,698,000
Administration:	
To provide for mandatory increases and program increases	+87,000
Less: Transfer of construction functions from Division of Indian Health to Office of the Surgeon General	−149,000
Net change, administration	−62,000
Net change, 1967	+6,278,000
Budget estimate, 1967	73,448,000

Analysis by activities

Activity	Amount available, 1965	Amount available, 1966	Estimate, 1967	Increase (+) or decrease (−)
Hospital health services	$37,647,255	$39,323,000	$42,884,000	+$3,561,000
Contract medical care	11,659,216	12,861,000	13,942,000	+1,081,000
Field Health services	11,597,330	13,094,000	14,792,000	+1,698,000
Administration	1,821,042	1,892,000	1,830,000	−62,000
Unobligated balance lapsing	215,157			
Total	[1] 62,940,000	[1] 67,170,000	[1] 73,448,000	+6,278,000

[1] Excludes reimbursements as follows: 1965, $665,000; 1966, $875,000; 1967, $406,000.

1. Hospital health services

Activity	Amount available 1965	Amount available 1966	Estimate 1967	Increase (+) decrease (−)
Hospital health services	$37,647,255	$39,323,000	$42,884,000	+$3,561,000

The estimate of $42,884,000, an increase of $3,561,000, consists of the following:

Statutory salary promotions	$315,000
Social security amendment rate increase, Public Law 89-97	57,000
Annualization of Military Pay Act increase, Public Law 89-132	28,000
Annualization of Civilian Pay Act increase, Public Law 89-301	226,000
Wage board increases from September 15, 1964, through September 15, 1965	174,000
Total mandatory increase	800,000
Program increase	2,761,000
Net increase	3,561,000

Need for increase

The increase of $3,561,000 is requested for the following:

1. Funds for additional staff to improve the quality of medical care. Improvement of inpatient and outpatient employee patient ratios.
2. Funds for increases in workload and cost.
3. Funds to provide services for nonbeneficiaries in remote areas of Alaska.
4. Funds to provide for additional fee-basis physicians (consultants).
5. Funds for additional training.
6. Funds to meet maintenance and repair requirements.
7. Funds to meet equipment requirements in terms of backlog, normal replacement and new equipment.
8. Funds to cover mandatory increases.

Additional staff to improve inpatient and outpatient employee patient ratio (279 position and $1,569,000)

Considerabl attention has been given for many years to the strengthening of the on-going medical care program. The continued improvement in facilities with new and modernized buildings will permit the achievement of an improved quality of medical care. A measure of this is found in the increasing number of facilities meeting the minimum health and safety structural standards of the Joint Commission on Accreditation of Hospitals.

However, there remains significant obstacles to overcome in achieving an improved quality of medical care. These have been documented in the Division's annual review of problems and deficiencies. Concern has been expressed in previous hearings regarding the quality of medical care in DIH hospitals and the need to meet the standards of services now being met in community and other Federal hospitals. Deficiencies noted in Joint Commission surveys are attributable to staffing limitations. The limitations are easily portrayed in the following table which compares the Division of Indian Health Hospitals employee patient ratios with those of other short-term general hospitals:

	Employee per 100 patients	Average length of stay
All short term hospitals	232	8.4
Federal	167	20.1
Non-Federal	242	7.8
DIH Indian-general hospitals	[1] 163	9.3

[1] Fiscal year 1964 data which includes personnel for outpatient operations.

Source of above: August 1, 1965 guide issue of the Journal of Americal Hospital Association.

Evaluation of these ratios should include consideration of the following factors:

1. DIH Indian general hospital ratio of employees per 100 patients includes personnel for outpatient operations which in our facilities are large and active. The ratio in 1965 excluding outpatients staff was 149 per 100 patients and it will be 153 in 1966.

2. Eighty-four percent of DIH hospitals are less than 100 beds while 61 percent of non-Federal short-term hospitals are less than 100 beds.

3. DIH hospitals have acutely ill patients, and a high percentage of female and pediatric patients, characteristics comparable to those in the community hospital.

4. Because of isolation and severe climatic conditions, our hospitals require more than the normal number of supporting staff including supply, utility, and maintenance personnel.

5. The need to provide services regardless of the size of the workload requires a minimum staff excessive to the average employee patient ratio.

Limitation of overall ratio of employees to patients has resulted in limited hours of nursing coverage and care, shortages of food service workers and technicians together with maintenance and housekeeping personnel. In view of this obvious deficiency of manpower, employees have been overloaded and attempts to attain accreditation for hospitals have been handicapped severely.

Similar handicaps have been experienced in outpatient services where manpower has been limited to approximately one-half a man-year per 1,000 visits. The 1966 ratio of 0.53 allows an average of 5.8 minutes per visit. The requested ratio of 0.65 for 1967 will permit an average of 7.2 minutes per visit.

An increase of $1,569,000 is required to cover the 279 positions that are requested. The utilization of personnel requested in terms of improved employee/patient ratio is reflected in the table on page — which groups hospitals in our system by size and/or mission and relates to each group the employee/patient ratios for 1965, 1966, and 1967.

Additional workload (seven positions and $55,000)

A continued increase in the number of admissions, births, and outpatient visits will require additional resources in personnel and other expenses. The average daily patient load reflects an increase of the more intensive medical care given acute general medical and surgical patients which is much more expensive than routine TB patient care which has declined. Workload changes anticipated for 1967 are as follows:

Increase in number of outpatient visits	23,000
Increase in number of births	200
Increase in number of hospital admissions	1,350
Increase in number of general patients per day	55
Decrease in number of tuberculosis patients per day	15
Net increase of average daily patient load	40

A program increase of $55,000 and seven positions is requested for 1967 to provide for the increased costs required to maintain the additional workload for more expensive general medical and surgical patients: the increased number of outpatient visits, admissions, and births.

Alaska nonbeneficiary program (16 positions and $175,000)

Sixteen positions and $175,000 are requested so that the Division of Indian Health may provide services to approximately 4,000 nonbeneficiaries living in the remote areas of Alaska. This Division operates the only medical and dental programs in these areas. It is estimated that a daily average of 5 will receive inpatient care and that the outpatient visits will number 10,000 per year. The nonbeneficiary will receive services on the same priority basis established for the Alaska native. The Division of Indian Health will be reimbursed at a rate comparable to that charged by a private resource if DIH facilities were not available.

Fee basis physician consultants (increase of $200,000)

There is a pressing need for more consultants to visit DIH hospitals. At the present time only minimum emergency and limited consultant services are available. Recent accreditation surveys have recommended more frequent visits of consultants to advise, supervise, and assist in carrying on a more comprehensive medical program. Through necessity, the DIH hospitals must rely on consulting pathologists and radiologists. The updating of facilities, such as modern

surgical suites and equipment, have made it possible to utilize more consulting specialty services in the smaller hospitals. There is a continuing need to improve the morale and confidence of the young medical officers operating IHH hospitals through broadening their medical experience.

The further use of consultants will also provide broader medical coverage and generally improve the quality and quantity of care to IHH beneficiaries. It is estimated that there is a need for at least a 55-percent increase in funds to purchase the services of specialists in such fields as surgery, radiology, pathology, orthopedics, internal medicine, and anesthesia.

Training (4 positions and $110,000)

Alaska pediatric residency—Two positions and $30,000.—The President has indicated his desire to reduce the infant death rate in the United States from 25 per 1,000 live births to 16 per 1,000. The comparable rate for Indians is 43 per 1,000 and for Alaska natives 51 per 1,000.

These data dictate the development of an aggressive pediatric program for these disadvantaged groups.

Forty percent of the patients seen in Indian health facilities are in the pediatric area. The needs for additional pediatricians and the inability of the Division to recruit these from outside of its staff were highlighted in the report of the Indian Health Committee of the American Academy of Pediatrics in January of 1965 when they stated:

"The committee recognizes that the establishment of physician residency programs suggested as early as the 1957 Task Force Report of the Surgeon General, are an important element in effective staffing of Indian health facilities and programs. It is recommended that every effort be made to staff these residency programs fully and that consideration be given to expansion of these programs to facilities within the Indian health program."

A pediatric residency program at the Anchorage Native Health Medical Center would provide a major step forward in providing the needed specially trained pediatricians for the Division's program.

The facilities and staff for the medical center have been reviewed and found ideally suited for such a training program. Since no other physician residency program exists in Alaska, it would also constitute a major contribution to the total health program of that region.

Funds requested for this program provide for two full-time residents.

Training health records—2 positions and $45,000

There is a great need in the Division of Indian Health for trained medical record technicians.

Funds are requested to establish an approved school for ARTS (accredited record technicians) in the Phoenix, Ariz., Indian hospital and in conjunction with the Epidemiology Training Center. The curriculum would be approved by the American Association of Medical Record Librarians (AAMRL). Ten students (male or female) who are Indian high school graduates would be trained each year. While the Indian will be given first preference, non-Indians will not be excluded from the course. The students will be assisted by a stipend.

The course will be 12 full months and include 6 weeks affiliation in a private hospital. Funds requested for this program provide for a faculty of two full-time personnel consisting of a school director and an administrative assistant.

Physicians, surgeons, and pathologists of the PHS Indian hospital in Phoenix will conduct the professional classes. Appropriate instruction will be given in the fields of anatomy, physiology, and pharmacology. The technical training (terminology, coding, filing systems, etc.) will be provided by the school director.

This program will bolster the inadequate and understaffed health records program of the Division.

COSTEP—Advanced professional training—$35,000

This increase will permit an expansion of the commissioned officer student training extern program which provides a successful mechanism for training, recruitment, and career development of new officers in the Service.

The COSTEP program provides training opportunities in a professional environment for students in health-related studies and stimulation of interest by promising students in Public Health Service careers and continues to serve as an effective recruiting technique for helping to meet the manpower requirements of the Public Health Service. The requested increase will permit an increase of 25 students for an average length of training from 70 to 90 days for each student.

Maintenance and repair (increase of $190,000)

To maintain and to make minor repairs to the Division of Indian Health real property and related equipment in fiscal year 1967 will cost $1,500,000, which is an increase of $190,000 over the 1966 level. The basis for this requirement of funds is the projected total area of 4,182,000 square feet of building space to be maintained; the maintenance of surrounding grounds, walks, drives, and parking areas; the maintenance of the boiler plants, electrical generators, sewage disposal systems, and the utility services for electricity; sterilizers; the procurement of tools and special instruments to accomplish the above work; and the minor repairs which can be accomplished within this funding.

Included in the maintenance responsibility of the Division of Indian Health is 826,280 square feet of building space in Alaska where costs are very high, 835,385 square feet of building space constructed prior to 1936 requiring extensive repairs, steam boilers in service far beyond their normal operating age that should be replaced, deficiencies in our older hospitals that should be corrected to provide reasonable standards of health services, and a large backlog of minor structural repairs and painting that should be accomplished without further delay.

Equipment (increase of $462,000)

An increase of $462,000 over the 1966 level of $1,160,000 is requested for equipment. Of the total of $1,622,000, $1,436,000 will be applied against the current large equipment backlog and replacement requirements; $186,000 will provide for groups II and III (portable) equipment requirements related to new construction ($155,000), vehicle replacement purchases ($6,000), and additional equipment ($25,000).

The following table sets forth the hospital health services current equipment backlog and the replacement requirements and estimated acquisitions for 1966 and 1967:

Backlog as of July 1, 1965 (beginning fiscal year 1966)	$3,292,000
1966 replacement requirements	+398,000
1966 other requirements including construction	+246,000
1966 estimated replacement acquisitions	−914,000
1966 estimated other acquisitions	−246,000
Backlog as of July 1, 1966 (beginning fiscal year 1967)	2,776,000
1967 replacement requirements	+675,000
1967 other requirements including construction	+186,000
1967 estimated replacement acquisitions	−1,436,000
1967 estimated other acquisitions	−186,000
Backlog as of July 1, 1967 (beginning fiscal year 1968)	2,015,000

Transfer of employment ceiling (decrease of 70 positions)

A decrease of 70 positions from the Division of Indian Health 1967 employment base is effected pursuant to the memorandum of agreement transferring reimbursable common services, utilities, and facilities on Mount Edgecombe, Alaska, from the Public Health Service to the Bureau of Indian Affairs.

This transfer was dictated by a decrease in activities and the utilization of island facilities by DIH in recent years, concurrent with an increase in activities by the BIA which resulted in the Bureau of Indian Affairs having major occupancy of the island.

Considering the reversal of the roles of major user it is appropriate that the operation and maintenance responsibilities for furnishing common services such as heat, water, electricity, on a reimbursable basis to other Government agencies located on the island pass to the Bureau of Indian Affairs. The transfer of common services from the Division of Indian Health to the Bureau of Indian Affairs does not affect the 1967 appropriation request since such services are provided on a reimbursable basis.

Plan of work

For 1967 an appropriation in the amount of $42,884,000 is requested for the hospital health services activity, to cover (1) the operation of 49 Public Health Service Indian hospitals and attached outpatient clinics (2) a nurse training program associated with Public Health Service Indian hospitals and (3) the maintenance of all Public Health Service Indian health facilities consisting of hospitals, health centers, stations, school clinics, and staff quarters.

The hospitals operated by the Division of Indian Health vary in size from 12 to 381 beds and in complexity from primary medical care facilities to comprehensive referral centers. The 42 facilities eligible for survey by the Joint Commission on Accreditation of Hospitals are being improved to meet and maintain these minimal standards as resources become available. At the present time 14 have accreditation and another 12 are preparing for a survey. Three hospitals were accredited in 1965.

The replacement hospitals at Barrow, Alaska and Fort Yates, N. Dak. will be in full operation in fiscal year 1967. The modernized hospital at Crow Agency, Mont. will be in full operation in fiscal year 1967. The Belcourt, N. Dak. and Lawton, Okla. replacement hospitals will be completed in fiscal year 1967; the expansion of the outpatient department at the Wagner, S. Dak., hospitals will be completed in fiscal year 1967.

A new program is being initiated to provide services to approximately 4,000 nonbeneficiaries living in the remote areas of Alaska.

Workloads for the total program are expected to be as reflected on the table that follows:

HOSPITAL HEALTH SERVICES

Workload data

	1965 actual	1966 estimate	1967 estimate	Change (+) or (−)
AVERAGE DAILY PATIENT CENSUS BY TYPE OF PATIENT (EXCLUDING NEWBORN)				
Total average daily census	2,244	2,200	2,240	+40
General patients	1,891	1,935	1,990	+55
Tuberculosis patients	353	265	250	−15
United States excluding Alaska	1,668	1,640	1,680	+40
General patients	1,450	1,475	1,520	+45
Tuberculosis patients	218	165	160	−5
Alaska	576	560	560	0
General patients	441	460	470	+10
Tuberculosis patients	135	100	90	−10
Total admissions (excluding births)	67,744	69,150	70,500	+1,350
Total births, all Public Health Service Indian hospitals	9,514	9,700	9,900	+200
OUTPATIENT VISITS FOR MEDICAL THERAPEUTIC AND PREVENTIVE SERVICE AT HOSPITAL FACILITIES				
Total visits	757,512	774,000	797,000	+23,000
United States excluding Alaska	682,693	699,000	710,000	+11,000
Alaska	74,819	75,000	87,000	+12,000

Employee/patient ratios and average daily patient loads, by type of hospital

Number and type hospital	Average daily patient load	Employees per 100 patients		
		1965	1966	1967
United States excluding Alaska:				
2 general	120 to 160	147	148	153
6 general	45 to 100	158	158	162
14 general	25 to 45	141	143	148
18 general	10 to 25	173	175	177
40 general		153	154	158
2 tuberculosis	80 to 95	92	103	103
Alaska:				
2 general	100 to 350	155	164	159
2 general	40 to 60	156	156	162
3 general	10 to 25	203	203	224
49 hospitals		149	153	156

Itemization of estimate, hospital health services

Obligations by objects	Actual, 1965	Amount available, 1966	Estimate, 1967	Increase (+) or decrease (−)
11 Personnel compensation	$26,390,795	$27,346,000	$29,437,000	+$2,091,000
12 Personnel benefits	2,205,968	2,290,000	2,526,000	+236,000
21 Travel and transportation of persons	999,526	1,004,000	1,017,000	+13,000
22 Transportation of things	556,010	551,000	585,000	+34,000
23 Rent, communication, and utilities	1,542,899	1,536,000	1,497,000	−39,000
24 Printing and reproduction	63,773	64,000	64,000	
25 Other services	1,916,325	1,938,000	2,708,000	+770,000
26 Supplies and materials	4,125,965	4,199,000	4,198,000	−1,000
31 Equipment	494,770	1,160,000	1,622,000	+462,000
42 Insurance, claims, and indemnities	2,000			
Subtotal	38,298,031	40,088,000	43,654,000	+3,566,000
Deduct quarters and subsistence charges	650,776	765,000	770,000	−5,000
Net obligations	37,647,255	39,323,000	42,884,000	+3,561,000

[1] Excludes reimbursements as follows: 1965, $665,000; 1966, $875,000; 1967, $406,000.

2. Contract medical care

Activity	Amount available, 1965	Amount available, 1966	Estimate, 1967	Increase (+)
Contract medical care	$11,659,216	$12,861,000	$13,942,000	+$1,081,000

The estimate of $13,942,000 provides an increase of $1,081,000 consisting of:

1. An increase of $404,000 for the hospitalization, medical care, and transportation of an average of 26 additional patients per day during fiscal year 1967 and $50,000 to meet minimum requirements of the contract dental program.
2. An increase of $622,000 for rising costs of program operation.
3. An increase of $5,000 to provide for statutory pay increases.

Need for increase

An increase of $404,000 is requested to provide for the hospitalization of an average of 26 additional patients per day. This increase consists of (1) $305,000 to cover hospital per diem costs for 21 additional general medical and surgical patients and 10 additional neuropsychiatric patients; (2) $23,000 for patient and escort travel; (3) $94,000 for physicians' services; and (4) $16,000 for other expenses for a total increase of $438,000. This amount is offset by a $34,000 reduction resulting from a decrease in the tuberculosis patient load of five patients per day.

The potential use of contract dental services to match beneficiary needs is considerably above current contract resources. To continue to meet minimum demands of the contract dental program an increase of $50,000 will be required.

An analysis of the rates negotiated in agreements with the various hospitals, clinics, physicians, and dentists with which the Division of Indian Health has current formal contracts, indicates a steady upward trend of approximately 5 percent annually. Published continuing surveys of health care costs corroborate this trend and reveal an even higher nationwide rate of increase. In order to maintain the ongoing level of the amount of services provided under this program it is necessary to plan for this added cost, and request funds sufficient to cover the increase. The amount of $622,000 represents about 57 percent of the total increase requested for this activity.

A mandatory increase of $5,000 is necessary to provide funds for pay act increases.

Plan of work

The request of $13,942,000 is for the purchase of medical care through contractual arrangements and is an essential element of the Public Health Service Indian health 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 Indian beneficiaries who urgently need such services. In addition, the use of contract services makes possible special diagnostic and therapeutic services which many small and intermediate sized Public Health Service Indian hospitals cannot provide at economical costs. Emergency hospital and medical care services are frequently required at locations not readily accessible to health facilities directly operated by the PHS Indian health program. This Division does not operate any inpatient facilities equipped to provide psychiatric care to Indian beneficiaries and, therefore, this type of service must be procured through contracts.

The following table indicates the distribution of funds under the various items requested for the 1967 program. It also shows how 1965 funds were obligated and the plan of funding for 1966 operations. The actual experience of average daily patient loads are reported for 1965 together with expected levels for 1966 and 1967.

Contract medical care

	1965 actual			1966 estimate			1967 estimate		
	Average daily census	Rate	Amount	Average daily census	Rate	Amount	Average daily census	Rate	Amount
Hospitalization:									
General	490	$32.98	$5,808,473	505	$34.73	$6,401,000	526	$36.57	$7,021,000
Tuberculosis	183	17.86	1,192,959	215	18.75	1,471,000	210	19.68	1,508,000
Neuropsychiatric	210	6.58	504,357	220	6.96	559,000	230	7.36	617,000
Total	883	.....	7,595,789	940	.....	8,431,000	966	.....	9,146,000
Patient and escort travel	.....	.....	250,527	.....	.....	271,000	.....	.....	300,000
Professional field supervision	.....	.....	164,923	.....	.....	225,000	.....	.....	230,000
Physicians' services (inpatient fees, office visits, consultation services)	.....	.....	2,473,469	.....	.....	2,648,000	.....	.....	2,832,000
Dental services (emergency services, dental laboratory prosthesis)	.....	.....	450,222	.....	.....	460,000	.....	.....	510,000
Other costs (laboratory and X-ray services, pharmaceuticals, proprietary drugs for inpatients and outpatients, prosthesis and burials)	.....	.....	724,286	.....	.....	826,000	.....	.....	924,000
Total	.....	.....	11,659,216	.....	.....	12,861,000	.....	.....	13,942,000

3. Field health services

Subactivity	Amount available, 1965	Amount available, 1966	Estimate, 1967	Increase (+)
(a) Sanitation	$1,786,659	$2,177,000	$2,386,000	+$209,000
(b) Dental	2,040,167	2,095,000	2,342,000	+247,000
(c) Public health nursing	1,792,549	1,954,000	2,170,000	+216,000
(d) Health education	550,916	707,000	791,000	+84,000
(e) Field medical services	5,427,039	6,161,000	7,103,000	+942,000
Total	11,597,330	13,094,000	14,792,000	+1,698,000

Summary of change

Statutory salary promotions	$115,000
Social security amendment rate increase, Public Law 89-97	49,000
Annualization of 1966 new positions	32,000
Annualization of Military Pay Act increase, Public Law 89-132	22,000
Annualization of Civilian Pay Act increase, Public Law 89-301	103,000
Program increase (151 positions)	1,377,000
Net increase	1,698,000

(*a*) *Sanitation*

The estimate of $2,386,000 is an increase of $209,000 and 15 positions consisting of:

Statutory salary promotions	$18,000
Social security amendments, Public Law 89-97	12,000
Annualization of 1966 new position	6,000
Annualization of Military Pay Act increase, Public Law 89-132	6,000
Annualization of Civilian Pay Act increase, Public Law 89-301	8,000
Program increase	159,000
Net increase	209,000

Need for increase

Lack of basic sanitary facilities, gross insanitary practices, and inadequate understanding of modern health and sanitation in the Indian and Alaska native home and community continue to exist despite increasing attention being given to these problems by Indian tribes and their members. These conditions are a major factor in perpetuating the poverty under which Indians continue to live. Surveys made from 1957 to 1964 of representative groups of Indian reservations, including more than 10 percent of the total beneficiary population showed that (1) one-half the Indian families (average 5.5 persons per family) live in one- or two-room houses, (2) more than 70 percent obtain their domestic water from potentially contaminated sources and haul or carry it, and (3) more than 75 percent have grossly inadequate facilities for sanitary waste disposal. These environmental conditions, together with lack of understanding of modern health practices, in large measure are responsible for the high incidence of preventable diseases and needless premature deaths, particularly among Indian infants. Diarrhea, dysentery, and respiratory ailments continue to cause a significant patient load at Public Health Service hospitals, clinics, and contract facilities. Environmental conditions, including insect and wild rodent vectors continue to result in sporadic epidemics on Indian reservations.

The sanitarian aid program continues to be the key element in bridging the gap of cultural differences and modern environmental health practices. Selected Indians are trained in basic elements of sanitation and then impart this knowledge to their own people. Eighty sanitarian aids on Indian reservations and in Alaska native villages survey gross sanitation deficiencies and motivate beneficiary families and groups to overcome basic health problems either by use of individual resources or through project participation. In July 1965, the contract for native village sanitation services with the Alaska Department of Health and Welfare by mutual consent was converted to a direct operation Present staffing permits at least partial services to about 70 percent of the total Indian and Alaska native beneficiary population.

During 1965 through the educational and technical efforts of the Public Health Service staff and the cooperative construction activity, Indian families and groups were motivated and assisted in obtaining environmental improvements as follows: 4,800 new or improved domestic water sources, 3,200 new or improved water storage facilities, and 3,500 community and individual sewerage systems or sanitary pit privies at Indian homes and gathering points. These improvements represent a 13-percent increase over the previous year.

In addition to sanitarian aid services, the basic environmental health activities include technical guidance and assistance to tribal governing bodies, Indian communities, and agencies providing services to Indian beneficiaries on (1)

sanitation problems associated with economic development projects, the rapid growth of "tourism" on Indian reservations, and the rising Indian population; (2) trading post and celebration area sanitation inspections, with impetus from adoption of sanitary codes by tribal governing bodies; (3) followup surveys of completed sanitation facility projects to assure that maintenance and care are being furnished and that facilities are being properly used; and (4) environmental health surveys and food service training at hospitals, schools, and other institutions employing Indians and serving the beneficiary groups.

Minimum criteria for basic environmental sanitation coverage provide that (1) all plans for new tribal enterprises be checked from a sanitation standpoint; (2) all trading posts be inspected at least semiannually, and all major celebrations be monitored for sanitary conditions to minimize opportunity for epidemic outbreaks; (3) followup surveys of completed sanitation facilities be made at least twice during the succeeding year after completion and at least annually thereafter; and (4) all Government institutional food service be surveyed at least twice per year, comprehensive institutional surveys be made biennially, and food service training courses be conducted to cover major facilities annually. In 1965, slightly more than one-half of these essential services were provided. This represented an increase of about 5 percent over the 1965 level.

Under the authority of Public Law 86–121, the Indian Sanitation Facilities Act, a coordinated tribal-Federal attack is being made to correct gross deficiencies in individual home and community water supplies, waste disposal facilities, and other sanitation facilities. Staffing to implement this work is supported under this subactivity item.

Under this activity, Indians participate in project planning and facilities construction, and assume responsibility for the operation and maintenance of the completed facilities. The staff time devoted to project engineering, technical support, and motivation and training of Indian families and groups has resulted in their acceptance and participation in the program to a marked extent. Indian participation in the form of men, money, and materials amounts to about one-third of the total construction effort.

In the 6 years this activity has been underway, a total of 436 sanitation projects have been undertaken with the funds appropriated through fiscal year 1965. This total includes 242 regular construction projects, 42 Public Works Acceleration Act construction projects, 14 construction projects authorized as a result of Alaska earthquake damage and western flood damage, 105 investigations, emergency works, and other special projects, and 33 construction projects to assist Federal Indian housing programs. Of these 436 projects, 367 are completed or in operation and 65 are underway. The remaining four projects, in the final stages of planning and negotiation of agreements with the Indian tribes (as of December 31, 1965) include one small regular construction project, one western flood damage project, authorized in May 1965, and two projects to assist Federal housing programs.

Fiscal year 1965 marked the first year of a planned program of Federal housing for Indian communities. By mutual agreement the Public Housing Administration and the Bureau of Indian Affairs coordinated their efforts with the limited financial ability of the Public Health Service to complement the Indian housing program with construction of sanitation facilities. During this period the Service initiated assistance to 28 housing projects with 400 units of housing accommodating approximately 2,000 Indians. In fiscal year 1966, the Public Housing Administration plans to construct an additional 1,910 units of Indian housing. Funds have been appropriated to the Public Health Service for construction of sanitation facilities to serve these homes as well as a limited number to be constructed under the Bureau of Indian Affairs housing improvement program.

The fiscal year 1966 appropriation included $3,858,000 for 36 sanitation facilities construction projects. This will enable sanitation facilities to be made available to more than 4,000 Indian and Alaska native families in more than 41 different geographic locations.

Plan of work

The 15 additional positions requested include 9 Indian sanitarian aids, 3 professional sanitarians, 1 sanitary engineer, and 2 clerks. They will be employed

to meet the additional follow-up workload of training beneficiaries in operation, maintenance, and utilization of completed sanitation facilities serving an additional 4,000 Indian and Alaska native homes. They will extend basic environmental health services on 5 Indian reservations and in various communities in Alaska and Oklahoma to an additional beneficiary population of 43,000. These services will include comprehensive environmental health surveys at Indian homes, inspections of trading posts and other commercial facilities on Indian reservations, and institutional sanitation and food service coverage at Federal installations serving Indians. An increase of 12 percent above present level of such services is programed.

(*b*) *Dental*

The estimate of $2,342,000 provides an increase of $247,000 and 20 positions consisting of:

Statutory salary promotions	$22,000
Social Security amendments, Public Law 89–97	14,000
Annualization of Military Pay Act increase, Public Law 89–132	6,000
Annualization of Civilian Pay Act increase, Public Law 89–301	7,000
Program increase (20 positions)	198,000
Net increase	247,000

Status of program

Dental caries, periodontal disease, and orthodontic conditions continue to be major health problems afflicting the Indian and Alaska native populations. In recent years the problems have been magnified by the inability to increase the dental resources to keep up with the tremendous growth in the child population. During 1965, 121,445 examined patients received 489,246 dental treatments. For this group representing 32 percent of the beneficiary population only 54.7 percent of the most urgent dental care was provided. The children were the recipients of most of the provided care.

Although the dentist to general population ratio is about 1 to 1,900, in the Indian Health program there is one clinician to about 4,100 people. This situation is further complicated by the fact that there is still a tremendous backlog of unmet dental needs. Most of the deplorable dental conditions found among these people are due to a lifetime of neglect, lack of understanding of measures that may be taken to prevent dental diseases and inadequate amounts of dental resources.

Over recent years there has been a marked increase in corrective and preventive services provided. For example, during 1965 topical fluoride treatments were provided to 75,520 patients as compared to 48,842 in 1964 and 3,139 in 1958. The number of filled teeth per patient examined has increased from 0.9 in 1958 to 2.7 in 1965. This improvement in the efficiency was accomplished primarily by the expanded and improved use of auxiliary personnel, improvement of the clinical facilities, and training in efficient management of the dental clinic.

Plan of work

The Dental Branch requires 11 dentists including 4 interns and 1 long term trainee and 9 dental assistants to increase its program of bringing beneficiary children to a maintenance level of dental care. A program of health education and other preventive services will be emphasized. The following table sets forth major practices planned for accomplishment during 1967 as compared to 1965 and 1966.

	1965	Estimate, 1966	Estimate, 1967
Patients examined	121,445	122,000	130,000
Total treatments provided (including topical flourides)	489,246	490,000	520,000
Topical flouride cases	75,520	76,000	82,000

(c) Public health nursing

The estimate of $2,170,000 provides an increase of $216,000 and 23 positions consisting of:

Statutory salary promotions	$20,000
Social Security amendments, Public Law 89-97	6,000
Annualization of 1966 new position	7,000
Annualization of Military Pay Act increase, Public Law 89-132	1,000
Annualization of Civilian Pay Act increase, Public Law 89-301	17,000
Program increase (23 positions)	165,000
Net increase	216,000

Need for increase

Public Health nurses are the chief providers of health services in homes on Indian reservations. Of the almost 55,000 families living in areas where DIH provides direct public health nursing service, only 25,000 or 45 percent of the families receive the service. Most of the 55,000 families are considered to be in need of public health nursing in the home because of the generally low level of health of the beneficiary population. A successful program of home follow-up of adequate scope to provide continuity of care for patients discharged from hospitals as well as those treated in clinics, and for case-finding health teaching, and other preventive services, requires significant addition to the public health nursing staff.

Plan of work

The program increase of $165,000 for 1967 will provide additional staff of 23 personnel of various levels including 1 public health nurse supervisor, 8 public health nurses, 9 nursing assistants with special preparation for public health work, 2 driver-interpreters, and 3 clerks. This increase staffing will make it possible to reach an additional estimated 1,600 families and increase the home visits by approximately 8,000 and the individual services to families by 15,000.

The increased staff will make it possible to reach more expectant mothers early in their pregnancy and provide more concentrated followup throughout the maternity cycle, in order to reduce the number of complications and improve the general health status of both mothers and infants.

Additional staff resources will also provide increased opportunities for strengthening the health teaching program in homes, hospitals, clinics, schools, and the community. Efforts will also be intensified toward prevention, case finding, care, and rehabilitation of chronic diseases and long-term illnesses, including heart, cancer, and stroke, among others.

(d) Health education

The estimate of $791,000 provides an increase of $84,000 and five positions consisting of:

Statutory salary promotions	$9,000
Annualization of 1966 new positions	19,000
Annualization of Military Pay Act increase, Public Law 89-132	1,000
Annualization of Civilian Pay Act increase, Public Law 89-301	7,000
Program increase (5 positions)	48,000
Net increase	84,000

Need for increase

Lack of or insufficient health knowledge among the Indians and Alaska natives is one of the more pressing deficiencies of the Indian health program. Lack of knowledge and understanding of what causes diseases, how they are spread and more important how they can be prevented underlies the Indian health problems. In addition, the problem is compounded by religious concepts of health and disease in many Indian cultures thus making the health education task more complex, and requiring modifications to the usual approaches and methods used in community health activities.

Lags in health motivation are shown in three of the leading causes for hospital admissions among children: respiratory infections, gastroenteric infections, and accidents. Although the socioeconomic environment is an important contributory factor in the maintenance of such diseases and conditions, it is also true that lags in health behavior plays a very definite role. The incidence of gastroenteric infections which in the main are brought about by poor personal hygiene and home sanitation practices, in the final analysis can be reduced through changes in behavior that will lead to the proper care and full utilization of whatever facilities may be available. Accidents—burns, falls, poisonings—improper diet, alcoholism, and poor oral health are other areas of concern which reflect improper attitudes toward recommended health practices. How to motivate our beneficiaries to change the unhealthful attitude toward the proper one is the task of the health education activiies.

Plan of work

An increase of five positions composed of three education specialists and two clerks will permit the extension of professional guided health education activities to three reservations not presently covered in the Albuquerque and Oklahoma areas.

(e) *Field medical services*

The estimate of $7,103,000 provides an increase of $942,000 and 88 positions consisting of:

Statutory salary promotions	$46,000
Social Security Amendments, Public Law 89-97	17,000
Annualization of Military Pay Act increase, Public Law 89-132	8,000
Annualization of Civilian Pay Act increase, Public Law 89-301	64,000
Program increase (88 positions)	807,000
Net increase	942,000

Need for increase

Increased workload.—Current facilities have continued to experience an increased demand for services as a result of better acceptance of care by the Indian beneficiaries. The 1967 estimate of 696,700 outpatient visits for therapeutic and preventive services at Indian health centers, health stations, schools, and satellite field clinics, exceed by 71,700 visits the 1966 estimate. Plans have been made to expand the preventive activities of the ongoing programs particularly in the field of maternal and child care and immunization. To meet both, the increased workload and the expansion of programs, an increase of $777,000 is requested to cover the cost of drugs, medical supplies and laboratory services ($106,000), equipment ($12,000) as well as salaries and related costs of additional professional and supporting staff which include 10 medical officers, 2 pharmacists, 25 nurses, 6 social workers, 6 nutritionists, 5 practical nurses, 3 nursing assistants, 3 health records clerks, 15 clerks and clerk-typists, 6 maintenance, 2 medical technicians, 1 pharmacy helper, and 1 community health aid (85 positions and $659,000).

Preventive medicine residency program.—The present shortage of physicians in the United States who are certified as specialists in preventive medicine and the expanding need for these qualified professionals in the Division of Indian Health program prompted the Division of Indian Health to establish a residency program in preventive medicine and public health with the University of Oklahoma. This program, accredited by the American Medical Association and the Board of Preventive Medicine is a planned 3-year continued program which provides for three preceptors, one coordinator, and three residents in each one of the 3 years. The above increase will provide for the additional three residents required in the second year of the program at an increased cost of $30,000.

Plan of work

The request of $7,103,000 for "Field medical services" encompass ambulatory medical care and preventive health services provided at fixed facilities, outside of

hospitals, and a numerous field locations as close as practicable to the widely scattered and isolated groups of Indian and Alaska native beneficiaries.

The therapeutic services include diagnosis and treatment, referral of persons needing hospital care and followup of patients after hospitalization. The preventive health services include a vast range of activities such as prenatal and postnatal care, well child clinics, school health, control of communicable diseases including immunization; screening and followup of cases and contacts; e.g., tuberculosis, venereal diseases, and trachoma, early detection of chronic diseases such as diabetes, prevention of deficiency diseases, and mental health. Associated with this activity are medical social services and epidemiology training.

The facilities in which these services are provided include 46 health centers (which include centers at the large BIA boarding schools) and about 300 other locations which include health stations and satellite field clinics.

There follows a distribution by major fixed facilities of the outpatient visits for 1965, 1966, and 1967:

	1965	1966	1967
Health centers	293,000	300,000	310,000
School health centers and larger day schools and BIA dormitories	101,200	105,000	115,000
Other clinics	178,000	220,000	271,700
Total	572,500	625,000	696,700

Itemization of estimate, field health services

	Actual, 1965	Amount available, 1966	Estimate, 1967	Increase (+) or decrease (−)
Obligations by objects:				
11 Personnel compensation	$7,557,088	$8,771,000	$9,968,000	+$1,197,000
12 Personnel benefits	836,929	962,000	1,143,000	+181,000
21 Travel and transportation of persons	717,180	736,000	788,000	+52,000
22 Transportation of things	281,090	309,000	353,000	+44,000
23 Rent, communications, and utilities	410,175	425,000	449,000	+24,000
24 Printing and reproduction	38,385	40,000	42,000	+2,000
25 Other services	775,362	740,000	779,000	+39,000
26 Supplies and materials	891,226	984,000	1,110,000	+126,000
31 Equipment	191,704	259,000	300,000	+41,000
42 Insurance, claims, and indemnities	909			
Subtotal	11,700,048	13,226,000	14,932,000	+1,706,000
Deduct quarters and subsistence charges	102,718	132,000	140,000	−8,000
Total obligations	11,597,330	13,094,000	14,792,000	+1,698,000

4. Administration

Amount available, 1965	$1,821,042
Amount available, 1966	1,892,000
Estimate, 1967	1,830,000
Decrease	62,000

The estimate of $1,830,000 provides a net decrease of $62,000 and nine positions consisting of:

Statutory promotions	$26,000
Social Security Amendments, Public Law 89-97	4,000
Annualization of Military Pay Act increase, Public Law 89-132	4,000
Annualization of Civilian Pay Act increase, Public Law 89-301	25,000
Total mandatory increase	59,000
Program increase (3 positions)	28,000
Less: Transfer of construction functions of 12 civil service personnel from Division of Indian Health to Office of Surgeon General	−149,000
Net program decrease	−121,000
Net decrease	−62,000

The Division of Indian Health Headquarters staff 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 field as nutrition, medical records, medical social work, statistics, financial management, general services and personnel (3) staff required for sanitary engineering.

As a result of the rapid growth and expansion of the data processing requirements in the Division of Indian Health and to meet the workload of proposed future applications, three additional positions are requested. The services of additional personnel are required in the areas of systems analysis and the planning, developing, and implementation of ADP and EDP programs.

The Division has on-going and planned programs with a potential basic card volume for 8 million records annually. On-going programs at the present time are contract medical care, inpatient and outpatient care, dental epidemiology and services, notifiable diseases, equipment and supply records, pharmacy and nutrition studies, daily patient load evaluation pilot study and the tuberculosis testing program pilot study.

Planned programs are accident prevention reporting, immunization reporting, and inpatient-outpatient medical audit reports.

Presently the work in this field has been accomplished by personnel who have of a necessity been performing dual functions. The increasing demands of ADP have been met at the sacrifice of on-going programs. To accomplish the Division's goals and responsibilities for satisfying the ADP requirements of all branches of the Division of Indian Health and for planned future expansion an increase of three positions is requested.

With the total authorization for this activity 24 positions and $337,000 in 1966 and 24 positions and $350,000 in 1967 are included for the Office of the Bureau Chief, Bureau of Medical Services. This Office provides program direction to the divisions under its supervision. It is financed by allocating its costs among the component divisions.

In 1967, a new Division of Buildings and Facilities will be established in the Office of the Surgeon General. The base staff for this Division will be drawn from the construction management staff in all PHS Bureaus except the National Institutes of Health. Centralization will provide the Surgeon General with greater flexibility to meet changing constructions workloads and facilitate the development of a master plan for PHS facilities. Twelve positions and $149,000 budgeted in 1966 in "Indian Health Activities" have been included in the 1967 budget for "Salaries and expenses, Office of the Surgeon General."

Itemization of estimate, administration

	Actual, 1965	Amount available, 1966	Estimate, 1967	Increase (+) or decrease (−)
Obligations by objects:				
11 Personnel compensation	$1,447,566	$1,505,000	$1,450,000	−$55,000
12 Personnel benefits	141,171	145,000	144,000	−1,000
21 Travel and transportation of persons	93,138	95,000	93,000	−2,000
22 Transportation of things	7,766	8,000	8,000	
23 Rent, communications, and utilities	63,558	64,000	63,000	−1,000
24 Printing and reproduction	1,856	2,000	2,000	
25 Other services	48,307	49,000	48,000	−1,000
26 Supplies and materials	12,352	12,000	12,000	
31 Equipment	5,328	12,000	10,000	−2,000
Subtotal	1,821,042	1,892,000	1,830,000	−62,000
Deduct quarters and subsistence charges				
Total obligations	1,821,042	1,892,000	1,830,000	−62,000
INDIAN HEALTH ACTIVITIES				
Program and financing:				
Obligations	[1] 62,724,843	[1] 67,170,000	[1] 73,448,000	+6,278,000
Unobligated balance lapsing	215,157			
Total amount available	62,940,000	67,170,000	73,448,000	+6,278,000
Transferred to "Office of Surgeon General, salaries and expenses" (42 U.S.C. 226)		11,000		−11,000
Transferred to "Operating expenses, Public Buildings Service" (79 Stat. 531)		10,000		−10,000
Proposed supplemental to cover Public Law 89-301 pay act increase		−730,000		+730,000
Proposed supplemental to cover Public Law 89-132 pay act increase		−268,000		+268,000
Appropriation	62,940,000	66,193,000	73,448,000	+7,255,000
Obligations by objects:				
11 Personnel compensation	35,549,992	37,821,000	41,059,000	+3,238,000
12 Personnel benefits	3,196,597	3,412,000	3,828,000	+416,000
21 Travel and transportation of persons	2,088,991	2,135,000	2,208,000	+73,000
22 Transportation of things	847,269	870,000	948,000	+78,000
23 Rent, communications, and utilities	2,068,626	2,078,000	2,062,000	−16,000
24 Printing and reproduction	111,810	114,000	116,000	+2,000
25 Other services	13,466,443	14,571,000	16,420,000	+1,849,000
26 Supplies and materials	5,448,515	5,635,000	5,785,000	+150,000
31 Equipment	697,185	1,431,000	1,932,000	+501,000
42 Insurance, claims, and indemnities	2,909			
Subtotal	63,478,337	68,067,000	74,358,000	+6,291,000
Deduct quarters and subsistence charges	753,494	897,000	910,000	−13,000
Total obligations	62,724,843	67,170,000	73,448,000	+6,278,000

[1] Excludes reimbursements as follows: 1965, $665,000; 1966, $875,000; 1967, $406,000.

Summary of positions and average employment

Activity	Positions			Average employment		
	1965	1966	1967	1965	1966	1967
Hospital health services	4,372	4,411	4,647	4,079	4,115	4,357
Contract medical care	20	20	20	15	20	20
Field health services:						
Sanitation services	175	217	232	165	207	223
Dental services	213	213	233	201	207	227
Public health nursing	195	205	228	182	195	219
Health education	51	65	70	52	62	69
Field medical services	522	560	648	507	564	652
Total, field health	1,156	1,260	1,411	1,107	1,235	1,390
Administration	153	153	144	147	147	138
Total	5,701	5,844	6,222	5,348	5,517	5,905

Passenger motor vehicles

Authorization is requested for purchase of 16 passenger vehicles of which 12 are for replacement. All vehicles to be replaced will have met the standards as to age or mileage.

The additional vehicles scheduled for procurement in 1967 are as follows:

Program and location	Number of vehicles	Type
Field health services:		
Dental: Oklahoma City area	1	Station wagon.
Public health nursing: Oklahoma City area	1	Sedan.
Health education: Oklahoma City area	2	Sedans.
Grand total additional	4	

PREPARED STATEMENT

Senator BYRD. First we will hear from Dr. Rabeau, Chief of the Division of Indian Health.

Dr. Rabeau, you have been with us before but not in your present capacity. We are very glad to have you here. Can you tell us briefly something of your previous experience?

Dr. RABEAU. Yes, sir; I have served at all levels in this program for approximately 20 years, ranging from medical officer in charge of field hospitals in Alaska, area director in South Dakota, and, for the past 2 years as Deputy Division Chief under Dr. Wagner.

Senator BYRD. We're glad to have you with us, Dr. Wagner, and we are pleased to have you and your associates.

Dr. Rabeau, will you file your written statement for the record, and summarize its contents for the committee, indicating particularly the changes in your budget which you propose from last year?

Dr. RABEAU. Yes, sir.

(The statement follows:)

The Division of Indian Health of the Public Health Service is the only Federal program providing a complete, comprehensive program to meet the total health needs of a given population group, both as individuals and as communities.

Nearly 400,000 American Indians and Alaska natives are served by the Indian health program. Both population groups occupy unique niches in the cultural,

sociological, and economic structure of the United States. The geographic isolation in which they live increases the difficulties of assimilating them into the mainstream of American culture. Each tribe maintains its own traditional mores, language, religion, and social organization. Their economic advancement is deterred by lack of education and vocational training which inhibits them from favorable competition in the regular labor market, and employment opportunities on reservations are extremely limited.

Living conditions on Indian reservations reflect the abject poverty of the people and in part cause and aggravate their poor health status. To meet their health needs, a comprehensive approach is required including curative medical treatment, rehabilitative services, health education, and most important, preventive services. The latter also involves the whole realm of environmental health activities. A total coordinated effort is essential because the people do not have the organized community affiliations found among other Americans.

PROGRAM ACCOMPLISHMENTS

During the period from 1955 to 1966, most death and disease rates have been markedly reduced among the people served by the Indian health program. Among Indians, infant death rates are down 38 percent; tuberculosis death rates down 57 percent; and deaths from gastroenteric diseases, down 62 percent. In the Alaska native population, infant death rates are down 33 percent; tuberculosis death rates are down 89 percent; and new active tuberculosis case rates are down 68 percent. Since January 1, 1965, there have been no deaths from tuberculosis among Alaska natives. This is in contrast to 9 in 1964 and almost 100 in 1954.

Despite these dramatic accomplishments, great disparities in disease incidence rates still exist between the general population and Indians and Alaska natives. To cite a few examples, the new active tuberculosis case rate among Indians is 7 times higher, and among Alaska natives, over 20 times higher. The Indian rate of amoebic and bacillary dysentery is 49 times higher than in the general population. Similar disparities, though not as marked, occur in other illnesses such as influenza, pneumonia and other communicable diseases, and the common diseases of childhood.

A measure of progress in the area of maternal and child health is the number of births which take place in hospitals. In the last 10 years, the live births in the Division's hospitals have increased 38 percent, from 6,900 to 9,500 per year. The latest available vital events reports show that 97 percent of Indian and almost 82 percent of the Alaska native registered live births are in hospitals.

PROGRAM GROWTH

The foregoing changes are indicative of what is probably the most significant occurrence within the Indian health program. This markedly increased utilization of health facilities demonstrates the rapidly growing acceptance and demands of the Indians for health services. Admissions of Indians and Alaska natives to hospitals are some 80 percent higher than in 1955, now numbering almost 92,000 a year in contrast to 50,000. The number of outpatient visits also has spiraled during this period, growing from 550,000 to 1,300,000 a year. Similarly, the number of dental services provided at hospitals and field clinics has nearly tripled, from 180,000 to 490,000 during this same period.

We attribute these increases to the Indians' attainment of a better understanding and appreciation of health care; to an expanded program capability; to the larger and better trained Indian health staff who concretely demonstrate to the beneficiaries the benefits of health services; and to the improved health facilities which are more convenient and desirable to use.

Since 1955, 8 Indian hospitals have been built, the majority to replace old, obsolete structures, and 42 health centers and field clinics have been constructed. Many of the latter are in locations where there was no previous health facility, but where heavy concentrations of people indicated a need. In addition, through Public Law 85–151, 110 beds have been added in 15 community hospitals serving both Indians and non-Indians.

Another area where considerable progress has been made is in the improvement of water supplies and sanitary facilities on Indian reservations and in Alaskan villages. Under the authority of Public Law 86–121 (the Indian Sanitation Facilities Act), safe water and waste disposal facilities have been authorized

for 30,000 families since the passage of legislation in 1959. To date more than one-third of the cost of these projects has been contributed by Indians and Alaskan natives in the form of labor, materials, and funds.

Increased efforts for cooperation of the Indian people and interested governmental and private organizations will continue to be made to achieve further advancements in the health status of the American Indians and Alaska native.

PROVISIONS OF THE APPROPRIATION REQUEST

The 1967 appropriation request for $73,448,000 for Indian health activities represents an increase of $6,278,000 and a net increase of 378 positions; 236 in hospital health; 151 in field health; and minus 9 in administration. In addition to mandatory items such as statutory increases, cost increases under the contract medical care program and increased pay cost requirements in the amount of $1,807,000, the funds requested will provide for (1) a small increase in the hospital employee/patient ratio which includes the full operation of two replacement hospital facilities; (2) services to nonbeneficiaries in remote, isolated areas of Alaska; (3) a slight increase in the workload of the contract medical care program; (4) an increase in the prevention health activities consisting of sanitation, and dental, public health nursing, health education, and field medical services.

The construction appropriation request in the amount of $14,422,000 will provide for (1) construction of a 15-bed general medical and surgical hospital at Mescalero, N. Mex. ($677,500) and planning for new hospitals at Tuba City, Ariz.; Philadelphia, Miss.; Harlem, Mont.; and Chinle, Ariz. ($395,000); (2) construction of health centers at White Shield, N. Dak. and Wanblee, S. Dak. ($440,000) and planning school health centers at Many Farms, Ariz.; Chilocco, Okla.; and Riverside, Calif. ($82,000); (3) construction of 13 health stations ($789,500); (4) funds for 207 units of personnel quarters ($3,800,000); (5) alteration projects at 18 locations including planning (improvement) of functional areas at 11 hospitals ($2,029,000) and (6) 39 sanitation projects plus provision of sanitation facilities to serve Federal and tribal housing programs for Indians ($6,200,000).

Mr. Chairman, I shall now be pleased to answer any questions the committee may have.

COMPREHENSIVE PROGRAM TO MEET HEALTH NEEDS

Dr. RABEAU. The Division of Indian Health of the Public Health Service is the only Federal program providing a complete, comprehensive program to meet the total health needs of a given population group, both as individuals and as communities.

Living conditions on Indian reservations reflect the abject poverty of the people and in part cause and aggravate their poor health status. To meet their health needs, a comprehensive approach is required, including curative medical treatment, rehabilitative services, health education, and most important, preventive services. The latter also involves the whole realm of environmental health activities.

A total coordinated effort is essential because the people do not have the organized community affiliations found among other Americans.

SOME ACCOMPLISHMENTS OF PROGRAM

Some of the accomplishments of the program during the period from 1955 to 1966 are: most death and disease rates have been markedly reduced among the people served by the Indian health program. Among the Indians, infant death rates are down 38 percent; tuberculosis death rate is down 57 percent; and deaths from gastroenteric diseases are down 62 percent.

In the Alaska native population, infant death rates are down 33 percent; tuberculosis deaths are down 89 percent, and new active

tuberculosis case rates are down 68 percent. Since January 1, 1965, there have been no deaths from tuberculosis among Alaska natives. This is in contrast to 9 in 1964 and almost 100 in 1954.

Another measure of progress in the area of maternal and child health is the number of births which take place in hospitals. In the last 10 years, the live births in the Division hospitals have increased 38 percent, from 6,900 to 9,500 per year. The latest available vital events reports show that 97 percent of Indian and almost 82 percent of the Alaska native registered live births are in hospitals.

GROWING ACCEPTANCE OF INDIANS FOR HEALTH SERVICES

The foregoing changes are indicative of what is probably the most significant occurrence within the Indian health program. This marked increase of utilization of health facilities demonstrates the rapidly growing acceptance and demands of Indians for health services. Admissions of Indians and Alaska natives to hospitals are some 80 percent higher than in 1955, now numbering almost 92,000 a year in contrast to 50,000. The number of outpatient visits also has spiraled during this period, from 550,000 to 1,300,000 a year. Similarly, the number of dental services provided at hospitals and field clinics has nearly tripled, from 180,000 to 490,000 during this same period.

We attribute these increases to the Indian's attainment of a better understanding and appreciation of health care.

IMPROVEMENT OF WATER SUPPLIES AND SANITARY FACILITIES

Another area where considerable progress has been made is in the improvement of water supplies, and sanitary facilities on Indian reservations and in Alaskan villages.

This was done under the authority of Public Law 86–121, the Indian Sanitation Facilities Act. Safe water and waste disposal facilities have been authorized for 30,000 families since the passage of legislation in 1959.

To date, more than one-third of the cost of these projects has been contributed by Indians and Alaska natives in the form of labor, materials, and funds.

The 1967 appropriation request for $73,448,000 for Indian health activities represents an increase of $6,278,000 and a net increase of 378 positions; 236 in hospital health; 151 in field health; and minus 9 in administration.

The funds requested will provide for a small increase in the hospital employee/patient ratio which includes the full operation of two replacement hospital facilities; services to nonbeneficiaries in remote, isolated areas of Alaska; a slight increase in the workload of the contract medical care program; an increase in the preventive health activities consisting of sanitation, dental, public health nursing, health education and field medical services.

APPROPRIATION REQUEST TO PROVIDE ADDITIONAL FACILITIES

The construction appropriation request in the amount of $14,422,000 will provide for construction of a 15-bed general medical and surgical

hospital at Mescalero, N. Mex., and the planning for 4 new hospitals. This also provides for the construction and planning of 5 health centers, the construction of 13 health stations, and for 207 units of personnel quarters, alteration projects at 18 locations, including planning of functional areas at 11 hospitals; and sanitation projects plus provision of sanitation facilities to serve Federal housing programs for Indians.

Mr. Chairman, we will now be pleased to answer any questions you may have.

Routine Health Services in Remote Isolated Areas

Senator Byrd. It is indicated in your justification statement that funds are being requested to establish an Alaskan nonbeneficiary program. What is this program?

Dr. Rabeau. Mr. Chairman, the Alaska Legislature requested the Division of Indian Health to provide routine health services to nonbeneficiaries in the remote isolated areas of Alaska where there are no private health facilities available. This program will serve an estimated 4,000 population in areas many hundreds of miles away from private health facilities. The most accessible facilities will be the Indian health hospitals, physicians, and dentists. These people will pay the going rate for private facilities for services rendered.

The funds requested are on the basis that we have no experience to estimate the amount of reimbursement until our experience indicates the annual rate of reimbursement. We will not be able to employ the necessary staff until these figures are available. The reimbursement received will not be requested for apportionment unless it significantly exceeds the amount requested.

Senator Byrd. It is indicated, also, that your average daily patient census will decrease by 15 tuberculosis patients. Isn't this an improvement over the situation as it existed when you presented your budgets of last year?

Dr. Rabeau. Yes, sir. Our reduction in the tuberculosis load is down 15 patients over last year.

Senator Byrd. Is this an improvement over the situation as it existed?

Dr. Rabeau. Yes, sir, tuberculosis rates are down considerably, as I indicated earlier.

Senator Byrd. In the administration portion of your justifications, it is indicated that there is a program decrease of $149,000 resulting from the transfer of construction functions to the Office of the Surgeon General. Just what have you moved from your Office to the Surgeon General's Office?

Dr. Rabeau. This is the removal of our Branch of Construction and Maintenance Division to the Office of the Surgeon General. This includes 12 personnel and supporting funds.

Senator Byrd. This accounts for the full decrease of $149,000?

Dr. Rabeau. Yes, sir.

Senator Byrd. Your fiscal year 1967 budget estimate of $73,448,000 excludes $406,000 in reimbursements. For what are these reimbursements made and to whom?

Dr. Rabeau. I will ask Mr. Chadwick to answer that.

Mr. CHADWICK. This relates to the program in Mount Edgecombe, Alaska, where the total cost of common services such as utilities amounts to approximately $1 million a year. Up until this current year, 1966, we have administered this program and the Bureau of Indian Affairs has reimbursed us for these services. Beginning with 1967, the Bureau of Indian Affairs will administer this program and we will reimburse them. The total cost remains the same but the method of funding changes.

Senator BYRD. For hospital health services, you are requesting $2,761,000 more than was appropriated to you last year. Would you please describe to the committee the programs for which you are asking this increase?

FUNDS FOR ADDITIONAL HOSPITAL STAFF

Dr. RABEAU. This increase will provide funds for additional hospital staff to improve the quality of medical care. It will allow us to increase in our facilities services in both the inpatient and outpatient areas. Also, there are funds to provide for nonbeneficiary services in Alaska, and an increase in funds to provide for additional consultants to come into our hospitals, particularly in the specialties of surgery, pathology, radiology, and internal medicine. There are also funds to provide for additional training programs. We wish to set up a health records technician training program and a pediatrics residency.

These, Mr. Chairman, are the major increases. There is also a small one for the commissioned officers' student extern training program. We are recruiting health students between their junior and senior years, for example, in medical schools or nursing schools, and provide them with on-the-job training. This is also, a most successful mechanism for recruitment.

Senator BYRD. Is the mandatory increase of $800,000 in the hospital health services item for pay raises?

Dr. RABEAU. Yes, sir.

HOSPITAL HEALTH FACILITIES

Senator BYRD. On page 20 of your justification, you list seven activities for which you request increases in varying amounts. Would you please supply for the record the amounts available for each of these items in fiscal year 1966?

Dr. RABEAU. Yes, sir.

(The information follows:)

The 1966 availability of $39,323,000 for hospital health services is distributed as follows:

1. Funds for staff to improve the quality of medical care. Improvement of inpatient and outpatient employee patient ratios	$26,450,000
2. Funds for workload and cost	7,292,000
3. Funds to provide services for nonbeneficiaries in remote areas of Alaska	
4. Funds to provide for fee-basis physicians (consultants)	364,000
5. Funds for training	1,291,000
6. Funds to meet maintenance and repair requirements	1,310,000
7. Funds to meet equipment requirements in term of backlog, normal replacement and new equipment	1,160,000
8. Funds to cover mandatory increases	1,456,000
Total 1966 availability	39,323,000

FEE BASIS PHYSICIAN CONSULTANTS

Senator BYRD. Would you please discuss for the committee, the need for the requested increase of $200,000 for fee basis physician consultants.

Dr. RABEAU. Most of our hospitals are small and are staffed by general practice physicians. Recent surveys by the Joint Commission of Accreditation of the American Hospital Association recommended that there be more visits by specialists such as pathologists and X-ray specialists to the hospitals. These men not only come out and treat patients, but, in addition, and more importantly, they further instruct and train our young physicians.

Senator BYRD. How many consultants would be provided by such increase would you say?

Mr. CHADWICK. Our current level is $364,000 and they average $50 a day.

Senator BYRD. This would be an increase of almost half as much as you presently have?

Dr. RABEAU. Fifty five percent.

Senator BYRD. Would you explain to the committee the proposed pediatric residency program to be established in Anchorage?

Dr. RABEAU. One of our major problems in the programs is that approximately 40 percent of admissions to our hospitals are pediatric cases. Our infant death rate is still approximately 40 percent higher than that of the general population of the United States. The review of our program by consultants, particularly the American Academy of Pediatrics, recommended the acute need for more pediatricians in the program.

Pediatricians are in short supply in the United States and it is felt one of the best methods of increasing the supply in the program is to train our own. This not only provides men on the spot but tends to upgrade the total health program of a given facility. We are reviewing the appropriateness of whether the residency should be established at Anchorage with the possibility it may be more appropriate to expand the program at the Phoenix hospital.

Senator BYRD. You propose to establish an approved school for accredited record technicians. Would you please discuss the plans for this school and the need for it?

Dr. RABEAU. The health record technician is a person that can be best compared to the practical nurse in the nursing field. The health record librarian, or medical record librarian, is a college graduate with training in medical records administration. Professional medical records personnel needed in large facilities are in short supply throughout the country. What is needed in our program is somebody above the level of a simple clerk. The health record technician training consists of a 1-year course for high school graduates. This course is specifically designed to give them a competence that will provide what is needed for the medical records in our hospitals.

Senator BYRD. In fiscal year 1967 you are asking an additional $35,000 for the commissioned officer student training extern program. How much did you have for this program in fiscal year 1966, and what is the value of it which persuades you to request an increase in it?

Dr. RABEAU. The amount of funds expended in 1966 were in the neighborhood of $18,000. We trained 12 individuals under this. We have two medical students, five nursing students, three dental students, and two sanitary engineers. This money will allow us to put on an additional 25 in these various categories and we hope to add 2 more categories.

OPERATION OF CONTRACT MEDICAL PROGRAM

Senator BYRD. For contract medical care, you are asking something over $1 million more than you had last year. Would you please discuss this facet of your operations with the committee?

Dr. RABEAU. Mr. Chairman, the contract medical care program is basically designed to provide complete health care for Indians that are either remote from one of our facilities or where certain specialty services are needed and may be available in a large metropolitan area.

Of the increase requested this year, 57 percent will be taken up by the rising costs. Hospitalization has gone up a little more than 5 percent in this past year. The remaining $404,000 increase will allow us to have an average of 26 additional patients a day hospitalized.

Senator BYRD. For the past year or two, unbudgeted funds have been provided by the Senate committee for your dental health program. Have these funds been helpful in improving the dental health of the Indian people?

Dr. RABEAU. Yes, sir, Mr. Chairman. We have made great strides in our dental program and are exceedingly proud of this program. Through the efforts of this committee and Congress we feel we have established an outstanding program. Since 1955, for example, we almost tripled the total services given. The number of teeth filled per beneficiary treated was also tripled. The number of additional services that would be rendered under this increase would be approximately 30,000.

Our dental program, we think, is one of the most outstanding health programs in the country.

OFF RESERVATION ASSISTANCE

Senator BYRD. Last year the Senate committee proposed that the Division of Indian Health and the Bureau of Indian Affairs study the situation with regard to the health, welfare, and education needs of Indians who have moved away from reservations to cities and towns. The committee has received this report and has printed the first portion of it in the record. Would you care to comment further on this matter at this time?

Dr. RABEAU. Mr. Chairman, we feel that this was a quite intensive and thorough study that was done by the Bureau of Indian Affairs and ourselves and we feel that our findings are quite valid. Furthermore, there is a definite impact on one community, which is Rapid City, S. Dak.

Our recommendation therein is that we set up and operate an outpatient clinic and utilize our own hospitals, and the community hospitals in Rapid City. Our program would be, if this came about, to put on a total community health program for the Rapid City Indians, not only for medical care, but particularly family health services, taking care of the whole family with methods for prevention.

Senator BYRD. I will not be able to hear the rest of your testimony, Dr. Rabeau. I certainly have enjoyed being with you this morning and appreciate your testimony.

Senator Bartlett will assume the chair. I have to attend a meeting on the Senate Appropriations Committee for Health, Education, and Welfare.

CONSTRUCTION OF INDIAN HEALTH FACILITIES

JUSTIFICATIONS

Senator BARTLETT. There will be placed in the record the justifications for a budget estimate of $14,422,000 for construction of Indian health facilities. This is $326,000 more than the amount appropriated in fiscal year 1966.

(The justification follows:)

Construction of Indian health facilities

Appropriation, 1966	$14,096,000
Unobligated balance from prior years	3,927,285
Total available for obligation	18,023,285
Decreases:	
Hospitals and clinics	7,925,212
Personnel quarters	1,475,212
Alterations	1,539,933
Construction of Indian sanitation facilities	6,446,528
Total	17,386,885
Carried into 1967	636,400
Increases (1967 appropriation request):	
Hospitals and clinics	2,393,000
Personnel quarters	3,800,000
Alterations	2,029,000
Construction of Indian sanitation facilities	6,200,000
Total	14,422,000
Total available for obligation	15,058,400

ANALYSIS BY ACTIVITIES

Amounts available for obligation

	Amount available 1966	Fiscal year 1967			Total available 1967 compared to total available 1966
		Unobligated balance from prior years	1967 budget requests	Estimated total available	
1. Hospitals and clinics	$8,335,612	$316,600	$2,393,000	$2,709,600	−$5,626,012
2. Personnel quarters	1,405,212	23,800	3,800,000	3,823,800	+2,418,588
3. Alterations	1,539,933	0	2,029,000	2,029,000	+489,067
4. Construction of Indian sanitation facilities	6,742,528	296,000	6,200,000	6,496,000	−246,528
Total	18,023,285	636,400	14,422,000	15,058,400	−2,964,885

Obligations by activity

	1965 actual	1966 estimate	1967 estimate	Increase (+) decrease (−)
1. Hospital and clinics	$3,970,077	$7,925,212	$2,616,600	−$5,308,612
2. Personnel quarters	240,073	1,475,212	3,595,800	+2,120,588
3. Alterations	603,169	1,539,933	1,941,200	+401,267
4. Construction of Indian sanitation facilities	4,264,095	6,446,528	6,186,000	−260,528
Total	9,078,224	17,386,885	14,339,600	−3,047,285

Analysis of continuing projects and 1967 request

	Planning or feasibility funds for projects approved prior to 1967		1967 request			
	Amount	Year appropriated	Funds for previously approved projects	Planning or feasibility funds for new projects	Funds for new construction projects	Total
Hospitals and clinics:						
Tuba City Hospital:						
1. Feasibility	$20,000	1964				
2. Partial planning	120,000	1965				
3. To complete planning				$95,000		$95,000
Mescalero Hospital	45,000	(1)	$677,500			677,500
Philadelphia Hospital				80,000		80,000
Chinle Hospital				132,000		132,000
Fort Belknap Hospital				88,000		88,000
Riverside School Health Center				30,000		30,000
Many Farms School Health Center				30,000		30,000
Chilocco School Health Center				22,000		22,000
Construction of 2 health centers					$440,000	440,000
Construction of 13 health stations					798,500	798,500
Total, hospitals and clinics						2,393,000
Personnel quarters: 207 units of quarters					3,800,000	3,800,000
Alterations:						
Kotzebue Hospital	15,000	1966	500,000			500,000
Sells Hospital:						
1. Partial planning	11,000	1965				
2. To complete planning			1,000			1,000
3. Construction			128,000			128,000
Cherokee Hospital				40,000		40,000
Pine Ridge Hospital				26,000		26,000
Red Lake Hospital				62,000		62,000
Talihina Hospital:						
1. Feasibility	13,000	1963				
2. Planning				65,000		65,000
Rosebud Hospital				28,000		28,000
Whiteriver Hospital				27,000		27,000
Shiprock Hospital				42,000		42,000
Anchorage Hospital				88,000		88,000
Owyhee Hospital				25,000		25,000
Browning Hospital				19,000		19,000
Tahlequah Hospital			157,800	10,300		168,100
Construction at 5 other locations					809,900	809,900
Total alterations						2,029,000
Sanitation facilities					6,200,000	6,200,000
1967 appropriation request						14,422,000

[1] Planning accomplished through savings.

HIGHLIGHT STATEMENT

Continued successful operation of the Indian health program servicing over 380,000 Indian and Alaska native beneficiaries will require additional strengthening in health facilities and staff housing. Present-day medical, hospital, and public health practices demand modern, functionally arranged facilities, and the ability to provide the necessary health staff.

Despite continuous improvement and expansion in the physical plant achieved since the transfer of the Indian health program from the Bureau of Indian Affairs to the Public Health Service in 1955, many of the present Indian health facilities are still inadequate. This inadequacy is the product of age, and obsolescence resulting from transition to modern hospital practice and deferred maintenance, coupled with the failure to meet the need for additional medical facilities and quarters in localities previously with inadequate or no medical coverage.

Since much of the comprehensive health program is carried out in field health centers and outpost health stations, which are located in remote areas and are many times the only source of medical service in the area, it is imperative that adequate facilities be available. The construction program for 1967 includes new or replacement field health facilities at locations where limited services are currently provided through grossly inadequate facilities or where field health services are not available to beneficiaries.

The need for additional staff housing proposed in this estimate is critical. The Indian tribes who are the beneficiaries of Federal health services are generally located in isolated and sparsely populated areas where trained personnel needed to carry on a health program cannot be locally recruited and where the local economy and practices are such that essential personnel recruited elsewhere find that housing for rental simply is not available. At the time when the Public Health Service assumed responsibility for the Indian health program, Government-owned housing at these locations was deficient in numbers to permit even partial staffing needs for required health services. In addition to the deficiencies in number many of the structures were glossly below normal standards of acceptability.

Completed construction since that time has somewhat improved the situation but has by no means fully alleviated it. Rental quarters are not available, and it is unrealistic to anticipate that employees will provide their own housing through purchase or construction at remote and undesirable locations. Recruitment and retention of professionally and technically trained personnel at the isolation and hardship posts to which the majority of Indian health employees are assigned depends on the availability of quarters.

Public Law 86–121 authorizes the Public Health Service in cooperation with Indian groups to construct, improve, extend, or otherwise provide essential water supply facilities, drainage facilities, and sewage and waste disposal facilities for Indian homes, communities, and lands. It also enables the Public Health Service to engage in a planned program of construction of sanitation facilities for Indian-housing-sponsored projects by Federal and tribal programs.

Funds are requested in 1967 as follows:

Activity	*Amount*
Hospitals	$1,072,500
Health centers	522,000
Health stations	798,500
Hospitals and clinics, total	2,393,000
Personnel quarters	3,800,000
Alterations	2,029,000
Sanitation facilities	6,200,000
Total 1967 request	14,422,000

Hospitals and clinics

Tuba City Hospital, Tuba City, Ariz	$95,000

Project cost estimate

Feasibility funds appropriated 1964	$20,000
Partial planning funds appropriated 1965	120,000
Balance of planning funds requested 1967	95,000
Construction funds to be requested in 1968	3,112,000
Equipment funds to be requested under Indian health activities budget	225,000
Total estimated project cost	3,572,000

PROPOSED PROJECT

The proposed project involves replacement of the existing 75-bed general medical and surgical hospital with a 125-bed general medical and surgical hospital, its outpatient clinics, adjunct services, and supportive elements in order to provide a comprehensive coordinated health program for about 17,000 Navajo Indian beneficiaries in the Tuba City, Ariz., service unit.

EXISTING FACILITY

The existing hospital was opened in 1954 as a 75-bed general medical and surgical facility. This facility was not designed to meet the tremendous growth in population which has occurred in the last 10 years, or the expanded need for and demands on outpatient medical, dental, and related preventive health services. The hospital was originally designed to serve an estimated 11,000 Navajo Indians, including the Kayenta subagency. The services and activities have increased twofold in the last 10 years.

The rapidly increasing activities have caused an extreme shortage of space and crowding in practically all functional areas—outpatient clinics, field health staff offices and adjunct space, administrative and professional offices, pharmacy, laboratory, X-ray, dining room, storage, and supply areas.

For the past 3 years the hospital has been operating at 90- to 100-percent capacity. There is no flexibility in bed space arrangement to assure safe and adequate organization of the medical, surgical, and obstetrical services to meet the diversified character of the inpatient load (infants, young children, and male and female adults). With the limited space, it has not been possible to meet the steadily increasing need for specialty services, nor the overwhelming need for more preventive health services. Lack of space and poor functional arrangement have prevented a coordinated health program which would integrate the hospital services with the multiplicity of public health activities and services provided in the hospital and the field, at numerous schools, and satellite locations.

POPULATION SERVED

The 1960 census enumerated approximately 11,700 Navajos residing in the Tuba City land management (BIA) districts; but within the hospital service area are the Navajos around Kayenta and adjacent areas to the north and east. About 5,000 are in these areas according to the 1960 census, which would bring the total of beneficiaries served to nearly 17,000. It is anticipated that the hospital service population will exceed 18,000 within a few years. This projection is based upon the accelerated school construction program and expanded BIA school enrollment, as well as on the continuing high birth rate. The Navajo population is estimated to be increasing at an average rate of 2.5 percent a year.

MORBIDITY

Infectious diseases are reported in large numbers. Leading are the gastroenteric diseases and dysentery in all forms, influenza, pneumonia, and other respiratory infections, strep sore throat, otitis media, and trachoma. Measles was high in 1963 (a dramatic drop took place in 1964 when measles vaccine was administered to the younger children). The Navajo tuberculosis incidence rate of about 300 per 100,000 population in 1963 (all types) has dropped by 50 percent compared with 10 years ago, but is still almost 9 times the incidence rate for all races in the United States excluding Alaska. The Tuba City service unit reported an average of 50 to 60 newly discovered cases annually over the past 3 years.

Satellite field clinic locations are Howell Mesa, Kaibeto, Dennebito Dam, Red Lake, and Gray Mountain. Field clinic visits to physicians totaled more than 3,000 in 1964. More than double this number were recorded in 1965 (reflecting extension of clinic services to the schools and especially immunization activity).

In developing the program plan, primary emphasis will be given to the facilities and staff required for the necessary extension of health protective services, outside of the hospital facility to the Navajo of this area. The services in the outlying locations will be integrated with the hospital inpatient and outpatient program and particular emphasis will be given to maternal and child health clinics and school health.

The plan involves a replacement of the existing facility and increasing the beds to a total of 125, with provision of sufficient isolation beds for care of infectious cases (tuberculosis and other conditions requiring isolation) and beds for patients with handicapping and crippling conditions. BIA has expressed interest in the old hospital building for use as a subagency administration facility upon construction of the new hospital.

ANTICIPATED BED DISTRIBUTION

The following shows the bed distribution and estimated average daily census, by major clinical service, after construction:

	Beds	Average daily patient load
Total, excluding newborn bassinets	125	105
Medical	27	22
Surgical	20	17
Pediatric	60	51
Obstetrics	18	15
Bassinets	(24)	----

The unusual peak loads during epidemic periods have often resulted in over 100-percent occupancy of pediatric and medical beds. The projected number of admissions and the ADPL reflect an expected hospital admission rate of 225 per 1,000 population, with an average stay of 10 days. The proportion of pediatric patients represents about half of the total load. Surgical services will increase as will the average length of stay for complicated cases. An increased field health program (case finding, home visiting, expansion of school clinics with increased school enrollment), will result in an increase in outpatient visits and also more referrals for hospitalization.

COMMUNITY FACILITIES AND REFERRAL FACILITIES

The Arizona State Hospital Plan, 1963, lists only two non-PHS Indian hospitals in the area. These are at Pago, Ariz. (25 acceptable beds), 79 miles north of Tuba City on the Utah border and Sage Memorial Hospital, Ganado Mission (47 acceptable beds recently constructed), 110 miles east of Tuba City and outside of the drawing area of the Tuba City service unit (serves the Chinle population).

Referral of cases requiring specialized care are to the Indian hospital in Gallup, N. Mex., about 200 miles away. Specialized laboratory services and consultant services are limited and must be obtained under contract from points over 200 miles away.

The distinct health needs of the Navajo, the isolation of the Tuba City service unit, the level of acculturation, cultural patterns, and degree of understanding of modern medicine require the operation of direct Federal services, through a coordinated comprehensive preventive, curative, and restorative health program.

Communication through interpreters is necessary, since 40 percent do not read or speak English. The emphasis for each of the health program activities in continuing assistance to the Navajo in order to increase their understanding of both health problems and the means made available to them of protecting themselves and their communities against controllable diseases.

The unique health needs of these people are best met by the PHS Indian hospital and satellite field programs, with active tribal participation.

1967 BUDGET REQUEST

Although original plans were to modernize and expand the present facility, the feasibility study indicated that a completely new facility could be provided for little more than the cost of the intended alteration project. The funds requested herein are to complete the planning for a new (replacement) facility.

Mescalero Hospital, Mescalero, N. Mex..... $677,500

Project cost estimate

Planning (savings from other projects)	$45,000
Construction funds requested in 1967	677,500
Equipment funds to be requested under Indian health activities appropriation	45,000
Total estimated project cost	767,500

PROPOSED PROJECT

Plans are to replace the existing unsafe and functionally inadequate hospital at Mescalero, N. Mex., with a new 15-bed facility to enable the provision of a coordinated comprehensive health program for about 1,400 Indian beneficiaries of the Mescalero Service Unit.

It is proposed also to construct 11 units of personnel quarters to house Indian Health program staff.

EXISTING FACILITY

The existing facility is an old frame structure which was constructed in 1912 and is a serious fire hazard. The heating system is totally inadequate. The sewer system pipes are corroded and rusting out, causing a constant maintenance problem.

Lack of privacy and isolation areas result in cross infections. There is no formula unit, no pharmacy nor a dental unit. The delivery room and newborn nursery are too small and in a poor state of repair. Space is inadequate for general clinics, field health services, food service, and offices. No space is available for proper storage of inflammable drugs which present a major fire hazard.

TYPE OF EXTENT OF PROFESSIONAL CARE

The plan is to provide a facility capable of meeting the basic adult medical, pediatric, emergency surgical, and obstetrical needs for inpatients and outpatients. The facility will serve as the center for the provision of comprehensive (personal and community) health services.

The provision of adequate clinical laboratory and X-ray facilities will greatly improve the quality of service currently being provided. Services rendered through the outpatient clinics will consist of general diagnostic, minor surgical and therapeutic care (referral for admission to inpatient services as indicated) and preventive health services—prenatal and postnatal services, well baby, immunization, physicals, etc.

Special emphasis will be directed toward the achievement of improved community health and increased utilization of medical social service. The public health nursing program will embrace the individual family as well as the community, and will include activities such as home visits, conferences, school health services, and assistance in clinics. General sanitation services will be provided to help the tribe and individual families to recognize their sanitation problems and to take action to resolve the problems.

Contract physician and hospital services for complicated medical and surgical cases will be available.

MORBIDITY

Infectious diseases are reported in large numbers and over the years gastroenteritis has been the leading notifiable disease. Pneumonia and respiratory infections and otitis media alternate in rank as second or third. The same pattern was evident in 1964. Otitis media was leading with 164 episodes reported; gas-

troenteritis was second and pneumonia third; 14 cases of hepatitis were also reported.

COMMUNITY HOSPITALS

Community hospitals under contract will continue to be used as during the past several years. This will enable hospitalizing complicated medical, surgical, and obstetrical patients in hospitals which have the available facilities and services.

Philadelphia Hospital, Philadelphia, Miss	$80,000

Project cost estimate

Planning funds requested in 1967	$80,000
Construction funds to be requested in 1968	1,053,000
Equipment funds to be requested under Indian health activities	90,000
Total estimated project cost	1,223,000

PROPOSED PROJECT

The proposed project involves replacement of the existing inadequate facility at Philadelphia, Miss., with a new 30-bed hospital and its outpatient clinics in order to provide for a comprehensive and coordinated health program for the Indian beneficiaries of the Philadelphia service unit.

NEW LOCATION OF REPLACEMENT FACILITY

Upon request of the Choctaw Tribe (who will provide the land) coupled with the facts that (1) the new site is closest to the greatest number of the Indian beneficiaries, and (2) that there would be no interruption in provision of medical services while the new hospital was under construction, it has been determined to relocate the facility at Pearl River, Miss., which is approximately 8 miles northeast of Philadelphia, Miss. Pearl River is the location of a BIA grade school and community center and a planned BIA high school. It is expected that a BIA Indian agency will eventually be situated at Pearl River.

EXISTING FACILITY

The existing hospital was constructed in 1928 and is completely inadequate in interior space and functional arrangement. There is no waiting room, no nurses' workroom or emergency room in the outpatient area. Pediatric patients overflow into the adult area and only one private room is available, which means there are no isolation facilities. Seriously ill patients must be kept in the wards. The delivery room is located in the medical area at the opposite end of the hall from the obstetrical rooms.

The kitchen facility is totally inadequate and impossible to maintain in a sanitary condition.

The facility was not designed to serve as a center for the provision of a coordinated health program and for integrating the hospital services with the public health services and field health activities.

MORBIDITY

The poor health status is largely related to the low income and inadequate housing of these Indian beneficiaries.

Leading among notifiable diseases have been influenza, pneumonia, and other respiratory conditions, gastroenteritis and dysentery. In 1964, otitis media ranked first.

Gastroenteritis and dysentery increased in 1964 compared with 1963. The rates per 100,000 population for these two reported diseases combined was nearly 8,600. This compares with the total rate for all Indian reservations of about 7,200 in 1963. The following compares the reported notifiable diseases for 1963 and 1964:

Thus, excluding deliveries and complications which are leading among reasons for hospitalization, the infectious and parasitic diseases, respiratory illnesses, gastroenteritis and otitis media are the leading causes, especially among the children and younger people.

Among the older people there is a higher percentage of diabetes and circulatory system illnesses than normally found among Indians.

UTILIZATION OF COMMUNITY HOSPITALS UNDER CONTRACT

Complicated medical, surgical, and emergency patients are hospitalized in community general hospitals under contract. The following shows workloads in the past few years of the larger general hospitals:

Contract general hospitals

	1964		1965 estimated cases
	Cases	Days	
Riley's Hospital, Meridian, Miss.	28	146	
University Hospital, Jackson, Miss.	56	473	60
Other	1	1	[1] 30
Total	85	620	90

[1] Includes Riley's Hospital, Meridian.

Tuberculosis patients are hospitalized in the State sanatorium at Sanatorium, Miss. An average census of 1 to 2 TB patients per day has been experienced.

Within the service unit boundary the distances from community general hospitals range from 37 miles to Meridian to 139 miles to Vicksburg. Jackson is 80 miles from Philadelphia.

The long identification of the beneficiaries with the present hospital and with the Federal Government as the sole provider for their health needs, along with the sustained interest on the part of the tribal council and, in more recent years, the overwhelming acceptance of health services, support the Division conclusion that direct operating services must be continued.

Under the criteria for provision of comprehensive health services and the special social and cultural background and health needs of the impoverished beneficiaries of the Philadelphia service unit, it has been determined that the health needs for the group can best be met by providing a DIH inpatient facility with its associated outpatient clinics close to where the people live, and integrated with an intensive field health program.

Chinle Hospital, Chinle, Ariz. $132,000

Project cost estimate

Planning funds requested in 1967	$132,000
Construction funds to be requested in 1969	2,307,000
Equipment funds to be requested under "Indian health activities"	300,000
Total estimated project cost	2,739,000

PROPOSED PROJECT

The proposed project involves the construction of a new 100-bed general medical and surgical hospital and its associated clinics and ancillary services to provide major diagnostic and treatment services for the rapidly growing Navajo beneficiary population in the Chinle, Ariz., Service Unit. The 16,000 Navajos estimated to be residing in and around Chinle within the next few years would be provided with comprehensive inpatient and outpatient services through this new facility and its field health program. A comprehensive preventive health program will be extended from the hospital to the surrounding areas, through an active outpatient department and through a number of field health stations and school health units.

PRESENT SERVICES

There is no hospital in the Chinle Service Unit at the present time. Health services are provided primarily by the Chinle Health Center and field health

stations which are satellite of the health center. Hospital care is provided by three different hospitals: Keams Canyon, a PHA facility about 85 miles to the west; Sage Memorial Hospital, a mission hospital at Ganado about 33 miles to the south; and the Fort Defiance PHA Hospital 65 miles to the southeast. Many babies are born in hogans and illnesses go untreated because of the distances to available hospital facilities.

Reductions in available general hospital beds for Chinle beneficiaries at these hospitals in recent years, due to a rapid growth in these local populations, makes it impossible for these hospitals to meet the needs of the Chinle population.

MORBIDITY

Infectious diseases are reported in large numbers. In 1964 the leading diseases were gastroenteritis (1,765 reported cases) and otitis media (1,475 cases), followed by streptococcal sore throat and pneumonia. Tuberculosis is still a serious problem, although the rate has declined in recent years. In 1964 the Navajo rate for new active cases was 230 per 100,000 population, about 8 times the rate for the general population of the United States.

Overall disease patterns in the Chinle Service Unit are those relating to the youthfulness of the population, its low economic status, and unfavorable environmental conditions. The most frequent causes of illness are the acute respiratory infections, the diarrheal diseases, and the common communicable diseases of childhood.

Because of the insanitary conditions of the home environment in which most of the beneficiaries live, the gastroenteric conditions are a year-round problem. The complications of gastroenteritis such as dehydration, acidosis, weight loss (especially in infants) are the cause of many referrals to the hospitals.

Otitis media, fast becoming a leading reportable disease, is a serious problem, particularly among the young children. In spite of continuing followup examinations and treatment, many children have persistent drainage from the ears. Varying degrees of permanent hearing loss are a resultant complication of these ear infections.

Other disease problems are impetigo, particularly in young children. Important factors relating to the solution of this problem includes health education regarding personal hygiene and adequate water supplies in the home. Trachoma and conjunctivitis are serious eye infections that continue as problems.

REFERRAL FACILITIES

Extremely complicated medical or surgical problems will be referred to the DIH hospital at Gallup for care. State and other resources will be utilized to care for mental patients. Other DIH facilities and contract hospitals will be utilized for tuberculosis.

Fort Belknap Hospital, Harlem, Mont..... $88,000

Project cost estimate

Planning funds requested 1967	$88,000
Construction funds to be requested in 1969	1,158,000
Equipment funds to be requested under Indian health activities	110,000
Total estimated project cost	1,356,000

PROPOSED PROJECT

The proposed project involves replacement of the present structure with a new 33-bed modern hospital, with expanded outpatient clinics and facilities for preventive services and field health activities. The plan is to assure provisions of safe and adequate areas for medical, surgical, pediatric, and obstetrical care as well as ancillary facilities to support these services.

EXISTING FACILITIES

The present facility, a 33-bed hospital, is a brick and frame structure built in 1931 and is of the same general design as the former hospitals at Pine Ridge, S. Dak. and Belcourt, N. Dak. The corridors are narrow, the patient areas cramped and the ancillary service areas unsafe and inadequately arranged. They were not designed to function in their present roles.

A recent visit by representatives of the Montana State Licenses Authority and the State fire marshal resulted in the filing of a report that emphasized the unsafe condition of this facility. The defects found are such as to indicate that the cost of renovating the existing structure would be almost the same as that for constructing a totally new facility. Renovation, it is felt, would only result in a patchwork product and would do little to alleviate the functional problems that presently exist.

MORBIDITY

Morbidity within the Fort Belknap service unit shows the typical picture of disease associated with extreme weather conditions and unsanitary home environment. In winter months extreme cold and bad weather account for a large number of respiratory infectious and otitis media. In the summer months high temperatures and an overabundance of flies, mosquitoes, and general unsanitary conditions in the homes account for high numbers of gastroenteritis diseases centered mostly in the pediatric age group. The five leading notifiable diseases reported for calendar year 1964 were gastroenteritis, otitis media, pneumonia, hepatitis, and influenza. The four leading causes of admission to hospital which accounted for 60 percent of the total admission in fiscal year 1964 were diseases of the respiratory system (221 cases); digestive system diseases including dysentery, gastroenteritis and colitis (160 cases); deliveries and complications of pregnancy (142 cases); accidents (105 cases); and diseases of the genitourinary tract (63 cases). With the exception of pregnancies per se, and accidents, all of the diseases reported above could be reduced in level and intensity through early treatment and through preventive measures. The residents of the service unit particularly the younger generation, are becoming aware of the need for early detection and treatment of diseases. Yet, their acceptance of modern medical practice is still far from ideal.

COMMUNITY FACILITIES

Local hospital administrators have not shown interest in financial assistance for construction of community facilities (Public Law 85-151) for joint Indian and non-Indian use and have indicated that it would be difficult for them to accept a major portion of the hospitalization workload now being carried by the Fort Belkap Indian Hospital. Under these conditions it is illogical to expect local medical resources to meet the need for the vital field health programs now being carried on in the Fort Belknap service unit.

Therefore, in order to most efficiently meet the health needs of the Indian beneficiaries in the Fort Belknap service unit it is recommended that a new [replacement] hospital be planned to provide a comprehensive community health service in a modern safe facility for one of the most impoverished groups of beneficiaries in the Indian health program, whose level of health is extremely low.

Clinics (health centers and stations) $1,320,500

A comprehensive preventive health program offers the most promising opportunity for eventually reducing the more costly medical and hospital services. Failure to continue to expand field health activities would unnecessarily delay the achievement of a level of health for Indian beneficiaries comparable to that of the general population.

In 1967 funds are requested for the construction of health centers at White Shield, N. Dak. and Wanblee, S. Dak. In addition funds are included for planning school health centers at Riverside, Calif., Many Farms, Ariz., and Chilocco, Okla.

Funds are also included for the construction of 13 health stations.

The definition of health centers and health stations for which funds are requested follows:

1. *Health center.*—A facility where health services are available at least 40 hours a week and where physicians' services are available either full time or on a regularly scheduled basis (at least weekly) and where other health staff is stationed such as dental, clinical and/or public health nursing, sanitation, health education, and medical social services.

2. *Health station.*—A facility where, although physicians' services may be regularly scheduled, physicians are not available full time, but one or more other health services are available on a regularly scheduled basis, such as dental, public health nursing, sanitation, health education, and medical social services. Such services are available from itinerant personnel headquartered in Public Health Service Indian hospitals and health centers or on a contractual basis.

The location, need and estimated cost for each of the proposed facilities follow:

Health centers and school health centers	$1,320,500
Health centers: White Shield, N. Dak.	220,000

FUNDS FOR CONSTRUCTION OF A HEALTH CENTER

Project cost estimate

Construction funds requested in 1967	$220,000
Equipment funds to be requested under Indian health activities	40,000
Total estimated project cost	260,000

It is proposed to construct a health center complex at White Shield, N. Dak. on tribal land to serve as the center of operation for the health program for the estimated 2,500 beneficiaries of the Fort Berthold Reservation. This reservation of 430,000 acres is in the northwest portion of North Dakota above Garrison Dam on the Missouri River. The Garrison Reservoir divides it into five segments. All Fort Berthold health operations will be directed from this location including activities in proposed health station at Mandaree (94 miles), Twin Buttes (127 miles), and New Town (54 miles).

CURRENT PROGRAM AND EXISTING FACILITY

Space is currently rented at New Town for the administrative direction of what is basically a program of contract health services. Field clinics are held weekly at White Shield and Mandaree and twice monthly at Twin Buttes. Outpatient care on other than clinic days is provided beneficiaries in private physicians' offices in New Town, Garrison, Parshall, Hazen, Beaulah, Stanley, and Watford City. Hospitalization and inpatient care services are provided in Garrison, Hazen, Stanley, and Watford City. Contract dental services are provided in Hazen, Stanley, Garrison, Dickinson, Watford City, Beaulah, and Parshall.

There is currently one social worker and one clerk handling matters involving eligibility and administrative duties of the service unit. The public health nursing service is under contract with the North Dakota State Health Department with three nurses giving part-time service to this reservation. One reservation sanitarian is currently on the staff and is responsible for checking wells and implementing sanitation construction Public Law 86–121 projects.

TYPE AND EXTENT OF CARE NEEDED

Health conditions on the reservation indicate a need for a comprehensive health program (with special emphasis on preventive services and rehabilitation) to adequately meet the health needs of this population group.

DEFICIENCIES OF CURRENT FACILITIES

The current facilities consisting of rented space in New Town, a room in the BIA school at White Shield, a small space in the tribal building at Twin Buttes, and space in the BIA building at Mandaree are completely inadequate for carrying on the current local ongoing programs and would be far less effective in meeting the more comprehensive program required to satisfy the health needs of this reservation.

PROPOSED FACILITIES

It is proposed that a health center be constructed and staffed at White Shield. This location is on the eastern segment of the reservation and is a population center for approximately 400 beneficiaries and accessible for another 340. It would be the focal point for operation of all the Fort Berthold comprehensive health services. White Shield is closer to Minot and Bismarck, both of which have a population of over 30,000 making them more attractive, medically speaking, because of the specialty services they can provide the reservation. White Shield is also closer to a number of health districts which operate on the reservation. These relationships are extremely important to the conduct of a comprehensive health program.

A health center with space to provide headquarters and services for a comprehensive medical care and health program to the Fort Berthold population will be complemented by satellite health stations at Mandaree, New Town, and Twin Buttes. To conduct this program the following staff will be required: Two medical officers, one dental officer, one dental assistant, one pharmacist-administrative officer, two public health nurses, one clinic nurse, two practical nurses, one medical social worker, one technician, two clerks, one maintenance worker, one janitor-chauffeur, and two sanitarian aids. Three of these positions are currently on duty at New Town. Fourteen new positions will be requested in 1968 and 1 in 1969 making a total of 17 and 18 positions, respectively.

Workload for the reservation upon completion of this health center and the satellite health stations will approximate annually:

Outpatient visits	13,400
Dental services provided	4,000
Hospital admissions	1,400
Hospital days	11,000

Fifteen units of housing will be required at this location for personnel and are included under the personnel quarters activity.

Wanblee, S. Dak. $220,000

Project cost estimate

Construction funds requested in 1967	$220,000
Equipment funds to be requested under Indian health activities budget	40,000
Total estimated project cost	260,000

It is proposed to construct a health center at Wanblee, S. Dak. This is the second largest populated area of the Pine Ridge Reservation. It is located in Washabaugh County on the northeast corner of the reservation where the total Indian population approximates 1,100. It is an isolated community approximately 100 miles from the nearest PHS clinic or hospital. There is one physician and a small community hospital in Martin, S. Dak., an off-reservation town 59 miles away from Wanblee. There is a 160-pupil BIA day school and a tribal community building at this location. Tribal land is available and the Oglala Sioux Tribal Council has recommended construction and staffing of a health center at this location. Such a center would also serve the communities of Kyle, Long Valley, Norris, Potato Creek, Red Leaf Interior and Kadoka which are connected by a road which has recently been paved.

CURRENT PROGRAM AND EXISTING FACILITY

The present clinic is operated in a wooden frame building with 960 square feet consisting of one working room, two bathrooms, two examining rooms, a boiler room and a pharmacy room. The waiting space is too small. There are no treatment rooms, no storage space, and no medical records space. Files and some clinic activities must be carried on or maintained in the waiting area.

Clinics are held once a week by a team from Pine Ridge consisting of a physician, public health nurse, clinic nurse, practical nurse and one receptionist-janitor.

In fiscal year 1965, 51 clinics were held with approximately 2,500 visits. On many clinic days the staff is unable to handle the patient load even though the

clinic hours begin at 10 a.m. and often last until 10 p.m. Daily patient load varies from 45 to 126 per clinic day.

A public health nurse spends 5 days per month in home visiting in the area. This is inadequate coverage.

One mobile dental unit is stationed at Wanblee for 2 months out of each year and provides services on 42 to 60 clinic days with an average of 10 patients per clinic day.

Prenatal, well-baby, and postpartum clinics are conducted on days of regular clinics and nutrition classes are given once each month.

EXTENT OF CARE NEEDED

Health conditions on the reservation, and in this portion particularly, indicate a need for a more concentrated comprehensive health program with special emphasis on prevention and rehabilitation.

FUTURE PROJECTIONS AND NEEDS

With a full-time health center at this location clinics could be held daily, giving the people an opportunity to receive better curative and preventive services. More constant contact with these beneficiaries would eliminate much of the existing fear and suspicion of sound health practices. General medical and surgical clinics will be held 3 days a week. Emphasis will be given to complete immunization services. Specialized clinics for prenatals, postnatals, well babies, crippled children, nutrition, and health education activities will be scheduled on alternate days. It is anticipated that at least 20 percent of the projected workload will involve maternal and child health preventive services.

The anticipated annual workload is projected as follows:

General medical and surgical visits	4,000
Prenatal visits	250
Postnatal visits	50
Well-child visits	800
Total medical visits	5,100
Dental patients examined	450
Dental services provided	2,000

Funds are requested for the construction of a new health center to provide medical care and dental services together with facilities and space to conduct the field health activities (public health nursing, sanitation, dental health education, maternal, and child health services) on a comprehensive basis for this area of the Pine Ridge Reservation. The proposed staffing for the facility will include: one medical officer, one clinic nurse, one public health nurse, one lab and X-ray technician, one pharmacist, one clerk, one maintenance-janitor, and a part-time dental team serving on an itinerant basis.

The present clinic building of 960 square feet will be converted into a set of quarters of which a minimum of six sets will be required. The additional five units of quarters are requested under the personnel quarters activity.

Riverside, Calif. $30,000

Project cost estimate

Planning funds requested for 1967	$30,000
Construction funds proposed 1968	459,000
Equipment funds to be requested under Indian health activities	41,000
Total estimated project cost	530,000

Plans are to replace the existing unsafe and functionally inadequate school health center located on the campus of the Indian school on the outskirts of Riverside, Calif., with a new 16-bed infirmary-type school health facility. This facility will provide for the operation of a coordinated comprehensive health program for over 1,000 boarding students enrolled in the Bureau of Indian Affairs Boarding School at this location.

EXISTING FACILITY

The existing building constructed in 1904, is a 2-story wood frame structure of approximately 11,760 square feet providing 35 infirmary beds for minor illness care. The structure does not lend itself to modernization, is obsolete, unsafe, and in a deteriorated condition. The Bureau of Indian Affairs is proceeding with long-range plans for remodeling the school campus and replacing old obsolete buildings with modern fire-resistant structures.

The proposed replacement structure for this health center is a modern infirmary building with capacity to meet the basic health needs of the 1,000-some students residing on this campus.

PROPOSED FACILITY

The new school health center and infirmary will provide space to meet the basic requirements for providing the services indicated in the above projected workload estimate. This will include space for administration; medical, public health, and dental clinics with offices; examining and treatment rooms sufficient to properly examine, diagnose and treat minor illnesses and injuries, and give routine and specialized dental care. It will enable screening for referral of serious conditions or specialized need to hospitals or specialized clinics; providing immunizations, physical examinations, health counseling and tests on all students; and giving inservice training to school and dormitory personnel. Space for a minimum of 16 beds will provide for the peakload of minor illnesses (including communicable diseases not usually accepted in community hospitals). Serious illnesses and complicated cases will be hospitalized in community hospitals in Riverside.

The proposed staff for the Riverside School Health Center is as follows: one medical officer; two dental officers; four dental assistants; one public health nurse; six clinical nurses; five nursing assistants; one pharmacist; one lab technician; two medical records; one administration clerk; two food service workers; one maintenanceman.

Planning funds are requested in 1967 with construction funds to be requested in 1968.

Many Farms, Ariz..... $30,000

Project cost estimate

Planning funds requested in 1967	$30,000
Construction funds to be requested in 1968	459,000
Equipment funds to be requested under Indian health activities	41,000
Total estimated project cost	530,000

It is proposed to construct a new school health and community health center at Many Farms, Ariz., which is an Indian trading center on the Navajo Reservation, 15 miles from Chinle. It will serve a rural population of approximately 2,500 and a large school population. A 400-pupil public school is now in operation, a 1,000-pupil BIA elementary school is now nearing completion and a 1,000-pupil BIA boarding high school is to be constructed and ready for occupancy by September 1968. Since no other facilities are available at the location, construction of a new facility is necessary to serve the 2,500 resident population and 2,400 schoolchildren. The only health service presently available consists of screening by an itinerant school health nurse who commutes from Chinle, and refers students requiring physicians' services to the Chinle Health Center. The local population must go to Chinle for any health services.

PROPOSED PROGRAM

A comprehensive school health program of curative and preventive activities will include outpatient medical, public health nursing, and dental services and screening for referral of patients requiring hospitalization in PHS facilities at Fort Defiance and Gallup. Eventually, after the new 100-bed hospital planned at Chinle is completed, patients from Many Farms will be referred there for hospitalization. The beneficiary population residing in this area will be provided comprehensive services through this center and a proposed

satellite health station at Rough Rock, 22 miles west. Emphasis is planned on maternal and child-health services.

Upon completion of this facility anticipated workload will be as follows:

Medical outpatient visits	9,000
Immunizations	5,000
Nurse visits	25,000
Dental services:	
Individuals examined	2,200
Services provided	9,000

Staffing will consist of: one medical officer; two dental officers; four dental assistants; one public health nurse; two clinic nurses; two practical nurses; one pharmacist; one medical record clerk; one laboratory technician; one community worker; one administration clerk; one maintenance man; and one chauffeur interpreter.

PROPOSED FACILITY

It is proposed to build a facility to serve as a school health and community health center that will adequately meet the needs of the program proposed. This will include space for administration; for medical, public health activities, and dental clinics. It will also include space for examining and treatment rooms to properly examine, diagnose, and treat minor illnesses and injuries. The proposed facility will also provide space for routine dental care and complete physical examinations. It will enable screening patients for more serious conditions who would be referred to IHH hospitals. The new facility will also contain ancillary space to provide routine laboratory services, health counseling to all students and inservice training to school and dormitory personnel. Emergency daybed care for students requiring observation to determine if hospitalization is necessary is also to be provided.

Funds are requested in 1967 to plan this new facility.

Chilocco, Okla. $22,000

Project cost estimate

Planning funds requested for 1967	$22,000
Construction funds proposed 1968	285,000
Equipment funds to be requested under Indian health activities	23,000
Total estimated project cost	330,000

Plans are to replace the existing unsafe and functionally inadequate school health center facility located on the campus of the BIA Indian School at Chilocco, Okla. Student enrollment, which reached nearly 1,100 in 1965, is projected at about the same level. The school community is an entity with no near neighbors, 7 miles from Arkansas City, Kans., and 60 miles from the nearest PHS Indian hospital at Pawnee, Okla.

EXISTING FACILITY

The existing facility is a frame, stucco structure, constructed with student labor in 1926. Each part of the structure was hand crafted with little regard to dimensions or standard construction practices and even simple repairs are difficult and expensive to accomplish. There is a two-story center section providing office space. Medical and dental clinics and kitchen space are provided for on the first floor (second floor not used) and there are single-floor wings on either side of the structure which have open wards and bathrooms. The building continues to settle and cracks in plaster recur. Overnight care of patients has been discontinued and only daybed care is given. Cases needing 24-hour care are referred out to local hospitals in Arkansas City, or PHS Indian hospitals at Claremore, Pawnee, or Talihima, Okla. Physical arrangement of this building is very poor and does not adapt to efficient arrangement of equipment and prohibits the performing of necessary service functions. The Bureau of Indian Affairs is proceeding with long-range plans for remodeling or replacing obsolete buildings on this campus.

PROPOSED FACILITY

It is proposed to provide a new school health center facility at this location that will be adequate for providing the estimated services and for the conducting of an adequate school health program. The new facility will include space for: administration, medical, public health activities, and dental clinics. It will also include space for examining and treatment rooms to properly examine, diagnose, and treat minor illnesses and injuries. The proposed facility will provide space for dental care. It will enable screening patients for more serious conditions for referral to hospitals or specialized clinics. It will contain ancillary space to provide routine laboratory services, health counseling to students and inservice training to school and dormitory personnel. Also to be provided is emergency daybed care to students requiring observation to determine if hospitalization is necessary. All illnesses requiring overnight hospital care will be referred to PHS Indian or contract hospitals.

The proposed staff for the Chilocco, Okla., School Health Center is as follows: one medical officer; ane dental officer; one dental assistant; one public health nurse; two nursing assistants; two clinic nurses; one medical record clerk; one clerk (administration); one maintenance man (handy man).

Planning funds are requested in 1967 with construction funds proposed in 1968.

Health station, Mandaree, N. Dak..... $47,000

Project cost estimate

Construction funds requested in 1967.....	$47,200
Equipment funds to be requested under Indian health activities.....	3,000
Total estimated project cost.....	50,200

Mandaree is a small Indian community located on the western segment of the Fort Berthold Reservation. It is on State Highway 22 about 37 miles southwest and across the Garrison Reservoir 40 miles from New Town, N. Dak. There are approximately 721 beneficiaries residing in this segment of the reservation.

Medical clinics are held there once each week by a contract physician in grossly inadequate space provided in an old frame BIA post office building. There is no waiting room and the examining room is no bigger than a closet. The equipment is outmoded and there is no treatment room, pharmacy, or storage facilities. The present program consists of brief medical treatment clinics held here once each week. Outpatient visits numbering 500 are estimated for fiscal year 1966.

It is proposed to have at least two medical clinics each week and carry on an extensive program of home visiting and conferences at this location. The conferences will consist of well child, preschool, prenatal, postnatal, and postpartum sessions directed by a public health physician and/or public health nurse. In addition periodic dental clinics will be scheduled and conducted. Staff from the proposed White Shield Health Center will serve this health station. Outpatient visits are estimated to increase to 1,000.

A health station building providing examining, treatment, demonstration, and conference space together with waiting and storage rooms is proposed. Space for the parking of a dental mobile unit and connections for same would be provided. Funds in the amount of $47,200 are requested to construct this health station.

Twin Buttes, N. Dak..... $47,300

Project cost estimate

Construction funds requested in 1967.....	$47,300
Equipment funds to be requested under Indian health activities.....	3,000
Total estimated project cost.....	50,300

Twin Buttes is an Indian community located on North Dakota Route 89, 16 miles from Halliday, N. Dak., in the southern segment of the Fort Berthold Indian Reservation. There are approximately 246 Indians residing in this southern segment.

Two clinics per month are now held in half of a tribal building which is inadequate for clinic operations. In the past several years there have been approximately 500 visits annually for medical treatment by contract physicians.

It is proposed to have at least one medical clinic each week and carry on an extensive program of home visiting and conferences at this location. The conferences will consist of well child, preschool, prenatal, and postpartum sessions directed by a public health physician and/or public health nurse. In addition periodic dental clinics demonstrations and group instruction will be scheduled and conducted. Staff from the proposed White Shield Health Center will serve this health station. Outpatient visits are estimated to increase to 1,000 visits annually.

A health station building providing waiting room, examining, treatment, demonstration, conference, and storage rooms for the indicated activities is proposed. Space for the parking of a dental mobile unit and connections for same would be provided. Funds in the amount of $47,300 are requested for construction of this health station.

New Town, N. Dak.---------- $47,300

Project cost estimate

Construction funds requested in 1967----------	$47,300
Equipment funds to be requested under Indian health activities----------	3,000
Total estimated project cost----------	50,300

New Town, N. Dak., population around 2,500, is located in the northern fringe of the Fort Berthold Indian Reservation. The Bureau of Indian Affairs Agency headquarters for this reservation is located here.

Administrative headquarters for the reservation health program have been maintained at this location in rented space. Medical outpatient services have been provided by contract in private physicians' offices.

With the construction of a health center at White Shield and locating of staff there, the administrative offices in New Town will no longer be necessary. However, it is planned to expand the health services to provide more comprehensive services with staff from this new health center.

It is proposed to situate a health station in New Town to serve those Indian residents of the northern segment of the reservation and those beneficiaries coming into the BIA headquarters from other portions of the reservation. New Town is about 54 miles from White Shield. In 1965 approximately 11,000 visits were referred to private physicians located in New Town, Watford City, Parshall, and Stanley. Many of these referrals come from other segments of the reservation. With the establishment of the health center at White Shield and health stations at Mandaree, Twin Buttes, and New Town, this load will be absorbed by these various locations and will minimize distances beneficiaries must travel.

It is proposed to hold clinics at this location two to three times per week. Both therapeutic and preventive medical and dental services will be given. In addition, well baby, prenatal, preschool, and postpartum conferences will be conducted by a Public Health physician and/or Public Health nurse.

Demonstrations and group instructions will also be scheduled and conducted. Staff from the proposed White Shield health center will serve this station.

A health station building providing waiting, examining, treatment, demonstration, conference, and storage rooms for the various activities will be required. Space for the parking of a dental mobile unit and connections for same would be provided.

Funds in the amount of $47,300 are requested for construction of the health station at New Town.

Lower Brule, S. Dak.---------- $47,200

Project cost estimate

Construction funds requested in 1967----------	$47,200
Equipment funds to be requested under Indian health activities----------	3,000
Total estimated project cost----------	50,200

Lower Brule is an Indian community on the Lower Brule Reservation in South Dakota located on the west bank of the Missouri about 35 miles northwest of

Chamberlain. It is accessible from the south by a secondary paved road and from the north by an unpaved road. Roads are generally in poor condition making transportation difficult in bad weather during the winter months. The population of the Lower Brule community is about 260 and the population of the reservation about 450.

Clinics have been held in an old tribal office which is being abandoned due to rising waters of the Big Bend Reservoir. During the past year clinics were held on an average of 2 a week with a total of 1,711 visits.

With the construction of the proposed new health station in the relocated community, it is anticipated that general medical and preventive clinics will be held twice weekly with special clinics held as needed. It is estimated that visits will approximate 2,000 annually.

Cannonball, N. Dak $41,200

Project cost estimate

Construction funds requested in 1967	$41,200
Equipment funds to be requested under Indian health activities	3,000
Total estimated project cost	44,200

Cannonball is an Indian community on the Standing Rock Reservation 25 miles north of Fort Yates, near the Missouri River. It is a new tribal community (one phase of the Standing Rock rehabiltation project), and has an estimated population of 400. The location is semi-isolated and accessible by gravel-surfaced road. The climate is extreme with heavy snows in the winter and intense heat in the summer. Temperatures range from —45° to over 105°.

Clinics are presently held intermittently in a former play area of the basement of the local day school. The building is an old structure, and the clinic space is very inadequate, with poor access lighting, ventilation, and location of water supply.

With the construction of the proposed standard field health station, general medical and preventive clinics will be held weekly, with special and school clinics held as needed. It is estimated that visits will total approximately 1,500 annually. The clinics will be conducted by a medical team from the Fort Yates Hospital.

Rock Point, Ariz $44,100

Project cost estimate

Construction funds requested in 1967	$44,100
Equipment funds to be requested under Indian health activities	3,000
Total estimated project cost	47,100

Rock Point is a community on the Navajo Reservation in Arizona, located about 50 miles north of Chinle. A paved road connects Rock Point and Chinle. It is the site of a Bureau of Indian Affairs boarding school and trading post. There is an estimated population of 1,200 Navajos in the area.

At present, clinics are held on a weekly basis in a former old frame building that was once a mission clinic but is totally inadequate. Services are provided by staff from the Chinle Health Center. A total of 4,200 visits were reported in fiscal year 1965 and 3,500 visits in 1964.

A permanent standard-design health station is proposed to serve the 1,200 resident population and a proposed new 400-pupil boarding school. Twice weekly general clinics and preventive health clinics, public health nursing conferences, and immunization clinics will be held. An average attendance of 50 to 60 persons is expected.

Red Lake, Ariz $44,100

Project cost estimate

Construction funds requested in 1967	$44,100
Equipment funds to be requested under Indian health activities	3,000
Total estimated project cost	47,100

Red Lake (Tonalea) is a community in the western part of the Navajo Reservation in Arizona, 22 miles northeast of Tuba City. It is the site of a Bureau of Indian Affairs day school and a trading post. There is an estimated population of 1,600 in the general area. Red Lake itself is on a paved road, but a significant number of people live in outlying communities in an area of extremely poor roads and with difficult transportation problems.

Bimonthly clinics are now conducted in a tribal chapter building with an average attendance of 23. The building is not designed for health services, and it is necessary to locate chapter officers to unlock the building, start the generator for electricity, and to provide heat in winter months.

It is proposed to construct a new permanent, standard-design field health station.

It is anticipated that twice weekly medical clinics will be conducted, which will provide general medical and preventive health services. The facility would be used for nursing conferences and immunization clinics. Staff will be provided by Tuba City. Twice weekly clinics are expected to average 35 to 40 visits.

Rough Rock, Ariz..... $44,100

Project cost estimate

Construction funds requested in 1967	$44,100
Equipment funds to be requested under Indian health activities	3,000
Total estimated project cost	47,100

Rough Rock is a Navajo Indian community in the Chinle Service Unit, 33 miles northwest of Chinle. It is the site of a Bureau of Indian Affairs boarding school and a trading post. Approximately 900 Navajos live in and nearby Rough Rock.

Several unsatisfactory attempts have been made in past years to conduct clinics in an old boxcar originally set up as a clinic under the Many Farms-Cornell project some 10 years ago.

It is proposed to construct a new permanent, standard-design field health station which will serve the resident population and the new 210-pupil Bureau of Indian Affairs boarding school due for completion in the near future.

It is planned to hold weekly general medical and preventive health clinics, public health nursing conferences, immunization and school clinics. Staff will be provided by the proposed Many Farms Health Center. Average attendance of 25 to 30 persons is exepcted at the weekly clinic.

Queets, Wash..... $105,000

Project cost estimate

Construction funds requested in 1967	$105,000
Equipment funds to be requested under Indian health activities	7,000
Total estimated project cost	112,000

Queets, Wash., is located on the Quinault Reservation in western Washington. It is 70 miles northwest of Aberdeen and 40 miles south of Forks. The Quinault Reservation covers an area of some 240 square miles, chiefly in Grays Harbor County but with a small extension into Jefferson County to the north. Queets is located in this northern tip, a remote and sparsely inhabited area. It has a local population of 165. The population of the Quinault Reservation is about 600.

Forks is the nearest off-reservation community of appreciable size (population 1,150), and has good commerical facilities, modern schools, a hospital (Clallam County Hospital) with 21 beds and 4 bassinets. There are two physicians and one dentist in private practice in Forks. The two physicians have contracts with DIH. U.S. Highway 101 connecting Forks and Queets is a good asphalt-surfaced road. The climate in this area is mild and wet, with frequent fogs and light winter snows. The average annual rainfall is 100 inches.

At the present time medical services are available through the contract physicians in Forks. Hospital services also are provided mainly through the facility at Forks. In fiscal year 1964 the hospital admission rate for the reservation as a whole was exteremely high, about 550 per 1,000 population. Respiratory infections accounted for 40 percent of all outpatient care. For the Indians of

Jefferson and Grays Harbor Counties, the infant death rate in the period 1961–63 was 115 per 1,000 live births, about 2½ times that for the Indians of the 23 reservation States.

With the construction of the proposed facility, general medical and preventive health clinics will be held weekly. Part-time nursing service will be provided at the clinic. Dental services will be provided on a part-time basis. Special preventive health clinics and group health conferences will be held as needed. The local Public Health nurse will use the clinic as a base of operations on the reservation. Health survey teams will also use the station as a base. The health station will serve the northern part of the Quinault Reservation and also the Hoh Reservation, 20 miles north. In addition, it will supplement the health care now provided the Indians of the Quileute Reservation at La Push, 15 miles west of Forks (population 250), primarily in the preventive aspects of health services. It is estimated that there will be 2,000 medical outpatient visits and 800 dental visits per year.

It is proposed to construct a new health station with dental operatory without basement. Due to the high ground-water table, heavy rainfall, and the wet, foggy weather prevailing, a one-floor plan without basement should be developed for use in this area. The plan will require approximately 1,800 square feet. Electrical service, not now available, will be furnished by a diesel generator.

Taholah, Wash..... $105,000

Project cost estimate

Construction funds requested in 1967	$105,000
Equipment funds to be requested under Indian health activities	7,000
Total estimated project cost	112,000

Taholah, Wash., is an Indian community of about 350 people on the Quinault Reservation in western Washington. It is about 40 miles northwest of Aberdeen on the Pacific Coast. The Quinault Reservation covers an area of about 240 square miles, mainly in Grays Harbor County but with a small extension into Jefferson County. There is only one other village on the reservation, Queets, which lies in the northwestern tip, in Jefferson County. The nearest off-reservation community is Pacific Beach, 10 miles to the south. The population of the Quinault Reservation is approximately 600. Roads in the area are for the most part narrow, all-weather roads in fair condition. The climate is mild and wet, with frequent fogs and light winter snows. The average annual rainfall is 100 inches.

At the present time medical services are available through private physicians under contract in Aberdeen, Wash. Hospital services also are provided by contract hospitals in Aberdeen. In fiscal year 1964 there were 325 hospitalizations for the reservation, giving an extremely high admission rate of about 550 per 1,000 population. The Indian infant death rate for the period 1961–1963 for the two counties in which the reservation is located was 115 per 1,000 live births, about 2½ times that for the Indian population in the 23 reservation States.

With the construction of the proposed facility, general medical and preventive health clinics will be held weekly. Full-time nursing service will be provided at the clinic. Dental service will be provided on a part-time basis. Special preventive health clinics and group health conferences will be held as needed. The local Public Health nurse will use the clinic as a base of operations on the reservation. Health survey teams will also use the station as a base. It is estimated there will be 3,750 medical outpatient visits and 1,800 dental visits per year.

It is proposed to construct a new health station with a dental operatory and without basement. Due to the high ground water table at Taholah, a one floor building without basement is planned for this location. The plan will require approximately 1,800 square feet on one floor.

Lapwai, Idaho..... $105,000

Project cost estimates

Construction funds requested in 1967	$105,000
Equipment funds to be requested in 1968	7,000
Total estimated project cost	112,000

Lapwai is 15 miles east of Lewiston, Idaho, on the Nez Perce Indian Reservation. The population of the reservation is about 1,400. The terrain of this area is varied, with valleys, high rolling hills, and rugged mountain country. Summers are hot and dry and winters are cold, with severe snowstorms. Precipitation ranges from 10 to 15 inches per year, largely as snowfall.

At present medical care is provided by private physicians under contract in Grangeville, Lewiston, and Orofino, Idaho, and Clarkston, Wash. Hospitalization is provided at contract hospitals in these locations. In fiscal year 1964, there were 282 referrals for hospitalization with an average daily patient census of 5.

There is at present a lack of a coordinated field health program with which to develop the health education and care necessary to raise the health level of this beneficiary group to the highest possible level. In order to provide a functional base for coordinating the overall health program and to make available a more accessible location on the reservation where patient care may be obtained, it is proposed to construct a health station at Lapwai, Idaho. This facility will provide a screening point for early detection of disease and serve as a base for preventive health activities.

The station will contain office space to accommodate a full-time contract care authorization center and clinic space for medical use. In addition, space will be provided for sanitation and dental programs.

The staff will include one physician, one clinic nurse, and one public health nurse (contracted from the local health department), a dentist, and supportive personnel. It is estimated that the medical outpatient visits will be 3,750 annually and that there will be 350 dental patients examined and 1,500 dental services provided.

Wellpinit, Wash..... $96,000

Project cost estimate

Construction funds requested in 1967	$96,000
Equipment funds to be requested under Indian health activities	7,000
Total estimated project cost	103,000

Wellpinit, Wash., is located on the Spokane Indian Reservation, 40 miles northwest of Spokane. It is a small settlement, with one store, a post office, a Bureau of Indian Affairs subagency, and a few dwellings. The Spokane Reservation, located in Stevens County, covers an area of 151,000 acres on the north side of the Columbia River. It is a heavily timbered area, whose climate ranges from minus 15° in the winter to 100° in the summer and has an annual precipitation of 9 to 15 inches.

The population is estimated at about 650 persons, predominantly of the Spokane Tribe. The educational level of the adult population over 14 years of age was 8.8 years in 1960. Income is from farming, stock raising, land leases, timber, and seasonal employment. The 1960 census showed the Indians of this area to have a median annual income (all persons with income) of $1,000.

At the present time a contract physician holds a clinic 1 day per week in Wellpinit. The clinic building is a five-room frame building, formerly a residence which was constructed in 1915. This building, together with a three-room building of similar age and construction, and now vacant, are inadequate for present or future needs. With the projected termination of care to the Colville Indians, the preventive and contract patient care aspects of the program in this service unit will be administered from Wellpinit rather than Nespelem. In fiscal year 1965, a total of 1,375 outpatient visits were recorded at the present facility. Respiratory infections and otitis media were the most frequently reported of the notifiable diseases.

It is proposed to construct a new health station with office space to accommodate a full time contract patient care authorization center and the clinic space for medical use. In addition, space is required for sanitation and dental activities. The provision of basement areas for patient care is undesirable, one-floor plan being best suited to meet present and anticipated needs. It is estimated that with construction of this health station outpatient visits will be 2,500 per year with 200 dental patients examined and 1,000 dental services provided. Estimated contract patient care referrals will be 1,100 per year for medical care and 175 for dental. The staff will include one physician, a clinic nurse, a public health nurse, a dentist, and other supportive personnel.

Big Cypress, Fla. $25,000

Project cost estimate

Construction funds requested in 1967	$25,000
Equipment funds to be requested under Indian health activities	2,000
Total estimated project cost	27,000

It is proposed to build a health station on tribally owned land on the Big Cypress Reservation 30 miles south of Lake Okeechobee in Hendry County, Fla., in order to provide services to the local population of 250 and the BIA day school students.

PRESENT FACILITY

The outpatient facility at Big Cypress Reservation is a 30-year-old frame building (formerly quarters) belonging to BIA. Its size is entirely inadequate. The waiting room is a converted porch. Maintenance of wood buildings in the swampy conditions found at this location is almost impossible. The BIA is replacing all of the frame buildings with masonry construction. The building in which the DIH conducts the health program is surplus to BIA needs and will not be replaced. Further, the BIA desires to relocate an existing road so they can eliminate a hazardous corner. This would necessitate demolishing the present structure which is approximately 490 square feet and is subject to flooding in the rainy season. The BIA recently completed a new day school building at this location.

PRESENT PROGRAM

Services at this location are totally provided through contract arrangements with the local health department. The physician is located 140 miles from the reservation at Sebring, Fla., and makes two trips a month to hold clinic sessions. A nurse located 40 miles away at Clewiston provides services twice a week.

Twenty-five to thirty patients are seen by the nurse at each of her visits while the physicians' clinic sessions attract approximately 50 patients. An active preventive health and immunization program is carried on as well as the medical care services provided by the physician.

A dental trailer makes an annual visit to the reservation and at other times emergency dental cases are referred to contract dentists in Clewiston.

Through a contract with the State, sanitarian services are available on a part-time basis.

PROPOSED PROJECT

A small masonry building of approximately 650 square feet containing waiting room, examining room, public health nurse office, and workroom is proposed. Tribal land in close proximity to the BIA school is available for the site. The old structure will be destroyed by BIA.

The local health department plans to add an additional physician to the staff who will be headquartered closer to the reservation and will increase the frequency of physician-held clinic sessions.

Summary of 1967 request for hospitals and clinics

Hospitals (construction and planning)	$1,072,500
Health centers (construction)	440,000
School health centers (planning)	82,000
Health stations (construction)	798,500
Total	2,393,000

Personnel quarters

1967 request $3,800,000

Because of the unique characteristics of the Indian health program and the geographical location of the beneficiary population, the Indian health facility is for the most part situated in isolated, desolate and sparsely populated areas. In most of these areas housing for sale or rental is just nonexistent. But unfortunately, housing constitutes a major factor in the ability to recruit or retain professional employees esesntial to the conduct of the program and the provision of basic health services.

It is quite evident that to provide the quality and quantity of health services required to elevate the health status of the Indian, Government housing must be made available. The Surgeon General's Advisory Committee on Indian Health, the American Hospital Association, the Association of State & Territorial Health Officers and the American Academy of General Practice have noted the deficiency and have strongly recommended the provision of an adequate number of suitable staff quarters.

To implement an accelerated hospital and field health program in 1956, 326 surplus prefabricated housing units and trailers were acquired. These units provided a partial solution to emergency housing problems and helped sustain the crash health program. However, they were never intended, nor are they adequate, for long-term use. Many of these units are still in use, but not by choice. The urgency for providing for current deficiencies, or for new and expanded programs and facilities by necessity takes precedence over the desire to replace the substandard units.

In 1967 the request for 207 units will permit the satisfying of acute needs at 20 locations. Included in the request are 43 units in association with various projects contained in other activities in this request: a new (replacement) hospital at Mescalero, N. Mex. (11 units); new health centers at White Shield, N. Dak. (15 units) and Wanblee, S. Dak. (5 units); and alteration projects at Sells, Ariz. (8 units) and Rocky Boy, Mont. (4 units). The remaining 164 units are desperately required to overcome existing deficiencies through provision of additional units or replacement of substandard units at 15 other locations.

It is hoped that 1967 will mark the beginning point for eventual relief in the drastic shortage of quarters that now exists.

Distribution of quarters by location, 1967 program

Type of facility	Location	Number of units	Estimated cost
Hospital	Winnebago, Nebr	7	$128,500
Do	Belcourt, N. Dak	17	312,100
Do	Fort Yates, N. Dak	14	257,000
Health center	White Shield, N. Dak	15	275,400
Hospital	Pine Ridge, S. Dak	14	257,000
Health center	Wamblee, S. Dak	5	91,800
Hospital	Mescalero, N. Mex	11	202,000
Do	Crownpoint, N. Mex	33	605,200
Do	Browning, Mont	11	202,000
Do	Crow Agency, Mont	15	275,400
Health center	Lame Deer, Mont	3	55,100
Do	Poplar, Mont	9	165,200
Do	Rocky Boy, Mont	4	73,500
Do	Fort Washakie, Wyo	7	128,500
Hospital	Parker, Ariz	4	73,500
Health center	Peach Springs, Ariz	4	73,500
Hospital	San Carlos, Ariz	7	128,500
Do	Sells, Ariz	8	146,900
Do	Whiteriver, Ariz	4	73,500
Do	Schurz, Nev	15	275,400
Total, 1967 request		207	3,800,000

Equipment requirements for ranges, refrigerators, and washer-dryers in the amount of $139,000 will be requested under "Indian health activities."

Alterations

1967 request $2,029,000

An orderly program of alteration, modernization, or addition to Indian health facilities is necessary in order to provide for up-to-date facilities that meet program needs and are safe for patient and staff as well. In 1967 projects are slated at 18 locations, 3 of which are planning or feasibility studies for major modernization at Red Lake, Minn., Talihina, Okla., and Anchorage, Alaska. The 1967 program includes a minor alteration project at Sells, Ariz., for which planning funds were appropriated in 1965 and construction of a sewage treatment plant at Kotzebue, Alaska (study funds appropriated in 1966). There is also a project

for a sorely needed sewage treatment plant at Mount Edgecumbe, Alaska. This is in keeping with Presidential desires that Federal installations do not contribute to water pollution.

Included are funds to plan modifications in the pediatric and surgical suite and to complete construction of an alteration project at Tahlequah, Okla., and funds to remodel the center at Warm Springs, Oreg. In addition funds are included for planning, alteration, additions, or modernization at eight other locations.

Aberdeen area: Pine Ridge Hospital, Pine Ridge, S. Dak..... $26,000

Project cost estimate

Planning funds requested in 1967	$26,000
Construction funds to be requested in 1968	324,000
Equipment funds to be requested under Indian health activities	35,000
Total estimated project cost	385,000

PROPOSED PROJECT

This project involves renovation of the existing hospital as follows: Excavation of a portion of the basement to provide for central supply; provision for a conference room and additional field health and office space and renovation of the existing hospital to provide more adequate functional arrangement of the space for an additional 11 pediatric beds.

EXISTING FACILITY

The orginal Pine Ridge Hospital was constructed in 1930 as a 47-bed, general medical and surgical hospital. Because of crowded conditions and poor outpatient facilities, an addition was constructed in 1961. Present bed availability is 58 of which 33 are adult and 25 are pediatric beds.

The average annual hospital admissions for the past 4 years (1962–65) has been 2,089. The outpatient load, during the same period increased from 19,766 visits in 1962 to 27,812 in 1965 (41-percent increase). During 1964 the average pediatric census was 31.4 These has also been a large expansion in comprehensive public health activities.

As a result of these changes, a pronounced need has been developed for more efficient arrangement of hospital and public health functions as well as an addition of more pediatric beds, a storage room, and space for coordinating hospital and public health activities.

Rosebud Hospital, Rosebud, S. Dak..... $28,000

Project cost estimates

Planning funds requested in 1967	$28,000
Construction funds to be requested in 1968	424,000
Equipment funds to be requested under Indian health activities	40,000
Total estimated project cost	492,000

PROPOSED PROJECT

The proposed project involves replacement of the old portion (substandard wing) of the Rosebud Hospital with an addition that will provide more adequate functional arrangement of space for 27 pediatric beds with supporting facilities, expanded dental clinic, plus administrative and field health offices. The project would provide 51 beds upon completion. Also included is construction of a new heated garage to house four ambulance-type vehicles plus six Government-owned staff automobiles.

EXISTING FACILITY

The Rosebud Hospital serves as the health center for and provides obstetrical pediatric, general medical and surgical services, to the residents of the Rosebud Indian Reservation. The existing physical structure consists of the original

hospital building of wood frame, brick veneer construction completed about 1915 to which was added a wing of modern construction in 1960. Although constructed and rated as a 36-bed hospital, it has experienced a peak census of 58 patients in the past 3 years (1963–65). The old portion of this building, which is unsafe and functionally inadequate, presently houses a 21-bed pediatric nursing unit with supporting facilities on the second floor. On the first floor are the administrative offices, field health offices, two-chair dental operatory, conference room, and medical library. The space is physically and functionally inadequate, posing safety and fire hazards for both patients and personnel.

COMMUNITY FACILITIES

In considering available community resources two factors must be kept in mind: (1) The negative attitude of State and local governments toward the Indian which is manifest by their considering him as the ward of the Federal Government making his welfare no concern of either the State or local governernment; and (2) the negative attitude of the Indian toward hospitalization in general and in particular, hospitalization in a distant facility. Of the four community hospitals in the immediate area of Rosebud none is larger than 35 beds and all have an occupancy rate at or approximately 60 percent. None of these hospitals have shown the slightest interest in community hospital (Public Law 85–151) funds or expanding contract arrangements beyond the current scope of services they provide. The average road distance of these hospitals from Rosebud is 68 miles. To impose the heavy obstetric and pediatric workload from the Rosebud Indian Hospital on these community hospitals would work a disservice on the Indian and non-Indian communities alike.

Red Lake Hospital, Red Lake, Minn $62,000

Project cost estimate

Planning funds requested in 1967	$62,000
Construction funds to be requested in 1968	1,000,000
Equipment funds to be requested under Indian health activities	50,000
Total estimated project cost	1,112,000

PROPOSED PROJECT

Plans are to demolish the present inadequate and totaly unsafe ancillary facilities wing of this hospital and replace it with a new wing, housing kitchen, laboratory, X-ray, surgical, OPD, dental, administrative, and field health facilities.

EXISTING STRUCTURES

The existing facility is composed of two wings—one is a modern brick, masonry, 25-bed building completed in 1963. The other is an old and badly deteriorated 50-year-old wood frame structure (former hospital) housing all the ancillary facilities except the pharmacy and dental clinic. The pharmacy and dental clinic are located in an old wood frame building that is 250 yards away and across the main highway from the hospital.

TRIBES SERVED

The Red Lake Hospital is virtually the only health resource for the Red Lake Band of Chippewas. It is located at the town of Red Lake on the Red Lake Reservation which is still considered a "closed reservation," indicating that utilization of land is restricted to Red Lake Indians.

PROGRAM PLAN

The proposal involves the demolition of the old ancillary services wing and the erection of a new wing to house these services and provide for an expanded outpatient and field health program. It is anticipated that the provision of more adequate and safe service areas will permit the conduct of a truly comprehensive and broadened health program for the reservation. Severe structural restrictions have minimized the amount and type of laboatory, X-ray, and

similar services that can be provided by the hospital. Only those surgical cases that were of an extreme emergency nature were cared for and these in an emergency room rather than a surgical suite. It is expected that, after completion of the new wing, surgical cases other than those involving "life and death situations," can be cared for at the hospital. Complicated diagnostic cases and patients requiring specialized treatment will still be sent to contract facilities at Bemidji, Rochester, and Minneapolis, Minn.

The expanded and centralized auxiliary services and outpatient areas will allow a stepped-up and more effective outpatient and field health program. The increased space will permit the holding of more clinics on a more frequent basis.

At the present time there seems to be no immediate need for additional inpatient facilities. It is difficult, however, to predict the impact of the expanded outpatient acivities on the hospitalization picture. Also to be noted is, that in order to be enrolled on the Red Lake roll, babies must be born on the reservation; birth outside reservation is a complete disqualification.

NEED FOR FACILITY

Careful study of the conditions of the Red Lake Reservation in relation to the joint criteria developed by the Bureau of Indian Affairs and the Division of Indian Health for justification of construction of Indian health facilities, indicates that a direct hospital operation will continue to be needed for some years to come. Some use is now made of community medical facilities in Bemidji, Crookston, and Duluth, Minn. Use of these facilities is limited, however, and is accepted by the beneficiary as a requirement in receiving specialized care. Bemidji is the closest point for receiving community medical care services and is located approximately 35 miles from the Red Lake Reservation. The reservation is extremely isolated and there is little or no transportation available for its residents. Some of the most conservative Indian groups in America today can be found among this reservation's population. Tribal leaders are adamant in their demands for the continuation of a Public Health Service Indian hospital and have indicated that without such a facility the Indian would simply do without care or return to the old custom of employing medicine men to cure their sickness. This would be extremely detrimental to the development of a comprehensive program of medical care for this group.

Total, Aberdeen area, $116,000.

Albuerque area: Shiprock Hospital, Shiprock, N. Mex..... $42,000

Project cost estimate

Planning funds requested 1967	$42,000
Construction funds to be requested in fiscal year 1969	585,500
Equipment funds to be requested under Indian health activities	80,000
Total estimated project cost	707,500

PROPOSED PROJECT

The purpose of this project is to expand the existing outpatient and field health facilities at the 75-bed hospital serving approximately 18,000 Navajo Indians of the Division of Indian Health Shiprock Service unit.

EXISTING FACILITY

The existing 75-bed hospital was authorized in 1953 to replace an old and very poor 43-bed hospital. This coincided with the authorization of a new Bureau of Indian Affairs boarding school. Estimates then of the population to be served ranged between 12,500 and 13,600. By 1957, the population was estimated to reach 14,000 due to the accelerated industrial activity and the additional numbers employed on the irrigation projects. The new 75-bed replacement hospital was completed in 1960. However, it was already too small to meet the growing population needs and the new demands on the health facilities generated by the expanded preventive health and field health services.

The present outpatient facility which also serves the adjacent 1,000 student boarding school requires expansion of space and supporting facilities in order

to provide a more adequate and comprehensive base for health services, integrated with the field health activities.

The present field health and outpatient areas are too small to meet the demand for unmet health needs of an increasing population. The present overcrowding inservice areas poses a potentially hazardous situation. An addition is proposed to provide for expansion of diagnostic services, outpatient clinics, and supporting services, coordinated with the field health activities.

PROPOSED PLAN

The proposed plan provides for expansion of the Shiprock outpatient clinics and the associated essential diagnostic and treatment facilities to relieve the critical overcrowding and to enable the conduct of a coordinated and comprehensive health service and field health program, for the growing population and the expanding school enrollment throughout the service unit.

With special emphasis on earlier prenatal care, postnatal services and well-child care, the high obstetrical workload and outpatient clinical workload is expected to increase.

Expectant mothers will be referred from field clinics to hospital clinics for more compresentive prenatal examinations and services earlier in pregnancy, in order to reduce the complications of pregnancy and delivery. Improved prenatal service is expected to influence the infant mortality rates over a period of time.

More complete diagnostic services (laboratory, pathology, specialty consultation services) are needed as is also screening of the older population to uncover existing conditions requiring medical attention. Since many patients are referred to other facilities for inpatient hospitalization, a comprehensive followup service must be organized and a system established for examining patients after discharge from the hospital, and before they return to their homes, in order to provide continuity in medical management. Consequently, plans for expansion of the Shiprock outpatient clinic services and hospital supporting facilities, as a base for coordinating expanded services at satellite field locations, is the priority proposal.

Gallup Hospital, Gallup, N. Mex..... $15,600

Existing corridor smoke partitions are lightly constructed using extensive amount of ordinary glass.

These partitions are to be replaced with construction similar to other partitions in the hospital which are more effective and permanent barriers. These barriers will extend above the corridor ceiling to fit tightly against the underside of the floor above.

Doors in the new partitions will be of solid wood construction with astragals to prevent smoke infiltration. Electrically operated door releases will be installed on normally open doors. Additional smoke stop partitions are to be installed where required.

Shonto Health Station, Shonto, Ariz..... $28,800

Project cost estimate

Construction funds requested in 1967	$28,800
Equipment funds to be requested under Indian health activities	4,000
Total estimated project cost	32,800

Addition of a dental clinic is required to provide dental services to beneficiaries. Currently dental services to 274 students are being provided from a temporary one chair operatory. The Bureau of Indian Affairs advises that the number of children to be enrolled at Shonto Boarding School will be increased to 1,294 students. There are, in addition, approximately 600 local preschool and adult beneficiaries totaling approximately 1,900 beneficiaries which would receive dental services. It is proposed to construct an addition to the present health station to provide permanent two-chair dental facilities plus expanded medical X-ray and laboratory facilities. The addition of the dental facility will evolve into a full-time dental

operation upon assignment of a resident dental team. Pending that assignment it will be staffed 2½ days per week by the dental team assigned to the Kayenta Health Center.

Total, Albuquerque area, $86,400.

Billings area: Browning Hospital, Browning, Mont..... $19,000

Project cost estimate

Planning funds requested in 1967	$19,000
Construction funds to be requested in 1969	254,000
Equipment funds to be requested under Indian health activities	7,500
Total estimated project cost	280,500

PROPOSED PROJECT

The proposed project involves alteration and expansion of the present hospital structure to provide additional outpatient area, expansion of the dental clinic, relocation of the obstetrical service to a more isolated position within the hospital and better working space for ancillary services. This expansion and alteration project is necessary to meet accreditation requirements and to provide health services for the Blackfeet service unit.

EXISTING FACILITY

The Indian hospital at Browning is a one-story building with a full basement. The original portion of the building, constructed in 1936, was altered in 1961, providing a constructed capacity of 35 beds. At that time the added wing provided for inpatient care and some remodeling of the old portion of the hosiptal was accomplished for improved general functioning. The dental suite has been cramped and the total outpatient area is inadequate for the load now being experienced.

The present obstetrical unit in the old part of the hospital opens off the main outpatient corridor. Outpatients are frequently wandering into this inadvertently, creating a high possibility for infection. Consequently the hospital cannot pass accreditation or meet Montana's State licensure standards.

COMMUNITY FACILITIES

Glacier Memorial Hospital at Cutbank, Mont. (used for emergency cases), has not shown interest in financial assistance under community hospital (Public Law 85-151) construction. At best, this general hospital would be able to provide only curative services to the Blackfeet Tribe. Other community facilities are so distant as to be unavailable to the residents of the Blackfeet Reservation.

Rocky Boys Health Center, Box Elder, Mont..... $29,500

The present building was designed and constructed originally as a health station. Because of the need to expand the present health services for this extremely poor group of beneficiaries, the facility program was expanded from 3- to 5-day services with a full-time physician providing a health center program.

The available space is not large enough, is functionally inadequate, and is not conducive to efficient operation.

It is proposed to construct an addition to the existing building to provide two examination rooms, an X-ray room, and a laboratory.

In fiscal year 1965 there were 8,651 outpatient visits, 484 dental exams, and 2,425 dental services provided. After the addition, it is estimated that annual services will include 9,000 outpatient visits for medical services, 500 dental examinations, and 2,500 dental services.

Total, Billings area, $48,500.

Oklahoma area: Cherokee Hospital, Cherokee, N.C..... $40,000

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Project cost estimate

Planning funds requested in 1967	$40,000
Construction funds to be requested in 1968	610,000
Equipment funds to be requested under "Indian health activities"	50,000
Total estimated project cost	700,000

PROPOSED PROJECT

The proposed project involves modernization through additional construction to the existing hospital building to provide space for (1) outpatient medical and dental clinic, and (2) additional space for public health, laboratory, and administrative functions.

EXISTING FACILITY

The existing hospital was constructed in 1936 as a 22-bed general medical and surgical facility. No modernization or major remodeling has taken place since the original construction. The present facility provides for 22 inpatient beds, 1 dental clinic, 1 delivery room, 1 operating room, and 2 examining rooms. This facility was not designed for the expanding outpatient, laboratory, dental, and comprehensive public health services required by the beneficiary population. During the period 1961–64 outpatient visits for medical therapeutic and preventive services increased from 19,732 to 21,147 per year. In 1965 the figure dropped to 17,826 visits reflecting a 99-percent reduction in influenza and an 85-percent reduction in hepatitis. This was probably due to a mild winter and a high level of immunity of the population at risk.

The outpatient department is extremely short of space for examinations. Patients cannot be seen separately and privacy is next to impossible. The waiting room area is so small that only the seriously ill can be seated, often forcing the ambulatory patients to wait outside even during inclement weather. The result is that patients needing care or preventive health service do not remain to receive such service.

The operation of a coordinated health program, integrating hospital services with comprehensive activities and services, has also been hampered by reason of inadequate space. Coordination is most difficult when such necessary functions as pharmacy, public health nursing, and sanitation must be housed separately from the hospital structure.

COMMUNITY FACILITIES

Administrators of local community hospitals have indicated a lack of interest in community facilities (Public Law 85–151) funds and have stated that they would be unable to provide coverage beyond the present scope of contractual arrangements. They feel strongly that the continuation of the Cherokee Indian Hospital is in the best interests of both the Cherokee Tribe and the local communities.

Talihina Hospital, Talihina, Okla $65,000

Project cost estimate

Feasibility funds appropriated 1963	$13,000
Planning funds requested in 1967	65,000
Construction funds to be requested in 1968	1,174,000
Equipment funds to be requested under "Indian health activities"	150,000
Total estimated project cost	1,402,000

PROPOSED PROJECT

Plans are to modernize the existing Indian hospital at Talihina, Okla., to provide 100 general medical and surgical beds with coordinated outpatient facilities and ancillary services. The project involves functional rearrangements in the main hospital building, which presently do not permit efficient and

economical operation; correction of problems resulting from the dispersal of supporting activities in a number of buildings at widely separated locations; and modernization of the outpatient department, medical records, waiting room, surgical suite, and administrative offices. Some rearrangement and relocation of these spaces as well as other elements of the hospital will be involved. A number of the old buildings will be eliminated through the consolidation of activities.

EXISTING FACILITY

The Talihina Hospital is located in the southeastern corner of Latimer County in southeast Oklahoma. The hospital was constructed in 1938 as a 224-bed general and tuberculosis hospital. It was carried as a 198-bed hospital until 1964. During 1964 there was a reduction in use of TB beds, as new patients were transferred to the State hospital and in July 1964 the TB unit was discontinued. Currently 114 general beds are available.

The Talihina Hospital is the primary health resource for the Choctaws and other constituent members of the Five Civilized Tribes. Close identification of the Talihina Hospital with the Choctaws and Chickasaws goes back to the appropriations of 1914 and 1915, which authorized the Secretary of Interior to construct a sanatorium on unallotted lands of the Choctaw and Chickasaw Tribes and with the use of tribal funds. Upon reconstruction in 1938 Talihina was designated as a medical center (with a large tuberculosis unit) for the Five Civilized Tribes: Choctaw, Chickasaw, Cherokee, Creek, and Seminole.

COMMUNITY HOSPITAL FACILITIES

The possibility of contracting for general medical and surgical beds in southeastern Oklahoma has been studied. According to the Oklahoma State plan for the hospital and medical facilities construction program there are 21 acceptable G.M. & S. hospitals listed in the 16 counties in southeastern Oklahoma which constitute the patient drawing area of the Talihina service unit. Of the 21 hospitals, 8 are in communities where there are unmet bed needs and 3 others had over 75 percent utilization. Considering optimum utilization as 75 percent for the remaining 10 institutions, theoretically there are 35 beds available in 7 hospitals, in 6 counties. Except for the one in Ardmore, Okla., which has a capacity of 100 beds (64 percent occupancy) the others range in size from 10 to 31 beds. These very small hospitals with few available beds cannot be looked to as a resource for providing the specialized type of care and continuity in medical management needed by Indian beneficiaries.

Not only are there the recognized disadvantages of small hospitals with regard to staffing, equipment, and flexibility of services for the diversified type of patient load, but such hospital referral practices would negate achievement of the objective to coordinate public health activities in the field with the hospital therapeutic, preventive, and restorative health program.

Tahlequah Hospital, Tahlequah, Okla..... $168,100

It is proposed to complete phases of an alteration project previously authorized for which funds were insufficient and to plan additional alterations to overcome deficiencies in pediatrics and the surgical suite of the PHS Indian hospital at Tahlequah, Okla.

CONSTRUCTION OF PREVIOUSLY APPROVED PROJECT, $157,800

Originally, the Tahlequah Hospital alteration project was to include the construction of a new wing; alterations to rooms and spaces within the existing hospital building; remodeling, including installation of new obstetric and radiographic suites, new laboratory and sterile supply facilities, nurses' stations, doctor's examining rooms and offices, emergency treatment room; and extensive alterations to provide a formula room, dietitian's office and administration suite. Also included were improvements to the electrical and ventilation systems, and revisions to the ambulance dock, drives, walks, and grading.

The bids received for this work were far in excess of the funds available. The scope of the project was therefore revised to remain within available funds and included only an outpatient addition. After readvertising, an award was made.

In order to accomplish the remaining project alterations additional funds will be required.

To date, the following elements of the original project have been completed or partially completed to the extent of available funds: Out-patient addition with air conditioning, radiographic suite, obstetrics suite, revision of the two nurses stations, sterile supply facilities, paging system, telephone system, parking and ambulance drive, ambulance dock, emergency room, and electrical distribution system.

The following deficiencies which were included in the original project still remain:

1. *Laboratory.*—Modernization of cabinets, structural alterations, and enlargement. (Recommendation of Joint Committee on Accreditation Surveyor).
2. *Formula room and dietitian's office.*—Conversion of dietitian's office and portion of employee's dining room into a formula room and dietitian's office.
3. *Administration suite.*—Provide office space adjacent to the out-patient area.
4. *Examination and treatment room.*—Conversion of existing bathroom and utility room into an examining room.
5. *Sidewalk.*—To provide off-street sidewalks during inclement weather and as safety factors.
6. *Completion of electrical system.*—Include branch circuit wiring, additional light fixtures, and air conditioning power wiring.
7. *Ventilation.*—To provide atmospheric control in the delivery room, and for the ventilation of toilets, utility rooms, and sterilization rooms.

This work is estimated to cost $157,800 and is requested to be made available in fiscal year 1967.

Planning for additional alteration projects required to correct deficiencies in existing structure, $10,300

PROJECT COST ESTIMATE

Planning funds requested in 1967	$ 10,300
Construction funds to be requested in 1969	172,000
Equipment funds to be requested under Indian health activities	17,600
Total estimated project cost	199,900

Three features of the Tahlequah Indian Hospital that have drawn the most adverse attention during accreditation or similar surveys are:

1. *Surgical suite.*—The present operating room opens on a much-traveled corridor near the pediatrics ward. The operating room has in it, old wooden cabinets for instruments, and sterile supply storage. The windows cannot be darkened for endoscopy. The conductive linoleum flooring is separating from the terrazzo beneath. This is in violation to existing standard guidelines and does not meet standards for accreditation. It is proposed to relocate the entrance to the surgical suite, install new conductive flooring, replace group I equipment and modernize the electrical and mechanical system to meet current construction codes and accreditation guidelines.
2. *Pediatric ward.*—There is at present totally inadequate space for proper isolation of pediatric patients with communicable diseases. Pediatric space in this hospital consists of one large room which was originally constructed as a six-bed open ward. It has a kitchen type sink and drainboard at one end and seven beds. Bathroom facilities are located outside of the ward in a connecting hallway.

The diseases most frequently admitted are: infectious diarrhea, upper respiratory infections, including croup, pneumonia, and whopping cough, and malnutrition resulting from improper diet. From time to time infectious diseases, usually diarrhea sweep through the ward.

In fiscal year 1964 there were 2,574 inpatient pediatric days. This averaged 7.1 pediatric patients per day. Hospital nursing reports for fiscal year 1965 reveal an average daily pediatric patient load of 8.9.

During the last survey of the Joint Commission on Accreditation of Hospitals, conducted in May 1964, one of the recommendations and comments noted in the survey report was: "The pediatric section of the hospital should be modernized and enlarged to provide better separation and isolation of babies and children. This recommendation is consistent with the standards of hospital accreditation which require that facilities for the isolation of patients with communicable dis-

eases, especially in obstetrical, newborn, and pediatric sections should be maintained. It is proposed to rearrange the pediatric ward to provide the necessary separation and isolation of the pediatric patients. By efficiently rearranging and modernizing the pediatric nursing unit additional space can be realized.

3. *Air conditioning.*—It is proposed to air-condition certain necessary area of this facility for the purpose of providing an environment inducive of safe patient care. To meet minimum accreditation standards, air conditioning will be provided for the following areas:

(1) The remodeled surgery.
(2) Surgical and OB recovery rooms.
(3) Nursery.
(4) Emergency room.
(5) Treatment rooms.
(6) Laboratory.
(7) Central sterile supply.
(8) Intensive care nursing units.
(9) Teaching-training conference room.

The provision of air conditioning in the program spaces are in compliance with Bureau of the Budget criteria as outlined in Circular A–57.

Total, Oklahoma area, $273,100.

Phoenix area: Sells Hospital, Sells, Ariz.---------- $129,000

Project cost estimate

Planning funds appropriated in 1965----------	$11,000
Balance of planning funds requested in 1967----------	1,000
Construction funds requested in 1967----------	128,000
Total estimated project cost----------	140,000

CONVERTING SPACE IN HOSPITAL TO FIELD HEALTH

Conversion of the general storage, subsistence storage, and other existing related service spaces (amounting to 1,558 net square feet) in the hospital to provide necessary field health office spaces is proposed.

The present space available for the field health activities in the small PHS Indiana health station building (formerly a health center) located about 1 mile from the hospital is entirely inadequate. This physical separation impedes the accomplishment of a coordinated health program for the Papage Indian beneficiaries.

ADDITIONAL STORAGE AND MAINTENANCE SHOPS

Experience demonstrates the need for additional storage space and maintenance shop facilities. The space provided in the original construction for the storage of medical and general hospital supplies was not adequate. Garage facilities located several hundred feet from the hospital have been utilized to supplement the storage area. This storage operation is inefficient and costly. The control of supplies is extremely difficult. In addition, due to the isolated location and lack of service organizations in this area, it is considered essential to provide maintenance resources to complement the hospital operation.

Accordingly, it is proposed to provide an addition of 4,422 gross square feet for centralized storage and maintenance operations space.

CONVERTING FIELD HEALTH CENTER TO QUARTERS

The old Indian health center building will be converted to an adequate three bedroom unit to reduce the present housing shortage for hospital staff.

Owyhee Hospital, Awyhee, Nev---------- $25,000

Project cost estimate

Planning funds requested in 1967	$25,000
Construction funds to be requested fiscal year 1969	220,000
Equipment funds to be requested under Indian health activities	20,000
Total estimated project cost	265,000

PROPOSED PROJECT

The proposed project involves modernization and alteration of the existing 20-bed hospital into a 16-bed general medical and surgical hospital with an outpatient department and accompanying field health offices which will permit the safe provision of comprehensive health services to about 1,500 Indian beneficiaries of the Owyhee service unit.

EXISTING FACILITY

The existing hospital was constructed of masonry in 1937. It is obsolete by modern standards and is costly to operate and maintain. Studies indicate that rehabilitation and modernization of the structure is possible.

Present arrangement of the clinical space makes infection a real danger since administrative and field health staff must pass directly through the patient area to reach their offices in the basement. Adequate facilities (scrub-up and dressing areas) necessary for the prevention of surgical and obstetrical infections are not present. The location of the formula room adjacent to the delivery room also poses a definite hazard.

COMMUNITY HOSPITALS

Community hospitals under contract will continue to be used as they have been in the past. Complicated medical or surgical problems will be referred to these hospitals where the necessary facilities and skills are available. State facilities will be used for care of patients with tuberculosis and mental disorders.

Whiteriver Hospital, Whiteriver, Ariz. $27,000

Project cost estimates

Planning funds requested in 1967	$27,000
Construction funds to be requested in 1968	431,000
Equipment funds to be requested under Indian health activities	37,000
Total estimated project cost	495,000

PROPOSED PROJECT

The proposed project involves the replacement of the obsolete and unsafe wing constructed in 1928 with the addition of a 12-bed pediatric unit, for a total constructed capacity of 50 beds.

EXISTING FACILITY

The original Whiteriver general medical and surgical hospital was constructed in 1928; an inpatient wing, which was added in 1960, brought the total bed capacity to 38. In the past 3 years the ADPL has averaged 36 (1963), 36 (1964), and 37 (1965). Because half of the current patient load is pediatrict, it has been necessary to care for these patients in the corridors and to crowd cribs in the available patient rooms. Under these conditions, safe and adequate medical care cannot be provided and the danger of cross-infection is ever present.

The 1928 portion of the building is structurally unsound and difficult to maintain. It is a serious fire hazard, and is a danger to patients, employees, and the wing added in 1960.

COMMUNITY HOSPITAL FACILITIES

Community hospital facilities are practically nonavailable to the residents of the Whiteriver Reservation. The nearest accredited hospital is in Phoenix, Ariz., 200 miles away. There are a few small nonaccredited hospitals within a reasonable distance such as McNary (15 beds) 20 miles away; Show Low (14 beds) 35 miles distance, and Springerville (18 beds) 60 miles away. These hospitals can offer only the most limited services for a very few people. The management of the complex and diverse health needs of the Whiteriver people requires program and staff specifically planned and trained to handle the unusual health problems and meet the health needs through a coordinated therapeutic, preventive, and restorative public health approach.

Total, Phoenix area, $181,000.

Portland area: Warm Spring Health Center, Warm Spring, Oreg..... $91,000

Project cost estimate

Construction funds requested in 1967	$91,000
Equipment funds to be requested under Indian health activities	5,000
Total estimated project cost	96,000

The Warm Springs Health Center is located on the Warm Springs Reservation in north-central Oregon, 26 miles north of Redmond, Oreg. The tribal group is composed of Warm Springs Indians, some Wasco and a few Burns Paiutes. The beneficiary population is estimated to be 2,200.

The Warm Springs Health Center was originally constructed as a hospital and sanitarium. When it was converted to a health center, only minor alterations were undertaken. Later, the former hospital kitchen area was altered into a dental suite. The functional arrangement has become increasingly unworkable. The clinical areas are improperly sized, intermingle freely with and overlap the administrative areas. The laboratory is too small and poorly equipped. The only access to the X-ray room is through a treatment room. There is no properly equipped emergency room. The nurses' workroom is poorly arranged. The receptionist occupies a corner of the nurses' workroom and has her working cabinets in an adjacent room. Medical records are filed some distance away in a converted cabinet formerly used for central supply storage. The administrative area is located in the clinic area. The public health nurse has no usable demonstration area. There is no pharmacy but the projected clinical load supports the need for a pharmacy and pharmacy storage area. The waiting room needs to be centrally located, with selective access to either clinical or nonclinical areas. An office is needed for a medical social worker.

It is proposed to alter the medical clinic to provide an additional examining room and expand the existing examining rooms, relocate and modernize the nurses' workroom, provide new pharmacy and laboratory facilities, relocate and modernize the dental suite, relocate the public health nurse office and add a demonstration area. In addition, a new reception and medical records office would be provided. Other alterations proposed include relocation of the service unit directors office, provision of office space for medical social workers and clerk-steno pool, relocation of the sanitarian aids' office, relocating the waiting room to a central location and relocation of the multipurpose room.

During fiscal year 1965 there were 9,675 outpatient visits to the facility. In addition, 568 dental patients received 3,446 dental services. Upon completion of the remodeling it is estimated there will be 12,000 medical outpatient visits annually and 600 dental patients receiving 3,600 dental services.

For projects of this nature and size it is possible and desirable to accomplish the project planning and the awarding of a construction contract within the same fiscal year.

The completed project will furnish an efficient modern facility which will enable the Service to better perform the function of raising the health of the Indian to the highest possible level.

Total, Portland area, $91,000.

Anchorage area: Anchorage hospital, Anchorage, Alaska $88,000

Project cost estimate [1]

Feasibility funds requested in 1967	$88,000
Planning funds to be requested in subsequent years' budget	[1] 366,700
Construction funds to be requested in subsequent years' budget	[1] 7,786,800
Equipment funds to be requested under Indian health activities	200,000
Total estimated project cost	8,441,500

[1] Estimated amount if study reveals modernization will suffice. If new facility is warranted the cost will be higher.

An amount of $88,000 is requested for a feasibility study to be made of the medical center and training facility at Anchorage, Alaska, to determine if a major modernization program or a replacement facility would best meet the medical needs of the Alaskan natives.

The proposed medical center will serve as a regional base hospital, referral center and training facility for a system of peripheral hospitals, health centers, satellite clinics, and BIA school health centers for the natives (Indians, Aleuts, and Eskimos) in the State of Alaska. It will also serve as the center for the tuberculosis program and will provide primary medical services for the Anchorage service unit.

Primarily the proposed medical center will serve two broad functions:

(1) A consultation and referral center for patients from the peripheral area health facilities; and

(2) A training center for professional staff.

The new facility will provide comprehensive diagnostic services, specialized treatment in all medical, surgical, pediatric, obstetric, and tuberculosis specialties and subspecialties. In addition it will serve the peripheral facilities as a source of consultation, provide comprehensive medical-surgical services for patients referred from satellite hospitals, and provide centralized clinical laboratory, pathology, and X-ray services for hospitals and field clinics. With a complement of interns and residents, the facility will be utilized as a center for training professional and supporting staff.

The medical center will be the hub of the PHS Alaskan area's health operation; the staff will provide, with the assistance of local consultant services available, the professional advice and technical coverage in all clinical specialties and subspecialties.

EXISTING FACILITY

The present structure was planned and built in 1953 to serve primarily as a tuberculosis hospital. It was designed to support such techniques and/or facilities as strict bed rest, pneumothorax, fluoroscopy, collection and disposal of infected sputums, etc. In less than a decade newer, more effective techniques among them chemotherapy, planned activity, early resectional surgery, and rehabilitation have rendered the facility obsolete and functionally ineffective and inefficient for either TB or general medical and surgical care. These newer techniques resulted in a reduced demand for TB beds and permitted the gradual conversion of TB beds to much needed general medical and surgical beds.

AREA AND POPULATION TO BE SERVED

The proposed medical center will serve primarily as a referral hospital for the 44,000 Alaska natives—Eskimos, Indians, and Aleuts who live in widely scattered villages throughout the State's 586,400 square miles. This vast region, approximately one-fifth of all the other States combined, is divided into the Pacific mountain, central plateau, and Arctic slope regions and includes a 26,000 mile coast line dotted with thousands of islands.

PROPOSED PLAN

The bed distribution by major medical service and the anticipated workloads are summarized as follows:

Service	Beds	Average daily patient load	Admissions
Medical, adult (including rehabilitation)	75	55	670
Surgical, adult [1]	90	74	1,080
Surgical, pediatric (including ENT) [1]	50	40	520
Pediatrics, medicine	95	70	850
Obstetrics	10	6	240
Total G.M. & S	320	245	3,360
Tuberculosis	45	40	140
Total medical center	365	285	3,500

[1] Included are some rehabilitation beds for the expanded rehabilitation services.

The percentage occupancy of the general medical and surgical beds and obstetrical beds would average almost 77 percent. Combined with tuberculosis (at about 90 percent) the occupancy for the entire medical center will average about 78 percent.

The outpatient medical workload is expected to reach about 30,000 visits, with the addition of specialty clinics and the referral of patients for special diagnostic and consultation services.

COMMUNITY FACILITIES

Community facilities in Alaska are either inadequate or insufficient to meet the many medical needs of the Alaska native population. Only two are accredited by the Joint Commission on the Accreditation of Hospitals. One, located in Anchorage, has a 150-bed capacity and an average daily patient load of 88. The other, located in Sitka, has a 24-bed capacity and an average daily patient load of 13 (August 1, 1965, Guide Issue of Hospitals, American Hospital Association).

Approximately half of the private physicians in the State practice in the Anchorage metropolitan area. Of these, a third have their boards in a specialty. (The entire State has approximately 30 board certified specialists; 22 of these are in the Anchorage metropolitan area.) All in Anchorage. In some instances (e.g., neurosurgery) the State's only board certified specialist is in Anchorage. Many of these specialists provide consultation on a routine basis at the Anchorage Medical Center.

In view of the changing scopes of the medical care program, the acute space needs, the lack of community facilities, and the limited availability of medical specialists, the Anchorage Medical Center requires a feasibility study to determine whether a major modernization of the existing facility or a replacement facility will best meet the major medical needs of the Alaska natives.

Kotzebue hospital, Kotzebue, Alaska $500,000

Project cost estimate

Study funds appropriated in 1966	$15,000
Construction funds requested in 1967	500,000
Total estimated project cost	515,000

All wastes from the Alaska Native Hospital and BIA School in Kotzebue are discharged into Kotzebue Sound at a point 550 feet from the beach and at a

depth of 80 feet below the water surface. The report of the Natural Resources and Power Subcommittee of the Committee on Government Operations directed attention to the lack of primary treatment of waste material being discharged. It is proposed to construct a primary treatment plant for the sewage load of the Division of Indian Health Hospital, the Bureau of Indian Affairs day school and the supportive facilities such as staff quarters, which are operated as a portion of the hospital and school complexes. The plant will provide the minimum treatment required by the State of Alaska Administrative Code.

Mount Edgecumbe Hospital, Mount Edgecumbe, Alaska $645,000

CONSTRUCT STEAM LINE, $30,000

Existing boilers and burners in the bachelor officers quarters are over 20 years old. The boilers require excessive maintenance and repair and the burners require total replacement. It is proposed to construct a steam line from the existing hospital steam main to and connecting with the bachelor officers quarters steam line.

INCINERATOR, $90,000

At present all dry garbage and burnable waste is burned by open fire on the beach on Mount Edgecumbe Island. No fill material is available for constructing a sanitary fill type area for waste disposal. The present method of open burning is unsightly and unsanitary. Gulls and vermine infest this disposal area and frequent the residential, school, and hospital sites. It is proposed to clear the site and install an incinerator plant for burnable wastes which will provide a modern sanitary method of waste disposal in accordance with approved practices.

SEWAGE TREATMENT PLANT, $525,000

The Mount Edgecumbe complex consists of many entities, principally a 162-bed Division of Indian Health Hospital, a 700-student boarding school operated by the Bureau of Indian Affairs, and the necessary supportive service such as administrative offices and staff quarters. Raw sewage is discharged into the waters surrounding the island by 18 separate outfalls. This dumping of untreated waste into waters which serve the Sitka community, adjacent to the Federal facility, and which are used as a source of seafood and for recreational purposes by the community and Federal facility personnel presents a hazard and nuisance and is in direct conflict with the President's policy that Federal agencies pave the way in elimination of water pollution.

A feasibility study conducted under the auspices of the Division of Water Supply and Pollution Control recommends that primary treatment be provided all sewage. The study revealed that construction costs for such a plant and collection system for the Government installations would be less costly than the Government's share of a larger complex capable of serving both the Federal agencies on Japonski Island and the village of Sitka. Sitka has no active plans for treating the village sewage and has declined to engage in a joint project with the Federal installation.

This project will provide a primary treatment plant on Japonski Island capable of serving the various agencies now on the island with the capacity to serve near term expansion plans now envisioned. It will include the necessary collection lines for the present facilities and an appropriate effluent discharge into Sitka Sound. The funds will be used for the detailed design and the construction of the facility, which will provide the minimum treatment required by the State of Alaska administrative code.

Total, Anchorage area, $1,233,000.

Construction of Indian sanitation facilities

1967 request $6,200,000

The request for 1967 includes:

(1) $4 million for construction of 39 projects to correct existing gross sanitation deficiencies and for investigations, emergency works, supplies and equipment; and

(2) $2,200,000 for construction of sanitation facilities in Indian communities where they are needed to complement Federal and tribal housing programs conducted by the Public Housing Administration, Bureau of Indian Affairs, or tribal groups in accordance with mutual understandings.

With the completion of all projects and assistance to housing authorized through fiscal year 1966, basic sanitation facilities will have been made available to more than 30,000 Indian and Alaska native families. This level of accomplishment represents 34 percent of the required effort to provide all existing families with both water and waste disposal facilities. The request for 1967 will enable facilities to be made available to another 5 percent of the families.

Sanitation facilities construction projects ($4 million)

Provision of basic sanitation facilities for Indian communities and homes is essential in the prevention of diseases and is basic to the improvement of health services and the fight against poverty. During the past 6 years the Public 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. While progress has been made, the lack of safe available water supplies and waste disposal facilities continues to be a major deficiency in the Indian environment. This condition is in large measure responsible for the high incidence of preventable diseases that still prevail among Indians and Alaska natives.

Health problems

1. Gastroenteritis combined with dysenteries and diarrhea ranks first among reported notifiable diseases on Indian reservations; incidence rates for amebic and bacillary dysentery is 49 times higher than the rate in the general population.

2. The Indian infant death rate is two-thirds higher than that of the general population, and for infants who have returned to their home environment after hospital birth and particularly for infants 1 month through 11 months of age, the death rate is about three times (for Alaska natives, about five times) that of comparable age groups in the general population, a condition in large part associated with the lack of sanitation facilities in the Indian home and extremely crowded living conditions.

3. An estimated 19 percent of all reported Indian deaths in a year are infant deaths (under 1 year of age) compared with 6 percent for this age group in the general population.

4. Between 30 and 35 percent of the patients discharged from hospitals were treated for infectious diseases (respiratory, other infective and parasitic, and skin diseases) and their residuals most of which are associated with lack of running water, insanitary conditions, and the overcrowded home environment.

Environmental conditions

Contributing to these health problems is the widespread scarcity of water among Indians and Alaska natives for even elemental household purposes. Thousands of Indians on many reservations haul water in a primitive manner for distances of a mile or more. In such instances, use of water for domestic purposes is as low as 1 to 3 gallons per capita per day as compared to five times this amount for the poorest rural families in the non-Indian population. A charge of $1 to $3 per barrel for water delivered to the Indian home is not uncommon. The source of domestic water supply for a majority of homes is unsafe. 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 expend combatting the rigors of their environment is another major 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, both liquid and solid, also contributes to the health problem of the Indians and Alaska natives. The absence of these facilities result in (1) spread of microorganisms responsible for diarrheas, and dysenteries, (2) insect and rodent infestations both in Indian homes and communities, (3) contamination of foods and domestic water supplies, and (4) general nuisance conditions.

Indian participation and training

Public Law 86-121 enables the Public Health Service to help alleviate the substandard environmental conditions that have been described. This law authorized construction of domestic water supplies, waste disposal facilities, and other sanitation facilities for Indian homes, communities, and lands. The Public Health Service administers the program in consultation with Indian tribes, Alaska native groups, and State and local health agencies. Participation by the Indians in project execution is stressed and tribes are assisted in assuming re-

sponsibility for continued operation and maintenance of completed community sanitation facilities. Parallel education and training activities are conducted to assure utilization, protection and maintenance of household sanitation facilities.

Projects for Indian beneficiaries 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—sanitary pit privy or flush toilet, kitchen sink, connecting plumbing; drainage—facilities for control of insects, systems to permit subsurface waste disposal.

It should be noted that the results of these efforts have produced an increasing awareness by the Indian people of the advantages of adequate sanitation facilities. This has been demonstrated by the many requests from the Indians for assistance under this program and by the substantial contributions of labor, money, and materials made by the Indians which total about one-third of the overall construction effort. Indian governing bodies have shown a willingness to adopt the necessary measures which are required for continued operation and maintenance of completed facilities. These include appointment of responsible maintenance individuals, establishment of water and sewer charges, and adoption of sanitary regulations. Each of these actions embraces new concepts in the Indian methods of government.

Construction progress

In the 6 years this activity has been underway, a total of 436 sanitation projects have been undertaken with the funds appropriated through fiscal year 1965. This total includes 242 regular construction projects, 42 Public Works Acceleration Act construction projects, 14 construction projects authorized as a result of Alaska earthquake damage and western flood damage, 105 investigations, emergency works, and other special projects, and 33 construction projects to assist Federal Indian housing programs. Of these 436 projects, 367 are complete or in operation and 65 are underway. The remaining four, in the final stages of planning and negotiation of agreements with the Indian tribes (as of December 31, 1965), include one small regular construction project, one western flood damage project authorized in May 1965, and two projects to assist Federal housing programs.

The fiscal year 1966 appropriation included $3,858,000 for 36 sanitation facilities construction projects. This will enable sanitation facilities to be made available to more than 4,000 Indian and Alaska native families in more than 41 different geographic locations.

The 39 projects planned for 1967 are urgently needed on 26 Indian reservations and in 12 communities in Oklahoma and Alaska. They will meet needs in areas where (1) essential sanitation facilities are lacking or in need of major rehabilitation, (2) rates of preventable diseases attributable to gross environmental sanitation deficiencies are high, (3) work is feasible and most nearly ready to be undertaken from an engineering and economic standpoint, (4) ability and willingness of Indians to assume responsibility for maintenance and operation have been indicated, and (5) willingness of Indians to contribute to and participate in the work has been shown. The request also provides for investigations and planning funds for urgently needed construction projects on which additional technical information is necessary before a solution can be recommended; for 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 for other unforeseen conditions which may require provision of materials, supplies, and equipment for completing the construction or repair of sanitation facilities.

ASSISTANCE TO FEDERAL HOUSING PROGRAM ($2,200,000)

Fiscal year 1965 marked the first year of a planned program of Federal housing for Indian communities. By mutual agreement the Public Housing Administration and the Bureau of Indian Affairs coordinated their efforts with the limited financial ability of the Public Health Service to complement Indian housing program with construction of sanitation facilities. During this period the Service initiated assistance to 28 housing projects with 400 units of housing

accommodating approximately 2,000 Indians. In fiscal year 1966 the Public Housing Administration plans to construct an additional 1,910 units of Indian housing. Funds have been appropriated to the Public Health Service for construction of sanitation facilities to serve these homes as well as a limited number to be constructed under the Bureau of Indian Affairs housing improvement program.

The request for sanitation facilities to assist Federal and tribal Indian housing construction in 1967 includes facilities to serve (1) more than 1,100 units of housing that are under Public Housing Administration annual contributions contracts, (2) communities having Indian housing units for which PHA has applications pending approval, (3) a limited number of housing units for local Indian housing authorities and tribal groups from which requests are anticipated during the next 12 months, and (4) a small number of BIA home improvement housing units that fall outside of areas having sanitation facilities.

There follows a list of projects proposed for fiscal year 1967.

Sanitation facilities projects

Reservation	Community	State	Project description	Estimated Federal cost
Aberdeen area:				
Winnebago	Rural phase II, Thurston County	Nebraska	Individual water and waste	$70,000
Red Lake	Redby-Rural, Beltrami County	Minnisota	do	227,000
Sakaogan Chippewa	Mole Lake, Forest County	Wisconsin	do	51,000
Cheyenne River	Meadow Lark Hill, Dewey County	South Dakota	Community water and sewerage	72,000
Pine Ridge	Crazy Horse, Shannon County	do	Individual water and waste	75,000
Albuquerque area:				
Laguna	Mesita, Valencia County	New Mexico	Community water and sewerage	170,000
Zuni	Zuni Pueblo, McKinley County	do	Additions and improvements to community water and sewer systems.	200,000
Laguna	Encinal, Valencia County	do	Community water and sewerage	65,000
Window Rock:				
Navajo	Scattered locations	Arizona, Utah, and New Mexico.	Construct and develop shallow wells and springs	200,000
Do	do	do	Low pressure systems	250,000
Do	do	do	Septic tank units	52,000
Do	do	do	Privies	50,0000
Anchorage area:				
Kake	Election district No. 3	Alaska	Communal water and individual waste	250,000
Kwethluk	Election district No. 16	do	do	45,000
Tanana	Election district No. 19	do	do	60,000
Tanacross	do	do	do	20,000
Tetlin	do	do	do	25,000
Billings area:				
Northern Cheyenne	Lame Deer phase II, Rosebud County	Montana	Community water and sewerage	150,000
Wind River	Arapaho phase I, Fremont County	Wyoming	Community water and individual waste	212,000
Crow	Crow agency phase I	Montana	Community water	125,000
Wind River	Crowheart-Burns	Wyoming	Individual water and waste	40,000
Oklahoma City area:				
Cherokee County and Jackson County.	Birdtown and 3200 tract	North Carolina	Communal and individual water, individual waste	110,000
Pushmataha and Le Flore County.	Hanobi district	Oklahoma	Individual water and waste	65,000
Cherokee County and Mayes County.	Peggs district	do	do	60,000
Delaware County	Kansas district	do	do	60,000
Adair County	Bell district	do	do	70,000
McIntosh County	Eufaula district	do	do	70,000
Blaine County and Dewey County.	Canton district	do	do	70,000
Kay County	White Eagle district	do	do	75,000

Phoenix area:				
Duck Valley	South section, Elko County	Nevada	do	118,000
San Carlos Apache	Seven Mile Wash, phase II, Graham County	Arizona	Community water and waste	100,000
Papago	Big Field, Pima County	do	Community water and individual waste	37,000
California rancherias	Scattered locations	California	Community water and community sewerage and individual waste.	104,000
Ely Colony	Ely Colony	Nevada	Community water and sewerage	10,000
Papago	Scattered villages	Arizona	Community water and individual waste	83,000
Portland area:				
Yakima	McKinley district, Yakima County	Washington	Individual water and waste	122,000
Warm Springs	Simnasho-Scoolle Flats, Wasco County	Oregon	Community and individual water, and individual waste	90,000
Colville	North half, Okanogan and Ferry County	Washington	Individual water and waste	71,000
Makah	Neah Bay, Mason County	do	Community water	135,000
All areas: Investigations, emergency works, supplies, and equipment.				141,000
Subtotal, sanitation facilities construction projects.				4,000,000

ASSISTANCE TO FEDERAL AND TRIBAL HOUSING PROGRAMS

All areas.—Water supply and waste disposal for Indian communities when Federal or tribal housing projects are approved:

(1) To complement construction of 1,141 units of PHA housing under annual contribution contract and scheduled for construction in fiscal year 1967.

(2) To assist communities for which PHA has applications pending from local Indian housing authorities.

(3) To meet anticipated applications from local Indian housing authorities and tribal groups.

(4) To complement the Bureau of Indian Affairs Indian housing improvement program.

Subtotal, assistance to Federal and tribal housing program for Indians, $2,200,000.

Grand total, fiscal year 1967 request, $6,200,000.

Itemization of estimate

	Actual, 1965	Estimate, 1966	Estimate, 1967	Increase (+) or decrease (−)
Program and financing:				
Total obligations	$9,078,224	$17,386,885	$14,339,600	−$3,047,285
Unobligated balance brought forward	−4,170,509	−3,927,285	−636,400	−3,290,885
Unobligated balance carried forward	3,927,285	636,400	718,800	−82,400
Appropriation	8,835,000	14,096,000	14,422,000	+326,000
Obligations by objects:				
11 Personnel compensation	1,210,160	1,874,100	1,927,400	+53,300
12 Personnel benefits	50,588	80,665	85,750	+5,085
21 Travel and transportation of persons	65,951	112,500	121,000	+8,500
22 Transportation of things	178,641	270,300	253,300	−17,000
23 Rent, communications, and utilities	17,134	24,000	23,860	−140
24 Printing and reproduction	6,974	11,500	21,360	+9,860
25 Other services	90,982	1,815,815	979,000	−836,815
26 Supplies and materials	173,835	231,100	178,000	−53,100
31 Equipment	197,612	127,185	90,000	−37,185
32 Lands and structures	7,086,347	12,839,720	10,659,930	−2,179,790
Total obligations	9,078,224	17,386,885	14,339,600	−3,047,285

TYPE OF CONSTRUCTION

Senator BARTLETT. For what type of construction is most of your estimate asked?

Mr. CHADWICK. The 1967 budget, Mr. Chairman, makes provision to construct one hospital and plan for four others. It makes provision to construct two health centers and plan three others. It makes provision to construct 13 health stations, 207 personnel quarters, alteration projects at 18 locations, which include improvements at 11 hospitals. The alteration involves planned improvements for 11 hospitals and it includes an amount of $6,200,000 for sanitation projects.

Senator BARTLETT. What does a hospital bed cost you out in Indian country?

Dr. RABEAU. Our construction experience, Mr. Chairman, is mostly based on square foot cost. It would vary markedly from area to area. Mr. Cohen may have some figures.

Mr. COHEN. The square foot cost is about $38.

Senator BARTLETT. Is this escalating?

Mr. COHEN. About 3 to 5 percent a year.

Senator BARTLETT. Is that escalation in keeping with other general construction costs?

Mr. COHEN. It parallels very closely.

Senator BARTLETT. How large are these hospitals that you plan for construction in 1967?

Dr. RABEAU. The hospital at Mescalero, N. Mex., is a 15-bed hospital.

Senator BARTLETT. How much will that cost?

Dr. RABEAU. $677,000.

Senator BARTLETT. What other hospitals are you going to build?

Dr. RABEAU. The Phoenix Medical Center will be constructed in 1967.

Senator BARTLETT. Will that have a hospital in conjunction with it?

Dr. RABEAU. Yes, sir. A 200-bed hospital and research facilities.

Senator BARTLETT. 200 beds, you say?

Dr. RABEAU. Yes, sir.

BUILDINGS OLD AND OBSOLETE

Senator BARTLETT. What type of facilities do you have there at this time?

Dr. RABEAU. We have a very old, obsolete series of buildings which are separated by a distance of, I believe, 14 city blocks. There is a total of 138 beds.

Senator BARTLETT. Would those be included with the construction of the new facility?

Dr. RABEAU. Yes, sir. The best building would be utilized as an area office.

Senator BARTLETT. Do you wish to comment particularly on any other part of your construction program?

Dr. RABEAU. We are asking for the 207 personnel quarters this year which are based on the availability of being able to provide prefabricated housing units. These will allow us to complete our total quarters needed at 20 locations.

Senator BARTLETT. Before leaving too abruptly the matter of hospitals and health center construction, I want to ask you more about the Phoenix Medical Center. It was authorized 5 years ago or thereabout and last year $4,950,000 was appropriated to enable construction to start. Has the construction contract been let?

Dr. RABEAU. No, sir. The architectural and engineering contract has been let. This is the contract for the design and working drawings.

Senator BARTLETT. What is the reason for the delay, Doctor, in the construction contract?

Dr. RABEAU. We were asked to reassess the adequacy of the research capability programed for this facility. This has been done in conjunction with the National Institutes of Health and has now been completed.

Senator BARTLETT. Who asked you to do that?

Dr. WAGNER. We wanted to create a hospital of excellence. The Congress authorized the planning of a 25-bed research unit in conjunction with the 200-bed hospital to assure that this research would be of the best possible quality. It did result in some delay in obtaining the architectural drawings because of the necessity of consulting with NIH and the experts in this.

Senator BARTLETT. You wanted to be top flight?

Dr. WAGNER. Yes, sir.

PLANNING UNDERWAY FOR CONSTRUCTION BIDS

Senator BARTLETT. Chairman Hayden, the chairman of this committee, who can't be with us today, asks that within the next few days you send him a letter advising that you have started letting construction bids.

Dr. RABEAU. We won't be in position to ask for construction bids, but we have the planning underway and do hope to complete this as rapidly as possible.

Senator BARTLETT. At an estimate, how long would you say it might be before construction bids might be asked for?

Dr. RABEAU. We will be glad to submit that.

Senator BARTLETT. If you will. Please advise Chairman Hayden from time to time.

Dr. RABEAU. Yes, sir.

Senator MUNDT. Senator Bartlett, I have a couple of questions on this hospital program.

Senator BARTLETT. This is a good place.

Senator MUNDT. I was much interested in the health and welfare report you made, Dr. Rabeau, which included Rapid City. The committee requested your division to make the study a year ago. You came up with three alternatives. Actually only two alternatives, because the first was just perpetuating the status quo.

Dr. RABEAU. Yes, sir.

Senator MUNDT. I would like to discuss those two alternatives, or any modifications of them which might be made. Of course, communitywise, we will be delighted to have the Public Health Service establish an outpatient clinic in that community to assume responsibility for this growing problem but I believe that involves an expenditure in the neighborhood of $400,000. This wouldn't be too bad if that would solve the problem throughout the Indian country. But, if you have many cities with the same kind of problems, this could run into a pretty tall fee, so I am wondering (1) how many other communities there might be which would be in the same situation as Rapid City?

Dr. RABEAU. To the best of our knowledge, and as a result of considerable time spent studying this problem with the Bureau of Indian Affairs, who are interested, of course, in the welfare and educational aspects, we felt Rapid City was the only community where there was a marked impact by the size of the Indian population on the community itself. We attempted to report in our joint report that this would be the only one where we would recommend that this be done.

INDIAN EMPLOYMENT IN AREA

Senator MUNDT. That is encouraging and I can understand that because it is the only city in a very large area. It is a city of about 45,000 people. But this city is richly surrounded by Indian reservations and so an Indian trying to go to a city or employment center almost has to head for Rapid City. For a long time, Indians enjoyed pretty good employment in that area. They had a big Military Establishment and they had labor in arts and crafts but now that has sort of hit a plateau by having the Indians drifting back and forth and saying, "I got a pretty good job in Rapid City." This caused others to come to the city and now it is quite a problem.

Do you think this appropriation would meet that problem then by building this out-patient clinic or hospital?

Dr. RABEAU. Our proposal was to renovate an existing building at the sanitarium into a clinic, at a cost of $87,000, the total estimate of $408,000 includes this item.

Senator MUNDT. This would serve to meet this problem?

Dr. RABEAU. Yes, sir.

Senator MUNDT. I am familiar with the facilities from the outside. It is a good location and they look good from the outside. Inside, I don't know.

What are they being used for now?

Dr. RABEAU. This is the building that was the old laundry building of which part was used for a maintenance-storage area.

Senator MUNDT. The reason I asked is we had a little trouble with State college and a nurses training program.

Dr. RABEAU. Yes, sir.

Senator MUNDT. This would not infringe on that?

Dr. RABEAU. No, sir.

Senator MUNDT. And this would cost how much in total?

Dr. RABEAU. $408,000 as follows: Renovation of building $87,000; contract inpatient care $209,000; and $112,000 for the clinic staff.

Senator MUNDT. Are you presenting that to the Bureau of the Budget or to our committee? Have you gone through the budget?

Dr. RABEAU. No, sir. It is not in the budget.

Senator MUNDT. It would be your recommendation to the committee rather than the budget committee?

Dr. RABEAU. It is one of the recommendations in the joint report that was requested, yes, sir.

Senator MUNDT. You made that report to us rather than the Budget Bureau?

Dr. RABEAU. Yes, sir.

Senator MUNDT. I was also very much interested in your report on the educational situation. That is on page 8 and 9. Would this be in your daily work, Doctor? You talk about a sort of partnership program, as I understand it, between the Bureau office in Aberdeen and the county officials of Pennington County and city officials in Rapid City in connection with Federal assistance in education. Would this be something different from the impacted area legislative approach?

Dr. RABEAU. This is the Bureau of Indian Affairs' responsibility.

Senator MUNDT. You wouldn't have any relationship to this at all?

Dr. RABEAU. No, sir. Except for providing health services.

Senator MUNDT. Which you could do through your clinic?

Dr. RABEAU. Yes, sir.

REPORT ON INDIAN NURSING TRAINING PROGRAM

Senator MUNDT. I think that is about all but, I'm going back to our Indian nursing training program. Could you give a little report on how that program is operating? It was tried on a kind of pilot basis and I would like to know, is it successful, should we extend it? Was it successful or is it a disappointment?

Dr. RABEAU. It has proved to be very successful. We are training 30 practical nurses a year in the advance techniques of hospital nursing. This accomplishes two things, it allows them to perform more

of the functions that, up to this time, have only been done by registered nurses who are in very short supply.

It allows these girls additional vistas for advancement because of the additional responsibilities they have and, I think, even more importantly, it motivates many, with talent, to want to go on and get their college education and become registered nurses.

Senator MUNDT. I was going to ask, is it leading to some becoming registered nurses?

Dr. RABEAU. Yes, sir; we have three now in training to become registered nurses.

Senator MUNDT. Are your facilities in Rapid City adequate for what you are doing?

Dr. RABEAU. Yes, sir. We use the facilities at Rapid City and also our hospital at Pine Ridge to provide additional clinical training for the type of patients not seen in Rapid City.

Senator MUNDT. Do you feel there is a rather satisfactory degree of rapport between the nursing association and your program?

Dr. RABEAU. Yes, sir. I have not had any letters in the past year.

Senator MUNDT. I haven't either. It is encouraging. Is the money in the budget adequate to continue in the program on what you consider an optimum basis or do you think it should be expanded?

Dr. RABEAU. No, sir. We are receiving adequate funds to be able to provide for this program. We hope to expand it slightly by utilizing the facilities to train some nursing assistants to also increase their expertise.

UTILIZATION OF INDIAN NURSES

Senator MUNDT. If we could provide the clinic, this is a place where you could utilize some of these Indian nurses?

Dr. RABEAU. Yes, sir. They would have outpatient experience which they are not now getting. They are all Indian girls.

Senator MUNDT. I have a couple of questions Senator Young asked me to have answered about North Dakota. Are any additional funds being requested this year for the construction of the new hospital out at Belcourt on the Turtle Mountain Reservation?

Mr. CHADWICK. That was fully funded in the 1966 appropriation and, accordingly, we do not need further funding for that installation at this time.

Senator MUNDT. What is the target date for completion of the project?

Mr. COHEN. We expect the award of the construction contract to be made this fiscal year. After that it will take approximately 16 months to complete the facility.

Senator MUNDT. That would seem to answer this next question, but he asked if any funds were requested to provide equipment for the hospital.

Mr. CHADWICK. Equipment funds are being requested in the operating budget. The equipment comes under the activities, rather than the construction budget.

FUNDS REQUESTED TO EQUIP FACILITY

Senator MUNDT. How much would be needed to fully equip the facility?

Mr. CHADWICK. We will provide that for the record.

Senator MUNDT. That will be satisfactory.

(The statement follows:)

The amount needed to fully equip the hospital is $210,000 of which $155,000 is being requested in the IHA estimate for 1967. It is planned to move the remaining $55,000 of present equipment in the old hospital into the new facility.

PLANS FOR A NEW HOSPITAL AT TUBA CITY

Senator MUNDT. That is all the questions I have.

Senator BARTLETT. Dr. Rabeau, I note you are asking $95,000 to complete planning for a new hospital at Tuba City. It is indicated that when the new building is available, the old building will be transferred to the Bureau of Indian Affairs. Is that a building which was originally provided by the Bureau of Indian Affairs?

Dr. RABEAU. Yes, sir. This building was built when the health program was under the Bureau of Indian Affairs. It was opened in 1954.

Senator BARTLETT. In the same section of your justification you talk about facilities available at Page, Ariz., indicating that there are 25 acceptable beds. What is an acceptable bed?

Dr. RABEAU. An acceptable bed falls in the category of one that is in a hospital that is either accredited or meets standards that are equivalent to that. It also covers the staff that is available to take care of the patient and in our own particular jargon includes the fire safety of the building and the square foot area allowances per bed.

Mr. COHEN. I think the beds would be acceptable under the Hill-Burton State program.

Senator BARTLETT. In your colloquy with Senator Mundt a few minutes ago you were speaking about a serious shortage of nurses. I suppose this applies to the Nation as a whole as well as to your operation; is that correct?

Dr. RABEAU. Yes, sir.

Senator BARTLETT. Are your nurses civilian employees?

Dr. RABEAU. The majority are, although we have a certain number of commissioned officers.

Senator BARTLETT. What would the ratio be?

Dr. RABEAU. About 25 civil service to one commissioned officer. The commissioned officers are primarily consultants and program supervisors.

STARTING SALARY OF CIVILIAN NURSES

Senator BARTLETT. What is the starting salary of a nurse?

Dr. RABEAU. The starting salary for a civilian nurse depends, of course, on the amount of her education. If she is of the new 2-year registered nurse training, she comes in at a GS–4 level and then after 1 year goes to a grade 5 and then after another year to a grade 6. The usual registered nurse, that is, a nurse with 3 or 4 years education comes in as a GS–5 and after 1 year's experience goes to a GS–6.

Senator BARTLETT. What are those?

Mr. CHADWICK. The GS–4 starting salary is $4,641 and GS–5 is $5,181.

Senator BARTLETT. What is the top bracket?

Mr. CHADWICK. Total longevity under grade 4 is $6,045, and under grade 5 is $6,720.

Senator BARTLETT. How many nurses do you have altogether?

Mr. CHADWICK. Currently 929 graduate nurses and 429 practical nurses.

Senator BARTLETT. Are you understaffed?

Mr. CHADWICK. Yes, sir.

Senator BARTLETT. How many doctors do you have?

Dr. RABEAU. 318.

Senator BARTLETT. Are you seriously understaffed in that category?

Dr. RABEAU. In certain specialty categories, we are understaffed. We have an adequate number of generalists. Most of our physicians are commissioned officers and about 70 percent of these are fulfilling their military obligations. Our shortages are basically in specialty areas, such as radiology, anesthesiology, pathology, and pediatrics.

Senator BARTLETT. You say most are commissioned. What percent is not?

Dr. RABEAU. I believe we only have 20 civil service positions out of our 318.

RETENTION OF PHYSICIANS AFTER MILITARY OBLIGATIONS

Senator BARTLETT. With respect to the young physicians fulfilling their military obligations, do you retain many of them? After they perform their obligations, do they leave?

Dr. RABEAU. We are retaining more every year. The retention rate used to be almost zero, but I believe the last figures shown to me show we retain about 17 percent.

Senator BARTLETT. It is going up pretty rapidly?

Dr. RABEAU. Yes, sir.

Senator BARTLETT. If a physician, a commissioned physician, stays with the Public Health Service, how many years does he have to serve before he may retire?

Dr. RABEAU. He is eligible for retirement after 20 years of service.

Senator BARTLETT. The same as in the military service?

Dr. RABEAU. Yes, sir; it is identical retirement.

TIME LAPSE IN PLANNING NEW HOSPITAL

Senator BARTLETT. On some of your projects you have proposed planning funds this year and indicate that construction funds will not be requested until fiscal year 1969. Is that time lapse because of the period it requires for planning a new hospital?

Dr. RABEAU. Yes, sir, Mr. Chairman. In many cases, we do a feasibility study. By that I mean we have an architect to apply programs to the facility and see in what way it is best to meet this need, whether it would be alteration or building a new hospital.

Senator BARTLETT. For the record, in the case of each of the hospitals and health centers for which you request construction or planning funds, have you communicated with local hospital administrators to determine the availability of their facilities under Public Law 85–151?

Dr. RABEAU. Yes, sir. This availability is one of the criteria that is considered when we evaluate the need for a new facility.

Senator BARTLETT. I was interested in your statement that nonmotor-vehicle accidents are one of the leading causes of deaths among Alaska natives, accounting for 20 percent of the deaths. What type of accidents are these that are so prevalent?

Dr. RABEAU. Airplanes, boats, and dogsleds.

Senator BARTLETT. What do the dogs do to the travelers?

Dr. RABEAU. They occasionally lose them.

Senator BARTLETT. You mean they start out where they intend to go and don't come back?

Dr. RABEAU. Yes, sir; on rare occasions, but it is basically accidents associated with slipping, falling, twisting of the extremities and, of course, the combination of the cold and getting wet, as you are well familiar.

Senator BARTLETT. Fire, of course, needless to say, in the Arctic Alaska, is a very serious problem. It is a big killer, is it not?

Dr. RABEAU. Yes, sir. A few years ago we put on a quite successful health education program which determined most of the fires were caused by inadequate installation where the stack went through the ceiling. A very simple educational program was designed which reduced these fires considerably. But where you depend on gasoline and kerosene lanterns for illumination, you can anticipate there will be a certain number of fires from that cause alone.

Senator BARTLETT. Are these Alaskan natives just as susceptible to cold as the white people?

Dr. RABEAU. Mr. Chairman, the studies that were done a number of years ago showed that while their skin temperatures dropped down to the same level as the nonnatives, their pain threshold did not become apparent. The nonnatives, when the temperature dropped too many degrees started to shiver and there was a contraction of the superficial skin areas. The Alaskan native would sit there with his skin at the same temperature in apparent comfort.

Senator BARTLETT. Was there any reason attributed to this variance?

Dr. RABEAU. Basically we feel it was a matter of accommodation.

Senator BARTLETT. They have been around quite a while, they and their ancestors?

Dr. RABEAU. Yes, sir.

FUNDS REQUESTED FOR SANITATION FACILITIES

Senator BARTLETT. The tabulation of the sanitation facilities projects for which you are requesting $4 million has been entered into the record. Will you please place in the record also a similar tabulation of these projects for which you are asking $2,200,000 in connection with assistance to Federal and tribal housing programs for Indians. Please break this down into separate tabulations.

Mr. JOHNSON. I would like to make an explanation in this regard. This is a program for assistance to public housing projects constructed by the Bureau of Indian Affairs, the Public Housing Administration, and tribal groups. It enables us to have funds for housing projects as they materialize, so that the necessary sanitation facilities may be constructed. Until the Public Housing Administration and the Bureau of Indian Affairs make their needs known, we are of course unable to provide the sanitation facilities.

However, in working out the programs with these groups, they estimate 2,000 housing units would be necessary to meet their program needs and that is the basis on which this amount was requested.

Senator BARTLETT. Thank you, that helps.

Last year, $146,000 was to be used at the Fort McDermitt Indian Reservation for badly needed sanitation facilities. Could you advise when you expect this will be finished?

Dr. RABEAU. Yes, sir.

Mr. JOHNSON. The funds for the Fort McDermitt project were made available to us in December 1965. We have initiated all the engineering planning, and actually opened bids for construction of the community water source on March 1. We anticipate the engineering drawing for the water distribution system will be completed during the month of April and the total project will be initiated during April or early May. We have a senior grade engineer on the job and motivation activity will begin this month. We anticipate this project will be essentially completed during this next year.

INDIANS SHOWING GREAT INTEREST IN ACTION TAKEN

Dr. WAGNER. I might say the Indian people at Fort McDermitt have shown a tremendous amount of interest in the committee's action in making this facility available to the Indians. The Indians are really getting together to better their lot as a result of this action.

Senator BARTLETT. The committee is happy to learn this. I couldn't be here at the starting of the hearing, Dr. Rabeau, and I don't know whether you read your statement in its entirety. Did you?

Dr. RABEAU. I highlighted the statement.

Senator BARTLETT. You referred therein, I note, to the abject poverty of the people on the Indian reservations.

Dr. RABEAU. Yes, sir.

Senator BARTLETT. I know that probably this is not a proper question to put to you because you are concerned with their health and not their economic conditions, but, basically, I am wondering, do you know of any improvements being made in this area? Are they being lifted out of this abject poverty?

Dr. RABEAU. Yes, sir. A number of factors are involved. I think the three most significant ones are: first, the relocation for employment opportunities, and the training undertaken by the Bureau of Indian Affairs where they undertake to relocate families where they are interested, undertake training and finding positions for them. The second is establishment of light industries on Indian reservations which make jobs available to Indians. Third is the Office of Economic Opportunity programs particularly the community action programs. There has been a considerable amount of economic assistance made available through all of these.

Senator BARTLETT. These problems are then being tackled vigorously?

Dr. RABEAU. Yes, sir. I think the Indians, among all other groups in the country, were in the forefront in coming up with community proposals to do something with their economic problems.

REPORT ON DEATH RATE AMONG INDIANS

Senator BARTLETT. You mentioned the new active tuberculosis case rate among Indians is 7 times higher than in the general popu-

lation and among Alaska natives it is over 20 times higher, which, of course, is deplorable. But I think in the preceding paragraph you gave some figures that are striking, dramatic and thrilling. I am referring to your statement that the infant death rate is down 38 percent, tuberculosis death rate is down 57 percent, and deaths from gastroenteric diseases are down 62 percent.

In Alaska, the infant death rate is down 33 percent, tuberculosis death rate is down 89 percent, and new active tuberculosis rates are down 68 percent. I am startled and pleased to learn that since the first of last year there has not been a single death from tuberculosis among Alaska natives. I think this is a wonderful thing and a credit, of course, to the Public Health Service which has moved so rapidly and effectively.

Dr. RABEAU. I think it would not have been possible without this committee and the Congress.

Senator BARTLETT. This committee was working on this about 15 years ago—I say this subjectively because I wasn't on it then. It gave you the money to build the new facilities and hospitals required before this job could be done. Nevertheless, there is a big job still ahead of you all over the country in relation to health problems and their relation to these people, is there not?

Dr. RABEAU. Yes, sir. I have a few charts that might be interesting to the committee.

Senator BARTLETT. Yes, they would be. The charts will be inserted in the record at this point.

(The charts follow:)

CHART 1

PERCENTAGE OF DEATHS IN SPECIFIED AGE GROUPS

Indian and All Races, U. S.

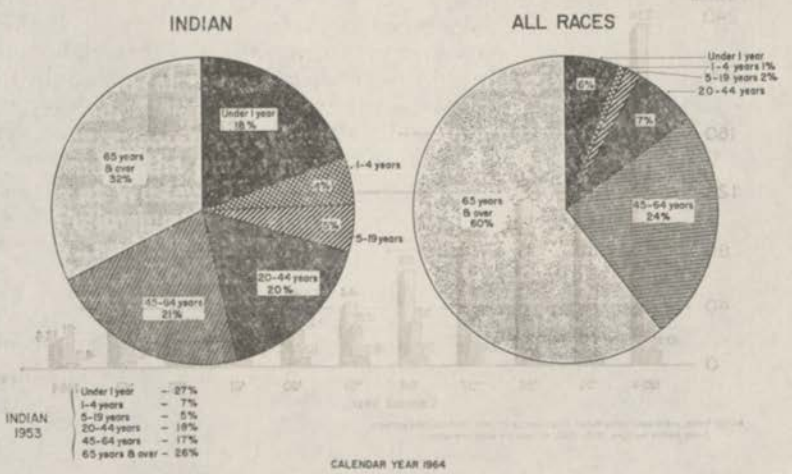
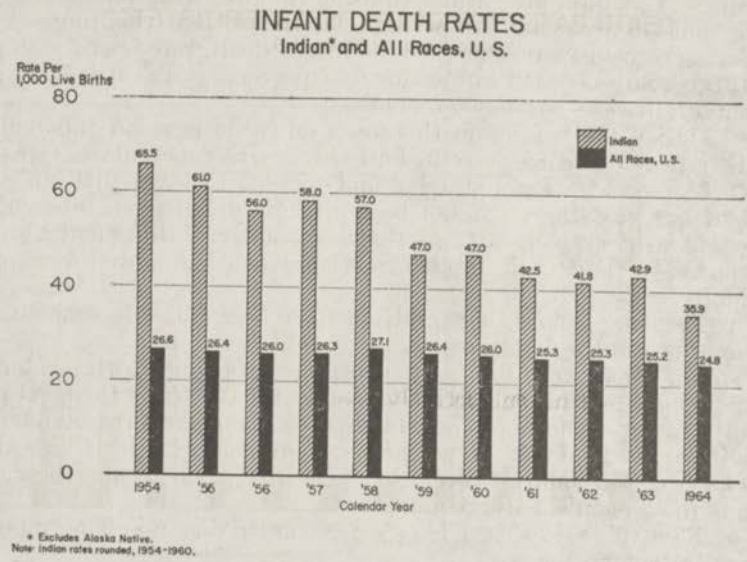
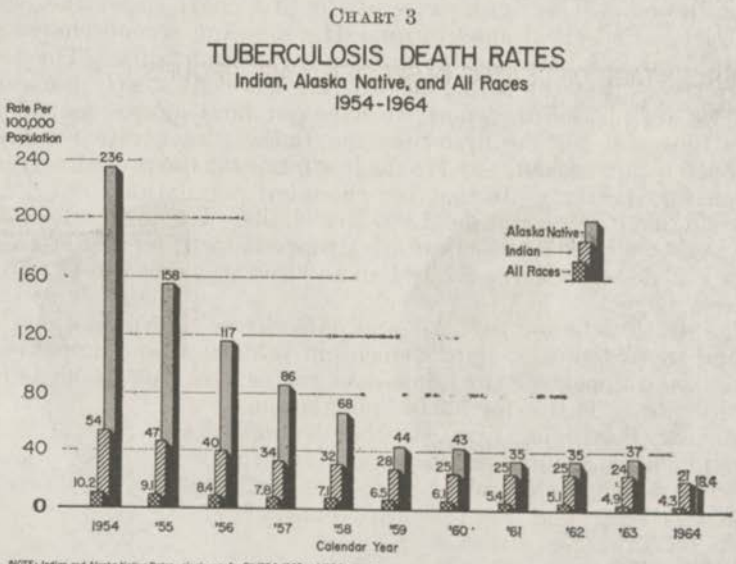


CHART 2



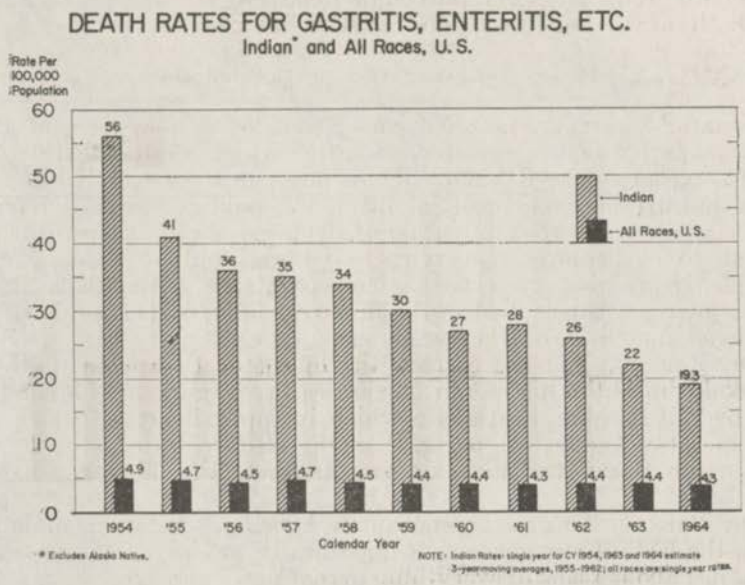
* Excludes Alaska Native.
Note: Indian rates rounded, 1954-1960.

CHART 3



NOTE: Indian and Alaska Native Rates: single year for CY 1954, 1963 and 1964 estimate. 3-year moving averages, 1955-1962; all races are single year rates.

CHART 4



SIGNIFICANCE OF CHARTS

Dr. RABEAU. The significance of the first chart shows the percent of deaths at specified age groups. The first and second charts show there has been a considerable drop in infant mortality. The second chart shows that the infant dealth rate has consistently gone down and we are pleased to report we have our final figures for calendar year 1964 and for the first time the Indian death rate for infants dropped to 35.9 as contrasted to the low forties of the preceding year.

Senator BARTLETT. Is that per thousand population?

Dr. RABEAU. Yes, sir; per 1,000 live births. The tuberculosis death rate as shown on chart 3 has steadily dropped down and the 1964 figures show it is down to 21 for the Indian and that it is down to 18.4 for the Alaska native.

The death rate for gastritis and enteritis as shown on chart 4 attribute to two things, improvement in sanitation and improvement in the environment of the home. As you can see this has gone down considerably. This is for 100,000 population.

Senator BARTLETT. What is the average death rate of infants throughout the country per thousand live births?

Dr. RABEAU. In the United States it is just about 25.

Senator BARTLETT. For the entire country?

Dr. RABEAU. Yes, sir.

Senator BARTLETT. That is for all races?

Dr. RABEAU. Yes, sir.
Senator BARTLETT. Per 100,000 or 1,000?
Dr. RABEAU. Per thousand.

PERSONAL EXAMINATION OF HOUSING MADE

Senator BARTLETT. Last November some of us were present at an Alaska native housing conference, after which we boarded a plane and traveled to the Eskimo villages down in the lower Kuskokwim area and up the Arctic coast as far as we could go; namely, Barrow. We made a personal examination of the housing conditions, which we found to be deplorable everywhere. I was told by Public Health people, if my memory serves me correctly, that in that Kuskokwim delta area 200 babies died in the first year of life. Do you have any personal knowledge of whether my memory serves me right?

Dr. RABEAU. You are correct, the infant death rate in the lower Kuskokwim is the highest in our entire program, much higher than the overall Alaskan death rate which is approximately 50 and it is considerably higher, of course, than the all-races rate.

Senator BARTLETT. What do you attribute this higher mortality to?

Dr. RABEAU. To grossly inadequate housing, sanitation, malnutrition, the lack of any concept of good health practices, lack of education, just about a lack of everything in that particular area.

Senator BARTLETT. These people live in a pretty primitive manner, do they not?

Dr. RABEAU. Yes, sir.

Senator BARTLETT. Now, Dr. Rabeau, does the service provide any psychiatric care for Indians?

Dr. RABEAU. Our programing for mental health, referring to psychiatric care, is provided in various ways in various States. In Alaska, the psychiatric hospitalization is done by the State of Alaska. We have no psychiatric hospitals. We do no psychiatric hospitalization on our own, except under contract to a State institution. We have, however, at the present time a prototype mental health project underway at Pine Ridge, S. Dak.

MEMORANDUM ON PSYCHIATRIC WORK

Senator BARTLETT. I have been told and I would like to ask you about this, that there is a need, perhaps an urgent one, for undertaking some psychiatric work in Alaska. A memorandum has been furnished me from which I will read. It says:

The transition from the communal way of life has been equally devastating to the psychological adjustment of the Alaskan natives and Indians. Despite the efforts of State mental health program to provide psychiatric treatment services for all the citizens of Alaska, the majority of the natives residing north of Anchorage are dependent for diagnostic and follow-up psychiatric services on the general physicians and allied staff of the Division of Indian Health.

Is that a correct statement in your judgment?

Dr. RABEAU. Yes, sir.

Senator BARTLETT. Then the memorandum goes on to say:

It is proposed that a mental health team be introduced to the Anchorage area office. The primary focus would be preventive and educational. Because of the

small total number of beneficiaries in Alaska, spread over a vast geographical area, it is planned to operate the entire mental health program from the area offices rather than staff each service unit.

The mental health team is to travel to the outlying hospitals to help general medical staffs handle groups of native patients, who need to learn how to manage periods of crises in their lives with a minimum of stress to avoid mental breakdowns that would require prolonged outpatient or inpatient therapy.

They will train young IHS physicians, nurses, other allied medical personnel and BIA school teachers to incorporate good mental health practices in their daily routine, and to focus on early case detection. The efforts of the mental health unit will not only benefit the hospital and clinic patients but also will result in the development of good community mental health which is necessary for their social and cultural growth.

RECOMMENDATION OF STAFF REQUIRED

Now, the recommendation that is before me is that the staff that would be required, a community psychiatrist, a clinical psychologist, one mental health social worker, and two clerks.

The estimate of the cost of that team is placed at $100,000. Are you familiar with any effort to have such a team installed?

Dr. RABEAU. Mr. Chairman, we are proposing, if my memory serves me correctly, to set up this project as soon as possible. This is very similar to our prototype study we have at Pine Ridge, but rather than limiting it only to one service unit, we would do a whole area. The basic purpose behind this is to improve the expertise of people dealing with our Alaska natives at the village levels, not only health, but educational personnel as well. We feel that by teaching our physicians and nurses and other health personnel, in methods and techniques in assisting in treatment of mental conditions and we basically are talking about stresses of living, that this should do more to solve the problem than attempting to move patients long distances to receive professional psychiatric care.

Senator BARTLETT. What is the incidence of mental health and difficulties among the Indians, and also Eskimos and how does it compare with the rest of the population?

Dr. RABEAU. Our experience is not really valid: the best figures we have available relate to the numbers housed in psychiatric hospitals. However, I would like to point out the people we are attempting to reach are those who have not yet reached that stage, the people having difficulty meeting the strain of everyday life. Everybody is under stress in life; it is basically their reaction to these stresses and strains of living that determine how healthy they are. We are interested in community denominators such as school dropouts, delinquency, and suicide rates. We have delayed planning our program in Alaska. We have put it over to a future date because of the fact we are waiting to be able to assess our prototype study in South Dakota.

TRANSITION FROM COMMUNAL WAY OF LIFE

Senator BARTLETT. Well, in connection with that, I read from this memorandum about the transition from the communal way of life. This is particularly true in Alaska, is it not? These people in the space of a generation, no less, particularly the Eskimos have been forced to adjust. I think, on the whole, they have done this admirably well, from the hunting and fishing economy to the white man's econ-

omy. Now, to an increasing degree, they depend on a salary or wage check at the end of the week or month, do they not?

Dr. RABEAU. Yes, sir.

Senator BARTLETT. In the olden days, they never saw any significant amount. So while it is your feeling that this is a project to be commended, it ought not to be instituted in the next fiscal year. It should be postponed pending your evaluation of what it has achieved down in South Dakota?

Dr. RABEAU. Yes, sir, Mr. Chairman. In the context of having a balanced total program, you must place priorities on your needs.

FUNDING ON SEWER AND WATER PROGRAM

Senator BARTLETT. Is it true that the sewer and water program is underfunded every year? Do you have enough money to do the job that certainly and imperatively needs to be done?

Dr. RABEAU. Mr. Chairman, we have estimated our needs in sanitation and have a known backlog of work. Up to now approximately one-third of the total program has been accomplished.

Mr. Johnson, would you show the chairman the chart?

Senator BARTLETT. The chart will be inserted in the record at this point.

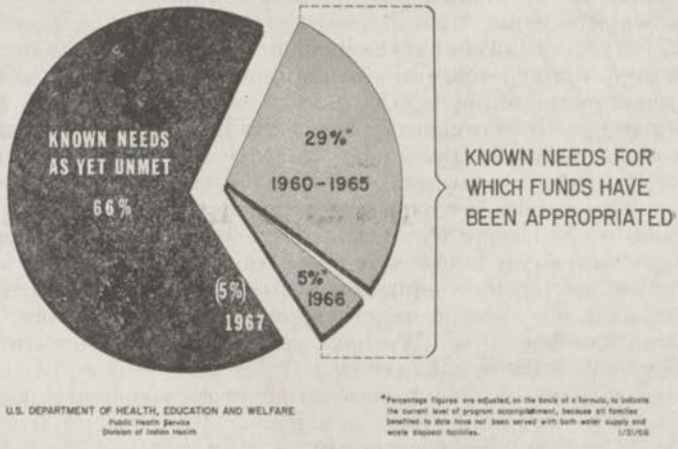
(The chart follows:)

NEEDS FOR CONSTRUCTION OF

SANITATION FACILITIES FOR INDIAN FAMILIES

UNDER PUBLIC LAW 86-121

(CURRENT ESTIMATED NUMBER OF BENEFICIARY FAMILIES: 69,000)



U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Public Health Service
Division of Indian Health

*Percentage figures are adjusted, on the basis of a formula, to indicate the current level of program accomplishment, because all families benefited to date have not been served with both water supply and waste disposal facilities. 1/31/66

NEEDS OF SANITATION FACILITY

Mr. JOHNSON. This chart represents what we consider the total sanitation facility needs for some 69,000 beneficiary families.

You can see by the lighter portion of the pie, we have met, or will meet, with funds appropriated to date over the past 6 years, approxi-

mately 34 percent of that need. This means that 66 percent of the needs of these total beneficiary families remains to be met. The 1967 requests will enable us to meet approximately an additional 5 percent of the need. We are making as rapid progress as we can. Our dollar certainly is devaluating every year and the 5 percent cannot hold out.

Senator BARTLETT. I suppose as the needs grow the increase will grow?

Mr. JOHNSON. As our base changes the needs will change. It is now 69,000 families.

Senator BARTLETT. I know in Alaska, principally I judge, on account of the work that has been done in respect to health, the population of Indians, Aleuts, Eskimos was stationary for many, many years at about 34,000. It is now up to almost 50,000, which would create more needs in the sanitation division too.

Is there any intention to make a sewer and water survey?

Dr. RABEAU. Yes, sir; we are making a complete sanitation survey in Alaska.

As you may be aware, we have increased our staff there in the past year and are attempting to have a complete environmental health survey, village by village, community by community.

PROGRESS MADE ON BRINGING WATER TO VILLAGES

Senator BARTLETT. As we went on this trip, which I referred to a while ago, we were told of the progress that had been made in bringing water to some of these villages, running water, that they had never heard of before. You would be amazed if you returned and found running water in Unalakleet, something you thought would never happen. I certainly thought it would never happen.

I have heard that an organization—the name might be associated with medical practitioners—has recommended a special training program for doctors and nurses in the Arctic. Have you heard of this?

Dr. RABEAU. Yes, sir. The American Academy of General Practice Committee reviewed our program in Alaska and made the recommendation that we undertake a very intensive and vigorous training of our Alaska version of the community health aid, which up there we call the village health worker, made two recommendations. One recommendation is that we intensify and expedite the training of these people so that we have trained help for each community. The second one had to do with our professional personnel, particularly our physicians, that we attempt to give more experience because they thought this was one of the greatest opportunities in the world for topnotch general practice of medicine.

Senator BARTLETT. A doctor goes up there to school and has an internship for a couple of years as a general practitioner and gets experience he couldn't have accumulated anywhere else in 5 or 10 years.

Talking about hospitals, as we were a while ago, a new hospital is going to be opened soon at Barrow, is it not?

Dr. RABEAU. Yes. The hospital actually is open now and the dedication is April 12.

INADEQUATE STRUCTURE REPLACED BY MODERN HOSPITAL

Senator BARTLETT. This replaces an older institution?

Dr. RABEAU. Yes, sir. The existing hospital at Barrow was built in the early forties, if my memory serves me correctly. It was an inadequate structure and has been replaced by a very substantial 12-bed modern hospital.

Senator BARTLETT. I was going to ask about that. Would 12 beds be enough. What is that population, about 1,600? It is growing very rapidly. Is that going to be big enough?

Dr. RABEAU. Yes, sir. We feel—and we have studied this—that on the basis of a very active preventive health program there it will be sufficient. We are adding a second physician which will increase the emphasis on the services to be provided in the field and in the homes. With the relatively small geographical area these people will come from, it will be easier to provide services outside the hospital. Therefore, we feel that the beds are adequate.

Senator BARTLETT. If you had a community of 1,600 in Iowa would a 12-bed hospital be adequate?

Dr. RABEAU. I believe Hill-Burton figures on beds in the United States on the basis of around 4 or 4½ to a thousand population. The needs and location in Barrow are many. First of all, they are over 600 miles away from Fairbanks, where the closest large hospital is. All patients in need of specialty services are transported to Fairbanks or Anchorage. In Iowa, I think, in your hypothetical situation, most of the small hospitals now are starting to combine into slightly larger facilities. It has a lot to do with the transportation pattern; the ease of the patient in getting to the hospital. When the day comes when Alaska is similar to Iowa, there will probably be further consolidation of facilities.

Senator BARTLETT. You and I can get to Barrow quicker than we can from here to lots of places in Iowa.

Dr. RABEAU. Yes; particularly in the last few days.

CHANGES IN RULES AND OPERATING REGULATIONS

Senator BARTLETT. The Public Health Service recently made a significant change in Alaska with respect to its rules and operating regulations, in that it will now take people of other races other than Indian, Eskimo, and Aleut on an emergency basis. Is that correct?

Dr. RABEAU. Yes, sir; emergency care was always provided at any of our facilities and, at the request of the last legislature, we are requesting funds under this program to allow us to increase our staffing and to provide routine medical care to remote, isolated areas to people who are nonbeneficiaries under the program.

Senator BARTLETT. These people will pay for the care?

Dr. RABEAU. Yes. The prevailing rates that they are now paying private physicians. The services will not exceed the services being provided to our beneficiaries.

Senator BARTLETT. The need for this has been long pointed out but it was rather highlighted by the fact that the Kennicott Copper Corp. is developing a mine on the Kobuk River in Kotzebue, the closest community. The change will afford an opportunity to fly their injured people in there to receive care that otherwise could not have been provided?

FURNISHING EMERGENCY CARE

Dr. RABEAU. As I say, emergency care was always provided. The commissioner of health and welfare will be required, following consultation with the State medical, dental, and hospital associations, to designate what areas are isolated and, we presume, the criteria he will use will be accessibility. If our resource is more accessible than a private one in this particular area, it would be designated. The area you are talking about is more than 160 miles from Kotzebue and more than double that to the nearest community hospital.

Senator BARTLETT. If a plane is on the field at the community where this mine is being established, if a plane is on the field headed for Fairbanks, the patient will be taken to Fairbanks. There is no intention to take over the work being performed of them by Government hospitals?

Dr. RABEAU. Yes, sir; we are only attempting to assist where we can, without competing.

Dr. WAGNER. This will encourage the development of Alaska by giving some feeling of security to people who go out in remote areas, that they will be provided with some health services.

The fact that these services would be available will be comforting to them. This is one of the things I think the Senate legislature considered in passing their resolution.

ADMINISTRATION OF MEDICARE PROGRAM IN ALASKA

Senator BARTLETT. I think it's a wonderful thing.

Now, I would like to ask a few questions which will be derived from the letter that came in only yesterday from Dr. Levi M. Browning, commissioner of health and welfare for Alaska. Perhaps, instead of asking these questions now—they relate to Alaska natives in reference to the medicare program, and there seems to be some large areas of doubt as to the administration—perhaps it would be preferable if I should furnish you copies of this letter and then ask you to respond for the record.

Dr. RABEAU. We would be happy to do that, sir. Do you wish that reply for the committee record?

Senator BARTLETT. I think it would be well because we are going to have the same problems in other geographic areas. A statement that would appear in a printed record might be very enlightening and helpful.

Dr. RABEAU. We will be happy to do that.

(The letter and departmental statement follow:)

LETTER FROM DEPARTMENT OF HEALTH AND WELFARE, ALASKA

MARCH 4, 1966.

Hon. E. L. BARTLETT,
Senate Office Building,
Washington, D.C.

DEAR SENATOR BARTLETT: Thank you so much for sending us the booklet from the Department of Health, Education, and Welfare on the impact of the 1965 legislation. I appreciate very much your thoughtfulness in sending it, and we will carefully go over this booklet. We had not seen it up here as yet.

We seem to be moving along pretty well on the implementation of title XVIII, though we're still having some difficulty in getting it across to the people in social security that Alaska does not have the sophisticated accounting systems that some

of our larger States do. But I think we will get it all ironed out. At any rate, we are moving ahead on the assumption that we will. As an example of what I mean, we were recently told of a ruling that if we "bought in" for people under our welfare programs that we could not buy in for a portion of the people; we would have to buy in for all of them. In other words, all of the people on our welfare programs—old age assistance, aid to the blind, totally and permanently disabled—who have been in the past receiving their medical care from the Alaska Native Health Service will not come under medicare. Many of them, it is true, will continue to receive their care from the Alaska Native Health Service. Where else could they go in Barrow? But no one is quite sure whether medicare will pay the Alaska Native Health Service and, if so, who will pay the deductible and coinsurance portions, or will this all be forgiven and then paid as an exchange of funds at the Washington level? It seems fairly certain that a number of the natives would prefer to go to Providence rather than the Alaska Native Health Service hospital in Anchorage. When they do, I am afraid it means the State has to pick up the coinsurance and the deductible fees. As a guesstimate, and it can only be that since we have no figures whatsoever to go on and because much depends on people's preferences and ideas, we foresee that it will cost the State something like $100,000 more to put this group under medicare. A hundred thousand dollars is a pretty sizable lump to our budget. We have pointed all this out to the social security people, and we are hopeful that we may get another interpretation of the rules.

We have also been asking what will be the answer to the question of transportation under medicare. The law and the regulations as we have them now provide only ambulance service. Of course, that doesn't mean much to a lot of Alaskans whose only means of travel is by air and that on planes that are not designated for ambulance purposes. We are hopeful that we can get across to the social security people that this does create a problem up here that we have many, many people who will not be able to take advantage of medicare unless they have transportation provided. The Alaska Native Health Service, for instance, does provide transportation to their hospitals but they are extremely doubtful that their funds could be used to transport patients to other medical facilities. It's the old story again, it's so hard to get interpretation of laws made to fit situations that are entirely different from what we have in Alaska. We will keep working with it and do the best we can.

We are trying to learn as much as possible about title XIX and we are trying to figure out what it will mean to Alaska. So far as we know now, it looks like the State will have to take on considerably more in the way of medical payments than it has before. It will mean a lot more to a lot of people in Alaska, I am sure, but the cost will be quite high. One thing that we are not clear on and will have to affect our thinking and our possibilities in this area is the role that the Alaska Native Health Service will play in the medicare. I have talked with people on the local level here and they, too, have questions that are unresolved as to where they are going to fit in.

Again, my thanks for your thoughtfulness. With most sincere regards.

Very truly yours,

LEVI M. BROWNING, M.D., *Commissioner.*

DEPARTMENTAL STATEMENT

The following guidelines, issued by the Division of Indian Health on February 10, 1966, provide answers to some of Dr. Browning's questions. These statements which are applicable nationwide to a variety of situations were sent to each Indian Health Area Director to assist him in collaborating with State health and welfare officials, tribal representatives, district office managers of the Social Security Administration and others interested in improving and expanding medical care programs for the needy.

1. Indians are as entitled to insurance coverage under title XVIII and other benefits under Public Law 89-97 as other citizens. Indian beneficiaries should be encouraged to take advantage of all benefits to which they are entitled.

2. Since Indians do not have individual entitlement to medical and related

care through the Division of Indian Health, they may not be automatically excluded under Public Law 89–97, section 1862(a)(2).[1]

3. When the needed medical and/or hospital care is more accessible to the aged Indian in a Division-operated hospital than in a community facility, the Indian may choose to be admitted to an Indian facility.

4. No payment under Public Law 89–97 will be expected or accepted by the Division of Indian Health from a Federal- or State-financed program for care provided to qualified Indian beneficiaries in a Division facility. For care given to non-Indians in Indian health facilities special determinations will be made by the Secretary of HEW.[2]

5. An aged Indian hospitalized in a non-Indian facility may request payment of the $40 deductible and other deductible costs by DIH under the following circumstances:

(1) If he does not qualify for payment as a needy, or medically needy person under the State welfare program;

(2) If he cannot afford to meet this expense through his own resources, and

(3) If prompt notification of service is given to the Service Unit Director, in accordance with Division of Indian Health policies.

6. In accordance with the Division of Indian Health fees and policies, a private physician who is serving a qualified Indian beneficiary may be authorized by a Service Unit Director to submit bills to the Division of Indian Health when an Indian cannot afford his own care and he does not qualify for the needed services through a public medical care program.

7. The Division may not pay the $3 medical insurance premium for any Indian under part B of title XVIII.

8. Community hospitals and private physicians under contract to the Division of Indian Health are not legally obligated to provide services to any qualified Indian and are not "excluded from payment" under section 1835 (b) of Public Law 89–97.[3] Contracts between Division of Indian Health and providers of services are agreements related to the administration of the program and do not obligate the provider to give service unless an individual authorization has been issued by the Division of Indian Health.

9. The fact that the Division of Indian Health may pay deductible costs in specified cases does not constitute an assumption of legal obligation or an expression of legal entitlement of an Indian beneficiary to payment by Division of Indian Health of total medical care. Care provided through the Division of Indian Health resources is supplementary to services to which Indians are entitled under other public medical care programs or other resources."

It is anticipated that even after July 1, 1966, when the hospital insurance program for the aged goes into effect, most natives will continue utilizing the Indian health facilities because they are more accessible to them than the nearest community hospitals. For example, of the estimated 960 Alaska natives receiving old age assistance in December 1964, only 20 percent, or about 192, resided in Nome, Fairbanks, Juneau, or Ketchikan, the major populated areas where the Division of Indian Health does not operate hospitals.

Provision of services to the native welfare recipients by the agency with the more accessible resources means that only those native welfare recipients who live in the larger population centers will look to the Alaska welfare program for needed medical services. Thus the transportation problem, about which

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[1] "Notwithstanding any other provision of this title, no payment may be made under part A or part B for any expenses incurred for items or services for which the individual furnished such items or services has no legal obligation to pay, and which no other person (by reason of such individual's membership in a prepayment plan or otherwise) has a legal obligation to provide or pay for."

[2] "No payment may be made under this part to any Federal provider of services or other Federal agency, except a provider of services which the Secretary determines is providing services to the public generally as a community institution or agency; * * *."

Alaska field hospitals will, in all probability, be considered community hospitals and reimbursement authorized.

[3] Last half of Public Law 89–97, sec. 1835(b), reads as follows: "* * * and no such payment may be made to any provider of services or other person for any item or service which such provider or person is obligated by a law of, or a contract with, the United States to render at public expense."

Dr. Browning expressed concern, will not be as extensive as if all native welfare patients had to be flown to the nearest community hospital.

It is our understanding that division of responsibility based on relative accessibility of resources does not violate title XIX which requires that medical assistance made available to individuals receiving one category of public assistance shall not be less in amount, duration, or scope than the medical assistance made available to individuals receiving aid under any other category. As long as native and nonnatives in the larger populated areas receive the same consideration, the fact that natives in Barrow, for example, should continue to receive their care through the Public Health Service facility will not be interpreted as contrary to the requirements of Public Law 89-97. We cannot comment specifically on Dr. Browning's problems related to "buying in." Recently we discussed this aspect of title XIX with the medical social consultant of the Bureau of Family Services in the San Francisco office without reaching any firm conclusions.

Combining Construction Resources

Dr. Gehrig. I am Dr. Leo J. Gehrig, Deputy Surgeon General of the Public Health Service. Senator Byrd earlier paid cognizance that this proposal includes the transfer of construction funds, and transfers of civil service personnel from the Division of Indian Housing to the Office of the Surgeon General, because the remainder of our proposal will be heard in front of another committee.

I would like to amplify the purposes here, if I may.

Senator Bartlett. Surely.

Dr. Gehrig. We have in the Public Health Service the Bureaus of Medical Services, and Environmental Health, each with scattered construction functions. We have noted when program priorities come up, each of the individual programs cannot meet their own needs within their existing resources. So it is contemplated we would bring together the construction resources which would total, among these 3 bureaus, 41 people. We also have an appropriation for 14 additional construction people to fit in this new division. We do not contemplate this transfer of functions will remove vitally all of these people from the Indian health program, but the coordination will permit us to establish a priority need and meet them with a larger group expertise than we have now.

What was started later in response to the question merely indicates this one movement but, within this budget, we are planning a larger resource in the Service which will be responsible to Indian health and others and will, in fact, be responsible for 14 positions to be added to this effort.

Senator Bartlett. Thank you. Your statement is helpful.

Subcommittee Recess

The subcommittee will stand in recess until 10 a.m. March 9, when witnesses will be heard pertaining to the National Gallery of Art and the Smithsonian Institution.

(Whereupon, at 11:30 a.m., Tuesday, March 8, 1966, the hearings were recessed, to reconvene Wednesday, March 9, 1966, at 10 a.m.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1967

WEDNESDAY, MARCH 9, 1966

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., in room 1223, New Senate Office Building, Hon. E. L. Bartlett presiding.

Present: Senators Bartlett, Byrd, and Mundt.

SMITHSONIAN INSTITUTION

NATIONAL GALLERY OF ART

STATEMENT OF JOHN WALKER, DIRECTOR; E. JAMES ADAMS, ADMINISTRATOR; ERNEST R. FEIDLER, SECRETARY-TREASURER; AND LLOYD D. HAYES, DEPUTY ADMINISTRATOR

1967 BUDGET REQUEST

Senator BARTLETT. The subcommittee will be in order.

The first witness this morning will be John Walker, Director of the National Gallery of Art.

Mr. WALKER. I have a statement here. May I read it?

Senator BARTLETT. Surely.

TWENTY-FIFTH ANNIVERSARY OF NATIONAL GALLERY OF ART

Mr. WALKER. One week from tomorrow, March 17, marks the 25th anniversary of the opening of the National Gallery of Art. I hope you will be there, Senator Bartlett.

Senator BARTLETT. I was there on opening night. The wife of the then territorial delegate from Alaska asked me to take her because her husband was not feeling well. I said I would be glad to take her, but I did not have a dress suit. She said that did not matter. I learned the next morning there were 6,000 people there. There were three men there in business suits. The two others, I learned, were detectives.

Mr. WALKER. In these few years, the National Gallery of Art has achieved the top rank of the great art museums of the world. A full measure of the credit for this unprecedented accomplishment is due to the sympathetic support of the gallery's plans and programs given by the Appropriations Committees of both Houses of Congress and by

Senators and Representatives generally. I express our deep appreciation and gratitude for that support.

The 1967 appropriation requested for the National Gallery of Art is $2,765,000. This is a net increase of $244,000 over the comparative base for the current year.

Level of Protection for Art Exhibits

Sixty-seven thousand eight hundred dollars of the increase is to raise the level of protection for art exhibits. With acts of vandalism and thefts an all time high in museums, we believe that sufficient guards must be posted in exhibition areas so that all visitors will be within view of a guard at all times. In general, this means having one guard for the protection of every two exhibition rooms. To constantly adhere to this standard from day to day requires 10 additional full-time guards, 4 additional part-time guards for service during the evening hours the Gallery is open, and additional funds for overtime pay. The cost of salaries, personnel benefits, and uniforms for this increase in the guard force amounts to $67,800.

Repairs to Gallery Building

Forty-one thousand eight hundred dollars of the increase is for nonrecurring repairs to the building. A number of large granite stones at the Mall entrance to the building have sunk from their original level to the extent that they now present a hazard to pedestrians. The cost of raising and resetting these stones is estimated at $25,000. The remaining $16,800 in nonrecurring building repairs is for the overhaul of 43 large fans in the ventilating and air-conditioning system.

Index of American Design

In July of 1960 the staff of the Index of American Design was assigned the added responsibility of establishing and operating an extension service. Due to the phenomenal growth of this service (which I will mention in more detail later), the effort now being devoted to the Index of American Design is that of one museum aid. To restore the staff of the Index to its numerical equal of 1959, we are requesting two new positions—a curator, GS–13, and a secretary, GS–5. The Index collection consists of some 17,500 watercolor renderings of the crafts and folk art of this country from the earliest colonial days through the last century. It was produced during the depression of the 1930's as a part of the Government-sponsored program for unemployed artists. The project was organized by States, and 31 States plus the District of Columbia are represented in the present collection. To determine the feasibility of completing the Index with drawings of representative materials from the remaining 19 States, we are requesting $20,000 for a pilot project. This amount will be used to commission local artists in the State or States selected to produce watercolor renderings of materials selected by the gallery's staff. The total amount for the two new employees' salaries, benefits, and office equipment, and the pilot project is $39,000.

NEW OFFICE OF PUBLIC INFORMATION

Twenty-seven thousand five hundred dollars of the total increase is to establish an office of public information. In this era of increased emphasis on the values of education and culture for all the people of the country, we believe that we have a very real obligation to do everything possible to bring a greater number of visitors to the Gallery, and, through our extension service, to take something of the Gallery to a greater portion of the population. To acquaint the people in all parts of the country with their National Gallery, we are requesting $27,500 to establish an office of public information. This amount will cover the salaries, personnel benefits, and office equipment for one specialist, grade GS–14; one secretary, grade GS–5; and one clerk, grade GS–5.

GROWTH OF THE EXTENSION SERVICE

I have mentioned before the extraordinary growth of our extension service. This activity loans slide lecture sets, films, and exhibits of art reproductions to schools and other educational organizations. Last year the extension service reached approximately 971,000 people, an increase of 421,000 over the preceding year. Almost 7,000 schools and organizations were recipients of this program last year. The average annual rate of increase in the number of recipients over the past 5 years is 43 percent. To meet the anticipated increase in demand during 1967, we are requesting an additional $10,000 for increasing the quantities of these materials, and $2,000 for the printing of brochures on the materials available.

MISCELLANEOUS ITEMS OF INCREASE

The remainder of the net increase of $244,000 consists of the following amounts offset to the extent of $4,000 in nonrecurring equipment items provided for in the current year:

(1) $23,000 to place the pay increases of Public Law 89–301 on a full-year basis;

(2) $13,300 to pay within-grade promotions and wage board step increases;

(3) $7,000 to print additional quantities of the Gallery's information booklet which is given to visitors;

(4) $4,000 for the payment of terminal leave earned by the temporary part-time employees who work during the extra evening hours that the Gallery is open from April 1 through Labor Day;

(5) $4,700 for the purchase of nonrecurring equipment items;

(6) $2,000 for postage to mail increased quantities of informational materials requested by the public; and

(7) $5,900 for increases in personnel benefits due to higher salary rates, the Social Security Amendments of 1965, uniforms (not heretofore provided) for crafts and trade employees, and higher payments to the Bureau of Employees Compensation.

INCREASE IN EMPLOYMENT

In summation, the average estimated employment in 1967 is equivalent to 361.7 man-years. We are requesting 15 new full-time employees, and the equal of 2.3 man-years of additional part-time employment. The 15 new employees are 10 guards, grade GS–3; 2 stenographers and 1 clerk, grade GS–5; 1 curator, grade GS–13; and 1 information officer, grade GS–14.

ATTENDANCE INCREASE

Of the total estimated employment of 361.7, the equivalent of 22.8 man-years is required to keep the building open to the public until 10 o'clock in the evening from April 1 through Labor Day. From July 1 through Labor Day of last year, almost 60,000 visitors came to the gallery in the extra evening hours from 5 to 10 p.m. Attendance during the first half of the current fiscal year showed an increase of 22 percent over the same period last year. The total attendance for fiscal year 1965 was 1,253,000.

1967 BUDGET ESTIMATE

Senator BARTLETT. Thank you, Mr. Walker.

There will be placed in the record the justification statement submitted by the National Gallery of Art in support of its budget estimate for fiscal year 1967 in the amount of $2,765,000.

This is a net increase over the current year, fiscal year 1966, of $244,000.

(The justification follows:)

The 1967 appropriation proposed for "Salaries and expenses, National Gallery of Art," is $2,765,000—a net increase of $244,000 over the comparative base for the current year.

This increase is primarily for the accomplishment of the following objectives:

(1) Continual maintenance, from day-to-day, of an adequate standard of protection for all exhibits;

(2) Extension, on a pilot-project basis, of the Index of American Design; and

(3) Increased utilization of the National Gallery of Art as an educational medium for the general public.

Following the trend of crime in general, thefts and acts of vandalism in museums are at an all time high. Accordingly, adequate protection of the Nation's art treasures requires the employment of additional guards, and more funds for payment of overtime compensation to the extent that the use of overtime work is more economical than the maintenance of a force large enough to completely cover daily absences of guards. To continually maintain a standard of one manned guard post for every two exhibition rooms will cost and additional $67,800 in 1967.

The Index of American Design has been described as the most valuable visual record of arts and crafts in America. It was produced during the depression of the 1930's by the Works Progress Administration's Federal art project as a part of its program for providing work for artists. The Second World War brought an end to the Index project before it was completed. We now propose a pilot project to establish a feasible method of completing this pictorial record of the American tradition of basic arts and craftsmanship. For this purpose, and to provide additional personnel to make the existing records and renderings readily available to designers, manufacturers, scholars, and the general public an increase of $39,000 is included in this budget.

In this era of increased national emphasis on the values of education and culture for all of the people of the country, we believe that we have a very real

obligation to do everything possible to take something of the Gallery to a greater portion of the population and to bring a greater number of visitors to the Gallery. We know of no surer means of bringing about a more complete utilization of the National Gallery of Art as an educational medium for the general public than through the efforts of an expert in public information. To employ a professional in the field of public information and to provide the support of two clerks will cost $27,500.

Increases, other than for the objectives mentioned above, include amounts for nonrecurring building repairs, additional educational materials for the extension service, larger quantities of information booklets available to visitors, and funds for within-grade promotions and wage-board step increases.

The 15 new positions required to carry forward the plans outlined for 1967 will bring the average number of all employees to 362.

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."

Salaries and expenses

Appropriation, 1965, including supplemental of $80,000	$2,227,000
Appropriation, 1966, including anticipated supplemental of $66,000	2,531,000
Adjustment to establish 1966 base [1]	−10,000
1966 base amount	2,521,000

SUMMARY OF INCREASES AND DECREASES

1. To pay for additional employment of guards (10 new positions and increase in overtime)	+$62,650
2. To pay salaries for 3 positions in new Office of Information	+24,170
3. To pay salaries of 2 new positions, Index of American Design	+17,075
4. To pay on a full-year basis cost of civilian pay increases due to Public Law 89–301	+23,000
5. To pay other increases in personnel compensation and benefits	+29,466
6. To pay for nonrecurring repairs to building and fixed equipment	+41,800
7. To pay for pilot project in Index of American Design	+20,000
8. To pay for other miscellaneous increases	+29,800
9. Reduction due primarily to nonrecurring equipment items in current year	−3,961
Net change, 1967	+244,000
Budget estimate, 1967	2,765,000

[1] The 1966 anticipated supplemental includes:
(*a*) $42,000 for civilian pay increases (Public Law 89–301);
(*b*) $14,000 for wage-board pay increases, effective Dec. 6, 1964; and
(*c*) $10,000 for wage-board pay increases, effective Dec. 5, 1965.
As the proposed appropriation for 1967 does not include the cost of the Dec. 5, 1965, wage-board increase, the $10,000 included in 1966 for that purpose is deducted to establish the 1966 base for increases and decreases.

EXPLANATION OF INCREASES AND DECREASES

1. Additional employment of guards to maintain protection of exhibits at approved standard, $62,650

Since the Gallery was first opened to the public on March 17, 1941, the approved standard of protection for exhibits has been based on having sufficient guards so located that all visitors in the exhibition areas will be within the view of a guard at all times. In general, adherence to this standard requires one guard for the protection of two exhibition rooms.

In the past the number of full-time permanent guard positions have been justified on this basis, but with no additional allowance for the following factors:

(*a*) The delay in filling vacancies due to turnover—in the current year this is computed at the equivalent of 6 man-years;

(*b*) The gradual utilization, over the past several years of public spaces (not counted as exhibition rooms) for exhibition purposes, with budget requests for additional guards being limited to those for newly constructed rooms—in the current year the protection of exhibits in such spaces requires 1.5 man-years of guard service;

(*c*) The gradual accretion of general duties for guards which do not relate to the number of exhibits open to the public—in the current year this amounts to 2.5 man-years of service (one guard-dog handler, and the servof one guard daily to handle the cafeteria line, large groups of schoolchildren, and other general duties); and

(*d*) The fact that daily absences of guards due to illness do not conform to a numerical daily average computed from the total days of duty lost annually from this cause.

Thus, to cover the deficiencies in guard service outlined above will require 10 additional full-time guards, at $4,005 annually, for items (a) through (c), and $11,600 for item (d) to pay the overtime required to cover absences due to illness which exceed the daily average. This total cost of $51,650 per annum relates only to guard services during the normal hours (10 a.m. to 5 p.m. weekdays, and 2 to 10 p.m. Sundays) the gallery is open to the public. To raise the protection of exhibits to the approved standard during the extra hours the building is open from April 1 through Labor Day (noon to 2 p.m. on Sundays, and 5 to 10 p.m. on weekdays) requires additional overtime service of full-time experienced guards, and additional part-time temporary guard service as follows:

1,740 hours of overtime, at $3.45	$6,000
2,842 man-hours of part-time temporary employment, at $1.77	5,000
Cost of raising protection to approved standards during extra hours	11,000

It is appropriate to ask: "Why in 1967 are we justified in requesting an additional $62,650 to raise the protection of exhibits in the Gallery to an approved standard which has not been maintained in the past?" We admit that we have been taking a calculated risk in an effort to keep down the cost of protection which in personnel compensation alone will exceed three-quarters of a million dollars in the current year. Some support for that policy came from the fact that up to the past 3 years museums in the Washington area had not been the victims of thefts and acts of vandalism which have plagued many other museums in this country and abroad during the past several years. We have knowledge of 74 thefts from museums in the United States over the past 3 years. Locally, a Paul Klee watercolor was stolen from the Phillips Art Gallery in January of 1963. Often acts of vandalism are not reported, however; in March of this year vandals slashed a mural in the George Washington Masonic National Memorial in Alexandria, and 10 paintings on exhibit at the Corcoran Gallery of Art were mutilated with scratches and holes.

Last year we had two paintings and one piece of sculpture damaged, either by accident or malicious mischief, while on exhibit. In addition, five other paintings were subjected to a barrage of spitballs, and one unauthorized painting was hung by a visitor, without detection in one of the exhibition galleries. Fortunately none of these acts resulted in permanent damage to any work of art, but we believe that the fact that the perpetrators of all of these incidents went unnoticed supports our conclusion that the protection of Gallery exhibits must be continuously maintained at a standard whereby all visitors, while they are in exhibition areas, are in view of a guard at all times. Having reached this conclusion, the officers and trustees of the National Gallery of Art believe it is their duty to apprise the Congress of the facts, and to request funds to correct the unsafe condition that now exists.

2. New Office of Information, $24,170

We have never employed an expert in the field of public information. Due to lack of staff our efforts in the field have been restricted to issuing a press release on the occasion of a special exhibition. Some 30 such releases were issued last year. However, of the 470 conventions held in Washington last year, we did not initiate contact with a single one. We are convinced that in this era of increased national emphasis on the values of education that we have an obligation to better inform the general public of the benefits the Gallery offers. These benefits may be realized not only through visits to the Gallery, but also through the work of our extension service and Index of American Design which serves schools and organized groups throughout the entire country.

The public information staff proposed consists of an information officer, GS–14; a secretary, GS–5; and a clerk, GS–5. Salaries for these three employees total $24,170 per annum. This staff will work with all public communications media, conventions, schools, and other organized groups to bring about a more complete utilization of the National Gallery of Art as an educational medium for the general public. In addition, it will process all requests for publication of photographic reproductions of works in the Gallery's collections, and provide editorial services for the scholarly writings of museum curators.

We believe this request is in full accord with the administration's policy of encouraging and supporting a national effort to improve the educational aspects of American life.

3. New positions for Index of American Design, $17,075

The Index of American Design is a collection of some 17,500 watercolor renderings of the crafts and folk arts of this country from before 1700 to about 1900. It was produced during the depression of the 1930's by the Works Progress Administration's Federal art project as a part of its program for providing work for artists. The Index was placed in the permanent custody of the National Gallery of Art in 1944. Renderings and records of the Index of American Design give students and the general public an opportunity to become familiar with the designs and craftsmanship of the early American cultural pattern. It provides artists, designers, and craftsmen with a source for an organic development of indigenous American design.

In July of 1960 the staff of the Index was assigned the added responsibility of establishing and operating an extension service. At that time the staff consisted of the curator, a museum aid, and a secretary. Due to the phenomenal growth of the extension service, the effort now being devoted to the Index of American Design is that of one museum aid. The work of the Index entails research, completion, and correction of records on existing renderings; organizing and circulating exhibitions and slides of Index materials; assisting students, designers, and members of the general public who seek information from the collection; and writing about the Index for publication.

From 1945 to 1959 the curator, Index of American Design, wrote 6 books and 20 articles about the Index. Since 1959, the Index staff has lacked time to produce any written material on the Index for publication. Also, the number of people seeking material from the collection, which the staff has been able to assist, has decreased from 406 in 1959 to 271 in the past year.

To restore the Index of American Design staff to its numerical equal of 1959, $17,075 is requested for the salaries of a curator, GS–13, and a secretary, GS–5. In addition to the work described above, these new employees and the museum aid presently engaged in Index work will have the responsibility of planning and supervising the pilot project for completion of the Index.

4. Extra cost in 1967 to place Public Law 89–301 civilian pay increases on full-year basis, $23,000

The pay increases for Classification Act positions provided by Public Law 89–301 were effective October 10, 1965. Thus, for the current year the increases will be paid for only 18.9 biweekly pay periods. In 1967 the increases will be paid for the full year (26.1 biweekly pay periods). The $23,000 requested for this item represents the cost of paying the increased rates for the additional 7.2 biweekly pay periods.

5. Other increases in personnel compensation and benefits, $29,466

These increases consist of the following items:

(*a*) Within-grade promotions and wage-board step increases, $13,336.

(*b*) Increased premium pay due to the higher level employment of guards, $1,300.

(*c*) Payment for annual leave earned by temporary employees on duty during extra hours Gallery is open during period from April 1 through Labor Day, $4,400.

(*d*) Increases in personnel benefits due to higher employment, higher salary rates, Social Security Amendments of 1965, uniforms not heretofore provided for crafts and trades employees, and higher payments to Bureau of Employees Compensation, $10,400.

6. Nonrecurring repairs to building and fixed equipment, $41,800

This item covers the following repair projects:

(*a*) Raising and resetting of numerous large granite stones at the Mall entrance to the Gallery, $25,000.

(*b*) Repair of 43 large fans in the ventilating and air-conditioning system of the gallery, $16,800.

7. Pilot project for completion of the Index of American Design, $20,000

The Index collection of some 17,500 water color renderings of the crafts and folk art of this country is a unique pictorial record which is unmatched for the quality of its renderings. It was not a new idea when its production was authorized in the depression of the 1930's as a part of the Government-sponsored program for unemployed artists. European nations had prior to that time made large collections of their native design material. Today, however, there is believed to be no comparable collection in Europe or elsewhere.

Work on the Index of American Design was begun in 1936. It ended in 1941, with the coming of World War II, before many important categories had been completely represented. In terms of comprehensiveness, experts in Americana consider it to be weak in the following categories: glassware, silverware, pioneer furniture, cowboy arts, costume, trade tools, slave-made objects, the river steamboat, and many phases of the "aristocratic prewar" South. Furthermore, large sections of the country are not represented in the index because they had few or no unemployed artists in the depression.

At the low prices of the depression (commercial artists who worked on the project earned $20 per week) its cost has been estimated at some $2 million. Its value to present and future hisortians, artists, designers, manufacturers, and the general public is inestimable.

We are requesting $20,000 to undertake a pilot project in 1967 to evaluate the practicability of completing the Index of American Design. Supervision of this project will be given by the staff justified in this budget submission. The full $20,000 will be used to commission local artists in the area or areas chosen to produce water color renderings of the materials selected by the gallery's staff. The cost of each rendering is estimated to range between $50 and $500 depending on the wage scale of the area, and the subject of the rendering.

8. Other miscellaneous increases, $29,800

(*a*) Additional postage for the increase in mailings of invitations to special exhibitions and educational materials requested by the general public, $2,000.

(*b*) Increased usage of the Gallery information booklet and floor plans due to higher attendance, $7,000.

(*c*) Increased usage of extension service brochures requested by schools and other educational organizations, $2,000.

(*d*) Additional materials for circulation by the extension service which loans slide lecture sets, films, and exhibits of art reproductions to schools and other educational organizations, $10,000.

(*e*) Guard uniforms for 14 additional guards (10 full-time permanent and 4 temporary part time), $1,500.

(*f*) Equipment consisting of lockers for 64 part-time guards, office furniture and machines for 5 new office employees, and a film inspecting and cleaning machine, $7,300.

9. Reduction due primarily to nonrecurring equipment items,—$3,961

Funds were provided in the current year for purchase of sofas for two new exhibition rooms and office equipment for three new employees.

STATUS OF PROGRAM

Changes in management requirements.—The average employment in 1965 (including the full-time equivalent of part-time and intermittent employment) was 310—2 man-years under the approved figure of 312. Net savings in personnel compensation and benefits totaled $15,300. This amount was used to cover increased costs of supplies, utility services, and postage.

Planned average employment for the current year is 344.4—0.4 more than indicated in the 1966 budget. This slight increase represents the part-time service required for the evening hours the Gallery was open to the public from September 1 through Labor Day. At the time the 1966 budget was submitted the plan was to end the evening hours on August 31. Wage board and pay act increases not provided for in the 1966 regular appropriation will cost $66,520. A supplemental appropriation of $66,000 will be needed to finance these pay increases. All other items in the 1966 budget are expected to run approximately as estimated in the presentation made to the Congress last year.

Funds are requested for fiscal year 1967 to support an average employment of 361.7. This increase of 17.3 over the current year estimate includes: (a) additional part-time employment of 2.3 man-years and 10 new full-time guard positions to provide better protection for art exhibits; (b) 3 new positions for an information office; and (c) 2 new positions for the Index of American Design. Additional funds, totaling $88,100, are also requested for printing, extension service materials, postage, repairs to the building and fixed equipment, and a pilot project for completion of the Index of American Design.

Accessions.—During the fiscal year 1965 there were 324 accessions by gifts, including 263 paintings, 9 sculptures, and 52 graphic arts.

Special exhibitions.—The following exhibitions were held at the National Gallery of Art during the fiscal year 1965:

7000 Years of Iranian art: Continued from the preceding fiscal year through July 19, 1964.

Prints by Whistler from the National Gallery of Art Collection: Continued from the preceding fiscal year through July 23, 1964.

Selected Renderings from the Index of American Design: July 2 through October 1, 1964.

French 18th Century Color Prints from the Widener Collection: July 30 through October 1, 1964.

Exhibitions of Watercolors by Perkins Harnley from the Index of American Design: August 12 through November 3, 1964.

Fifteenth and Sixteenth Century German Prints from the National Gallery of Art Collection: October 2 through December 6, 1964, January 11 through February 11, 1965.

Drawings of the 15th and 16th Centuries from the Wallraf-Richartz Museum: October 4 through November 1, 1964.

Blake's Engravings of Dante's Inferno and the Book of Job from the W. G. Russell Allen Collection: October 22, 1964, through January 10, 1965.

William Blake, Poet, Printer, Prophet: October 25 through November 22, 1964.

Prints by Altdorfer, Dürer, Lucas van Leyden and Schongauer from the National Gallery of Art collection: October 26 through December 15, 1964; January 14 through April 22, 1965.

Piranesi etchings of prisons and views of Rome from the National Gallery of Art Collection: November 4, 1964, through April 18, 1965.

Designs for the Grave of the Late President John F. Kennedy: November 17 through December 13, 1964.

The 1964 Christmas Card Subjects from the Graphic Arts Collection: December 7, 1964, through January 10, 1965.

The Watercolor Drawings of John White: January 31 through February 22, 1965.

Landscape Prints by Rembrandt and Other Dutch Artists from the Rosenwald Collection: February 12 through May 19, 1965.

Eyewitness to Space: sponsored by the National Aeronautics and Space Administration—March 14 through May 23, 1965.

Rosenwald Miniatures and Widener French 18th-Century Books: April 24 through May 2, 1965.

The Chester Dale Bequest: May 6, 1965, to continue into the next fiscal year.

Graphic Arts from the Chester Dale Collection: May 6, 1965, to continue into the next fiscal year.

Exhibition Illustrating Richard Bales' Index of American Design Suite No. 4: May 20, 1965, to continue into the next fiscal year.

Exhibition of Rembrandt's Portrait of the Artist's Son. Titus: on loan from the Norton Simon Foundation—May 26, 1965, to continue into the next fiscal year.

Sketches by Constable from the Victoria and Albert Museum: June 6, 1965, to continue into the next fiscal year.

White House Festival of the Arts Exhibition: June 18, 1965, to continue into the next fiscal year.

Exhibitions of recent accessions: "Tiberius and Agrippina" by Rubens, November 29 through December 20, 1964; "A Knight of the Golden Fleece," French School, 15th century, December 22, 1964, through February 5, 1965; "Portrait of a Man in a Fur-Lined Coat" by Rembrandt, lent by the Fuller Foundation, January 8, 1965, to continue into the next fiscal year; "The Cornell Farm" by Edward Hicks, "Captain Samuel Chandler," and "Mrs. Samuel Chandler" by Withrop Chandler—February 6 through February 14, 1965; "Watson and the Shark" by Copley—February 21 through April 4, 1965; "Carlo and Ubaldo Resisting the Enchantments of Armida's Nymphs," and "Erminia and the Shepherds" by Francesco and Gian Antonio Guardi—April 4 through April 27, 1965; "The Assumption of the Virgin" by Miguel Sithium—April 18, 1965, to continue into the next fiscal year; "Mrs. Adrian Iselin" by Sargent, "Winter Harmony" by Twachtman, and "Brazilian Seascape" by Heade—May 16 through June 8, 1965.

Curatorial services.—Advice was given regarding 1,740 works of art brought to the Gallery for expert opinion, and 28 visits to collections were made members of the staff in connection with offers of gifts. About 6,200 inquiries, many of them requiring research, were answered verbally and by letter. The material in the "Index of American Design" was studied during the year by 271 persons doing special research or seeking material for publication and design.

Extension service.—This service circulates to the public traveling exhibitions, gallery films, slide lecture sets, and filmstrips. There are 104 exhibits in circulation, lent free of charge except for transportation costs. These were circulated in 844 bookings and were seen by an estimated 422,000 viewers. Eleven special exhibits, lent to a church organization for circulation in 74 bookings, were seen by 39,971 viewers. Sixty-four exhibits, prepared by the extension service were circulated by 3 outside groups, and were seen by an estimated 111,200 viewers. Twenty-eight copies of two films on paintings in the National Gallery of Art were circulated in 316 bookings and were seen by an estimated 94,800 viewers. A total of 2,150 sets of slide lectures on 14 subjects were circulated in 5,717 bookings and seen by approximately 343,000 viewers. In the past year the extension service reached approximately 971,000 people, an increase over last year of 421,500. In addition, the "Index of American Design" had 34 traveling exhibits (booked 62 times), and there were 133 bookings of Index slide sets.

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 36,843. Lectures, conferences, and tours given by special appointment served 16,310 visitors. There were 44 Sunday auditorium lectures illustrated with art films or slides, attended by 12,569 persons. Members of the education office gave 33 radio broadcasts during the year; 26 were newly prepared talks and 7 were recordings from prior years.

Library acquisition.—During the year the Gallery library acquired 3,598 books, 1,094 pamphlets, and 1,281 periodicals. The library now has 22,889 books, 17,919 pamphlets, and 1,944 bound volumes of periodicals.

Photographic laboratory.—The photographic laboratory of the Gallery made 41,411 color slides, 156 black and white slides, 1,614 negatives, 689 color transparencies, and 104 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, which are provided from private funds, were continued throughout the year. These concerts are free to the public.

Attendance and maintenance.—There were 1,253,102 visitors to the Gallery during fiscal year 1965. The average number of visitors daily during the fiscal year was 3,421. This is the largest average in the past 10 years, save for those years in which occurred the unusually popular exhibitions of the Mona Lisa and the

Tutankhamen treasures. 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.

Obligations by object classification

		1965 actual	1966 estimate	1967 estimate
11	Personnel compensation	$1,833,812	$2,104,500	$2,239,300
12	Personnel benefits	132,993	145,600	156,700
21	Travel and transportation of persons	6,962	7,000	7,000
22	Transportation of things	707	600	600
23	Rent, communications, and utilities	144,629	149,700	151,700
24	Printing and reproductions	18,350	18,000	27,000
25	Other services	34,261	37,500	99,300
26	Supplies and materials	50,810	59,600	71,100
31	Equipment	4,393	8,500	12,300
40	Grants and fixed charges	43		
	Total obligations	2,226,960	[1] 2,531,000	2,765,000

[1] 1966 column includes anticipated supplemental of $66,000 for pay act and wage board increases.

THEFTS AND ACTS OF VANDALISM

Senator BARTLETT. In your justification statement you refer to thefts and acts of vandalism in museums. Have you experienced such in the National Gallery?

Mr. WALKER. Thank God we have not, but this has happened in Washington in the Corcoran Gallery, and the Phillips Gallery has had trouble, too. I have just been in London and the national gallery in London has found it necessary to have one guard in every room. We feel we are protected with one guard in each two rooms.

Senator BARTLETT. There is quite a bit of theft over there, isn't there?

Mr. WALKER. Yes, sir.

Senator BARTLETT. How do the thieves operate?

Mr. WALKER. There are three motives: One, they are cranks. By that, I mean they are completely irrational. There is nothing you can do about that. The second is kidnaping; they steal the painting and hold it for ransom. The third is, a few people who will steal the painting in order to sell it.

The great danger is that it will be stolen by a crank or someone will ask ransom for it.

Senator BARLETT. Yes, an average person would know he cannot take a painting and sell it.

Is ransom paid occasionally?

Mr. WALKER. It is never admitted, but I believe in a very large case of theft, where the works of art were recovered under the most peculiar circumstances, one imagines the insurance company paid ransom.

Senator BARTLETT. These pictures are not small in terms of walking out of a building. How do they do it?

Mr. WALKER. Some are small, but the Goya painting stolen in London, the famous painting of Wellington, is quite large. It is still a mystery, even though they caught the man and convicted him of having stolen the picture, as to just how he removed it from the museum. The director still feels a great deal is not explained. The usual way is for the person to come in and hide in the toilet rooms, or some

such place, and after the gallery closes, sneak out with the work of art.

We have a police dog in the Gallery which is very helpful to disclosing people who may be hidden. We, also, have a closed-circuit television set over the exit of the gallery.

Senator BARTLETT. Does vandalism constitute a threat?

Mr. WALKER. I am afraid it does. The Corcoran suffered considerable vandalism and one of the reasons for having guards is to make the young people respect the works of art more.

Senator BARTLETT. Does this reach the point, ever, where somebody will come in and slash a picture or attempt to do so?

Mr. WALKER. We have not had that happen in the Gallery, but it has happened elsewhere. One of the most horrible acts of that kind was done many years ago by a suffragette in London. A nude by Velasquez—she took out her hatpin and slashed it in four or five places. It was repaired but you can still see where it was damaged.

OFFICE OF INFORMATION

Senator BARTLETT. One of the increases is needed to establish an office of information?

Mr. WALKER. That is correct.

Senator BARTLETT. I notice you have never had a public information office heretofore. Will you please explain to the committee why you feel such an office is now necessary?

Mr. WALKER. Sir, we feel that the Gallery belongs to the whole country. We are known around the country quite well now, but we want the services we can offer schools, colleges, clubs, and churches around the country to be better known. For that reason, we are trying to emphasize our program. We have a man in a temporary position who is working on that; attendance and so forth. We think our attendance will increase as a result.

Senator BARTLETT. He is working on that?

Mr. WALKER. Yes, he has done some work, but his principal effort has been devoted to our 25th anniversary.

Senator BARTLETT. You have already picked a man?

Mr. WALKER. Yes, sir.

Senator BARTLETT. What kind of background would be desirable?

Mr. WALKER. The man we picked worked in the Virginia Museum doing the same type of work. He was very successful. The Virginia Museum is one of the best run State museums in the country. He had worked for a television company for 5 or 6 years before that, I understand.

Senator BARTLETT. You are paying him from another fund?

Mr. WALKER. Yes, sir, we are paying him in his temporary position with funds which were allotted for another position that is presently vacant.

Senator BARTLETT. He would have to have knowledge of art and be a skilled writer too?

Mr. WALKER. Yes.

Senator BARTLETT. He is a GS–14?

Mr. WALKER. Yes, sir.

Senator BARTLETT. What is the starting salary?

Mr. HAYES. It is $14,680 per annum.

Senator BARTLETT. How many guards do you have today?

EMPLOYMENT OF GUARDS

Mr. HAYES. We have 122, but we have money for 128. We had difficulty getting guards this year.

Senator BARTLETT. You must go through quite a screening process?

Mr. HAYES. We do, but we hire them all from the civil service register. To get on that list, they have to be veterans. There has been some difficulty. The new veterans' act the President has signed or will sign should give us some younger veterans on the registers.

Senator BARTLETT. Do you interview them or hire them on a local basis?

Mr. HAYES. We interview local residents; if they are from distant States, we, of course, do not bring them to Washington for an interview.

SOURCE OF FUNDS

Senator BARTLETT. You ask for fiscal year 1967 something on the order of $2,765,000. Do you get funds from other departments of the Government?

Mr. WALKER. The entire collection has been bought or given to us by private individuals. We use donated funds to some extent for lectures, concerts, and the salaries of certain specified executive officers.

Senator BARLETT. So, there is help from other sources?

Mr. WALKER. Private individuals, yes.

ADEQUATE AIR CONDITIONING

Senator BARTLETT. I suppose you have a special need for adequate air conditioning?

Mr. WALKER. We do, indeed. That is one of the great things that the Gallery has proved. We have had air conditioning from the moment the Gallery opened. Our pictures have now become used to the controlled climate in which they live. We have practically no blistering of paintings in the Gallery.

We have just one restorer. A large gallery, without air conditioning, might require half a dozen, I suppose.

Senator BARTLETT. Do these pictures lead a more healthful existence?

Mr. WALKER. Yes. You see, a painting on a panel, that is, on wood will contract when it is dry and expand when it is wet from the humidity in the air. Wood does this at a different rate than the surface paint on the picture. That causes blistering and then the paint flakes off. I think the National Gallery in London and the Metropolitan have now introduced air conditioning. It is essential for 13th and 14th century paintings.

Senator BARTLETT. They are getting it?

Mr. WALKER. Yes. I must say that our air conditioning for 25 years has been remarkably successful. I am happy to say we have been able to maintain that. When we brought the Mona Lisa over here, we were able to duplicate the exact temperature and humidity that it had before it left France.

EXTENSION SERVICES

Senator BARTLETT. Yes, I saw that.

Will you tell us something more about the extension services?

Mr. WALKER. The extension services is the part of the Gallery I am particularly interested in. It was set up as a separate department about 5 years ago. Its purpose is to distribute films about the Gallery, prepared slide lectures with records, or a text which the teacher reads and reproductions of our pictures. These go into schools, clubs, churchs, and places like that, where there is no guarding. All this we do free of charge. There has been a fantastic growth in demand for this service. I hope it is going to continue because I would like to help every school in the country.

Senator BARTLETT. The demand is chiefly from schools?

Mr. WALKER. Schools, churches; we work quite a bit with them—the Methodist Church and so on—usually religious pictures are requested by churches.

Senator BARTLETT. You spoke of slides. Do you have moving pictures, too?

Mr. WALKER. We have slides and moving pictures. We just made a new picture, with private funds I was able to raise, showing the history of American paintings from the 17th century right down to the 20th century. This is expected to be released by Encyclopaedia Britannica or some other large distributor. I think it will be very successful.

INDEX OF AMERICAN DESIGN

Senator BARTLETT. You have a large book there.

Mr. WALKER. Yes, this book about the Index of American Design is the second edition and is about to be reprinted for a third edition.

Senator BARTLETT. It is for sale to the public?

Mr. WALKER. Yes, sir.

Senator BARTLETT. Through the gallery?

Mr. WALKER. Yes, and book stores all over the country.

Senator BARTLETT. What does this cost?

Mr. HAYES. The new edition will sell for $12.95. This edition was less than that.

Mr. WALKER. We have no more copies of the present printing, but I am delighted to say it is in the process of being reprinted. We will send you one when the new printing is received.

Senator BARTLETT. You said that to restore the staff of the Index to its numerical equal of 1959, you are requesting two new positions, a curator, GS–13, and a secretary, GS–5. What happened in 1959?

Mr. WALKER. What happened is that we tried to run the Index and extension service with the same staff. The extension service is growing so rapidly it is taking up all the time of the staff and has left the Index less effective than it should be.

Senator BARTLETT. So you want to go back to that which you had?

Mr. WALKER. Yes.

BROCHURES ABOUT THE GALLERY

Senator BARTLETT. You do not have with you one of the brochures you mentioned?

Mr. HAYES. Yes, I have one here, sir. This is a brochure on the exhibits in the Index which we send to schools.

Senator BARTLETT. This is what they can get from the Gallery?

Mr. HAYES. Yes; this is one on our slide lectures. We didn't have enough money this year to print all the copies needed so we have been running them off on our duplicating machine.

Senator BARTLETT. May I have these?

Mr. HAYES. Yes; of course.

These are other printed items which we use to tell the public about the Gallery.

Mr. WALKER. That is a Spanish edition we have here. There is a good deal of demand for our information booklet in Spanish. There it is in English.

Senator BARTLETT. It occurs to me the school children of Point Barrow, Alaska, may be interested in some of this.

Mr. WALKER. We will get in touch with them.

Senator BARTLETT. No; I will get in touch with them and we can handle this that way.

GALLERY HOURS

What are the seasonal hours of the Gallery?

Mr. WALKER. Every weekday from 10 to 5 o'clock and Sundays from 2 p.m. until 10 o'clock at night. But, beginning the first of April, the gallery will be open every day from 10 in the morning until 10 at night. This has been very successful.

UNIFORMS FOR CERTAIN EMPLOYEES

Senator BARTLETT. You want money for uniforms that have not up until now been provided?

Mr. ADAMS. These are for our trades and crafts people. We have uniforms, of course, for the guards and for the laborers working where the public can see them. The trades and crafts people, carpenters, electricians, painters, and engineers are often called into the public areas. Through their union, they asked for uniforms. We thought it was a good idea and are requesting the funds in the 1967 budget.

Senator BARTLETT. You already buy uniforms for the guards?

Mr. ADAMS. Yes.

CALCULATION OF ATTENDANCE

Senator BARTLETT. You noted the total attendance for fiscal 1965 as having been 1,253,000. How do you calculate that?

Mr. WALKER. We have guards at both of our entrances with tally registers. They count the people as they come in. We are anxious to be particularly accurate and, from time to time, I believe, we count people as they go out.

Mr. ADAMS. Yes; we check ourselves. Last year, the first summer we were operating in the evenings, we did check the flow coming out.

Senator BARTLETT. You do not have a register?

Mr. WALKER. No; not a register that visitors must sign. Anyone coming in who wishes to comment on the Gallery can do so in a book in the visitors' lounge, or suggestions can be written on cards provided for that purpose.

FOREIGN VISITORS

Senator BARTLETT. Do you get any visitors from abroad?

Mr. WALKER. Yes; an enormous number. It is difficult to separate them from the American ones but I know friends who come from abroad make a particular effort to come down to the Gallery.

PROVISIONS FOR VISITORS IN WHEELCHAIRS

We had a comment from a lady the other day, which made me think of you. She wanted to comment on how much she appreciated the guards who had helped with her wheelchair.

Mr. ADAMS. She said the guards were most helpful without being condescending.

Mr. WALKER. I know how interested you are in people having handicaps of this sort.

Senator BARTLETT. Persons with a wheelchair can get into the Gallery?

Mr. WALKER. Yes; we have a ramp they can use to enter and then take an elevator.

Senator BARTLETT. Thank you very much, Mr. Walker; you and your associates.

Mr. WALKER. Thank you, sir, and we hope we will see you on the 17th.

Senator BARTLETT. I will try to be there, informally.

Now, we will hear the witnesses from the Smithsonian Institution led off by Mr. Ripley.

SMITHSONIAN INSTITUTION

STATEMENT OF S. DILLON RIPLEY, SECRETARY; JAMES BRADLEY, ASSISTANT SECRETARY; SIDNEY R. GALLER, ASSISTANT SECRETARY; FRED L. WHIPPLE, DIRECTOR, ASTROPHYSICAL OBSERVATORY; AND MARIA M. HOEMANN, BUDGET OFFICER

1967 BUDGET REQUEST

Mr. RIPLEY. Senator, I hope you will allow me to introduce some of my colleagues.

On my right is Assistant Secretary for Administration, Mr. Bradley; the Assistant Secretary for Science, Dr. Galler; and on my left, Dr. Whipple, Director of the Astrophysical Observatory.

Senator BARTLETT. Good morning, gentlemen.

There will be placed in the record the general statement submitted with the budget justification of the Smithsonian Institution, together with a number of other informational items.

(The justification follows:)

The Smithsonian Institution, established by the act of August 10, 1846, is devoted to public education, basic research, and national service in science, learning, and the arts. The Institution, with its wide array of research and education facilities for both the scholar and the general public, is richly endowed with many of the resources that can create a fuller and more meaningful life for the American people.

The dedication of the Smithsonian to the high purposes of its founder, "the increase and diffusion of knowledge among men," was renewed through the scholarly observance of the Smithson Bicentennial in September 1965. For well over a century the Institution has been concerned with the nature of man, the organization of life, and the nature of the physical universe.

The Institution performs fundamental research and publishes the results of studies, explorations, and investigations. It holds for study over 59 million valuable items of scientific, cultural, and historical interest. It presents public exhibitions in the arts, history, and science.

The museums and art galleries are a powerful but still little understood force for the free education of approximately 13 million of our fellow citizens who visit these exhibitions every year. The rewarding experience of these visits is made possible only because, in our conception, this Institution represents a company of scholars, brought together to use and to interpret objects and to pursue original investigations and research. One of our leading concerns is the study of what constitutes the creation of awareness and interest in people as a result of viewing exhibits. We believe the solution of this problem can represent a fundamental breakthrough in the educational process.

The "Salaries and expenses" appropriation finances the continuing operations of the Smithsonian Institution. The Institution maintains public exhibits representative of the arts, American history, aeronautics, space, technology, anthropology, geology, and biology; preserves for reference and study purposes millions of valuable objects of scientific, cultural, and historic interest; conducts research in the natural and physical sciences and in the history of cultures, technology, and the arts in the United States and in many foreign countries; and participates in the international exchange of scientific literature and art. The areas of research in the sciences include anthropology, biology, geology, solar radiations, and astrophysics. The Smithsonian is also undertaking an exten-

sive program of classification and study of marine organisms collected in connection with the Government's expanded oceanographic program.

The Institution administers three museums, five scientific programs, three art galleries, the Armed Forces Museum Advisory Board, and associated international programs. It is responsible for the operation and maintenance of seven main exhibition buildings; the Astrophysical Observatory in Cambridge, Mass.; the Canal Zone biological area; the river basin surveys in Lincoln, Nebr.; a storage facility at Silver Hill, Md.; and an exhibits laboratory.

The increases requested for the professional staff and their assistants are based on an objective analysis of these programs. By every standard the Intitution is undermanned in the area of basic research.

The U.S. National Museum requires an increase for the increasing number of exhibitions and to intensify efforts to preserve thousands of valuable museum objects.

The Museum of History and Technology, which enjoyed an unprecedented number of visitors (5,300,000) in its first year, requires additional funds for a limited number of professional staff to complete the 50 thematic exhibition halls, interpret the collections, extend historic research, design exhibitions, and publish scholarly studies. This support is required in order that this museum may utilize its collections as a living center for scholarly research in American studies.

The Museum of Natural History requires an increase in order to fill gaps in the scientific research program; to meet increasing demands for identification of scientific specimens originating from every major university and study center in the Nation; and to reduce serious backlogs in classification and studies of the national collections of scientific specimens.

The National Collection of Fine Arts requires funds to create a basic curatorial staff to establish a great national art gallery in the Fine Arts and Portrait Galleries Building scheduled for completion during the fiscal year 1967. Funds are similarly requested for the Smithsonian Gallery of Arts, Crafts, and Design to be housed in the old Court of Claims Building which has been transferred to the Institution with the approval of the President. It is essential that a curatorial staff be established for planning of the programs and exhibits of these galleries. Funds are included also to continue the U.S. Information Agency art program of international exhibits.

The National Portrait Gallery requires funds to provide the necessary staff and associated equipment to open its new gallery in the Fine Arts and Portrait Galleries Building. This will provide the Nation for the first time with a major gallery dedicated to the outstanding men and women who have contributed to the history, development, and culture of our country.

In astrophysics, we plan to participate in studies for the northeast radio telescope in consortium with Harvard University and the Massachusetts Intitute of Technology and in collaboration with the National Science Foundation. An astronomical radio antenna, obtained from the Army, will be erected and a large reflector for gamma ray experiments will be fabricated and installed.

At the Canal Zone Biological Area, we plan a modest increase in the scientific staff of this unique tropical field preserve.

Buildings management expenses for the operation and maintenance of additional building space will require an increase in funding.

A program of education and training will be established for visiting research scientists and qualified students. Fuller utilization of the institution's extensive collections and laboratories will be achieved by offering scholars opportunities to pursue their studies at the Smithsonian.

The administrative services divisions require commensurate increases in order to overcome existing backlogs, particularly in the library and publications divisions, and to keep pace with the substantive programs of the Institution.

Overseas programs in archeological research and excavation, systematic biology, and museum sciences are proposed to be expanded. This work is financed by excess foreign currencies. The construction program contemplates a continuation of a 12-year capital improvement program at the National Zoological Park.

The "Restoration and renovation of buildings" appropriation will finance the restoration of the old Court of Claims Building for use as a Smithsonian Gallery of Arts, Crafts, and Design; plans for rehabilitating the Arts and Industries Building; and feasibility studies of future potential needs of the Institution.

Exhibits program, Museum of History and Technology, fiscal years 1964 through 1967

A. Halls installed and opened to the public as of June 30, 1965:
1. Flag hall.
2. First ladies hall.
Everyday life in the American past:
3. 17th-century furnishings.
4. 18th- and 19th-century furnishings.
5. Historic Americans.
6. American costumes.
7. Light machinery (timeqeeping, typewriters, phonographis, and locks).
8. Tools.
9. Farm machinery.
10. Autos and coaches (partial).
11. Railroads.
12. Temporary exhibits gallery (1st floor).
13. Civil engineering (bridges and tunnels).
14. Watercraft.
15. Philately and postal history.
16. Glass.
17. Graphic arts: Hand processes.
18. Graphic arts: Photomechanical processes.
19. Graphic arts salon.
20. and 21. History of the Armed Forces (through Civil War).
22. Ordnance, and the gunboat *Philadelphia*.
23. Special exhibits (third floor).

B. Additional halls to be installed and opened to the public by June 30, 1966:
1. Musical instruments (partial).
2. Physics.
3. Ceramics.
4. Medicine, dentistry, and pharmacy.
5. Heavy machinery.

C. Additional halls to be installed and opened to the public by June 30, 1967:
1. Autos and coaches (completion).
2. Health.
3. Petroleum.
4. Growth of the United States (three sections).
5. History of the Armed Forces (post-Civil War period).

SCHEDULE OF RENOVATION OF EXHIBITS

In 1967 the Smithsonian will continue its program of revitalizing the exhibits in the U.S. National Museum.

A. Completed and opened to the public in 1965:
1. Osteology (23 units).
2. Physical anthropology.

B. Halls to be completed and opened to the public by the end of 1966:
1. Gem and jade sections of gems and minerals hall.
2. Reptile section of cold-blooded vertebrates hall.
3. Osteology hall (completion).
4. Meteorite section of physical geology hall.
5. Peoples of Asia and Africa hall (completion).

C. Construction partially completed by the end of 1966:
1. Fish section of cold-blooded vertebrates hall.
2. Physical geology hall (six units).
3. Classical archeology.
4. Life in the sea.

D. During 1966, drawings will be finished for the following: Hall of insects.

E. During 1967, contract will be awarded for the hall of insects, and the botany hall will be architecturally designed.

Grants to Smithsonian Institution, fiscal year 1965

Granting agency	Title of grant	Actual amount
Department of Defense	Potential vectors and reservoirs of disease in strategic overseas areas.	$32,000
	Mammals and their ectoparasites from Iran	22,000
	Miscellaneous small grants	20,000
Total, Department of Defense		74,000
Department of the Interior	Zoology	7,000
National Aeronautics and Space Administration.	Study of meteorites	213,000
	Satellite tracking program	4,284,000
	Prairie network	104,000
	Miscellaneous small grants	22,000
Total, National Aeronautics and Space Administration		4,623,000
National Science Foundation	Taxonomy of bamboos	16,000
	Science Information Exchange	1,712,000
	Photographic investigation of comets	39,000
	Marine mollusks of Polynesia	16,000
	Publication of flora of Japan	20,000
	The phanerogams of Colombia	19,000
	Recording of data for specimens collected during the U.S. Atlantic Program.	35,000
	Sorting of U.S. Antarctic research program biological collections.	48,000
	Sorting of collections from the International Indian Ocean Expedition.	21,000
	Miscellaneous small grants	100,000
Total, National Science Foundation.		2,026,000
Total grants, fiscal year 1965		6,730,000

Research by Smithsonian Institution on contracts, fiscal year 1965

Agency with whom contract was made	Research field	Actual amount
Atomic Energy Commission	Plant physiology	$67,000
Department of Defense	Astrophysics	230,000
	Zoology	609,000
Total, Department of Defense		839,000
National Aeronautics and Space Administration.	Celescope	2,425,000
	Astrophysics	10,000
Total, National Aeronautics and Space Administration.		2,435,000
Total, research contracts, fiscal year 1965.		3,341,000

Grants to Smithsonian Institution, fiscal year 1966

Granting agency	Title of grant	Estimated amount
Department of Defense	Mammals and their ectoparasites from Iran.	$65,000
	Potential vectors and reservoirs of disease in strategic overseas areas.	145,000
	Miscellaneous small grants	75,000
Total, Department of Defense		285,000
National Aeronautics and Space Administration.	Study of meteorites	210,000
	Prairie network	113,000
	Satellite tracking program	4,900,000
	Miscellaneous small grants	25,000
Total, National Aeronautics and Space Administration.		5,248,000
National Science Foundation	Science information exchange	1,800,000
	Estimated miscellaneous grants	100,000
Total, National Science Foundation		1,900,000
Total grants, fiscal year 1966		7,433,000

Research by Smithsonian Institution on contracts, fiscal year 1966

Agency with whom contract was made	Research field	Estimated amount
Atomic Energy Commission	Plant physiology	$83,000
Department of Defense	Zoology	700,000
National Aeronautics and Space Administration	Celescope	3,000,000
Total, research contracts, fiscal year 1966		3,783,000

SMITHSONIAN INSTITUTION
SCHEDULE OF BUILDING PROJECTS

JANUARY 1966

FISCAL YEARS	1961 AND PRIOR YEARS	1962	1963	1964	1965	1966	1967	1968	1969	1970
REMODELING OF CIVIL SERVICE COMMISSION BLDG. (FOR ART GALLERIES)	PRE-PLANNING STUDIES	PLANNING APPRN. RECEIVED, $400,000		UNDER CONSTRUCTION APPRN. RECEIVED, $5,465,000	APPRN. RECEIVED, $1,000,000		MARCH 1967 COMPLETION			
NATIONAL AIR AND SPACE MUSEUM BUILDING	PRE-PLANNING STUDIES			PLANNING APPRN. RECEIVED, $511,000	REMAINDER OF PLANNING APPRN. RECEIVED, $1,364,000			SCHEDULED TO BE UNDER CONSTRUCTION REQUEST CONSTRUCTION APPRN. $40,331,000		
CONSTRUCTION & IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK		PLANNING APPRN. REC'D. (DC), $85,000	CONSTRUCTION AND IMPROVEMENTS SCHEDULED TO BE IN PROGRESS APPRN. RECEIVED, $1,275,000	APPRN. RECEIVED, $1,275,000	APPRN. RECEIVED, $1,525,000	APPRN. RECEIVED, $1,539,000	APPRN. REQUESTED, $1,589,000	REQUEST APPROPRIATIONS OF VARIOUS AMOUNTS FOR 12-YEAR PROGRAM.		
RESTORATION AND RENOVATION OF BUILDINGS:							REQUEST CONSTRUCTION APPRN. $2,300,000			
SMITHSONIAN GALLERY OF ARTS, CRAFTS, AND DESIGN							START CONSTRUCTION SEPT. 1966	FEBRUARY 1968 COMPLETION		

PREPARED STATEMENT

Senator BARTLETT. Do you have a written statement? If so, do you care to read it?

Mr. RIPLEY. I have a prepared statement I would like to submit for the record.

Senator BARTLETT. The statement will be made a part of the record.

(The statement follows:)

I would like to summarize our budget request for 1967.

	1966	1967	Increase
Salaries and expenses	$18,755,000	$23,437,000	$4,682,000
Restoration and renovation of buildings	2,248,000	2,300,000	52,000
Foreign currency	1,300,000	5,700,000	4,400,000
Construction and improvements, National Zoological Park	1,539,000	1,589,000	50,000
Total	23,842,000	33,026,000	[1] 9,184,000

[1] 38.5 percent increase.

Half of the increase ($4,400,000) is for museum programs and associated research in the natural sciences and cultural history using special foreign currency. The administration has urged that worthwhile projects be presented for the approval of the Congress in the countries where deposits of foreign currencies are surplus to our normal needs. I believe that the knowledge that this country will obtain and the knowledge that this country will exchange with the other countries represent an excellent program to take advantage of the availability of these funds and at the same time contribute so strongly to our foreign aid and cultural objectives.

A small part of the increase is for construction and improvements at the National Zoological Park ($50,000) and for restoration and renovation of buildings ($52,000).

The remaining half of the increase ($4,682,000) is for the continuing operations of the Institution which are financed through "Salaries and expenses." Increases are needed to further the research, museum, and art programs.

One million ninety-three thousand dollars of this increase is for the museum programs, including scientific research in natural history. The Museum of Natural History requires most of this increase in order to fill gaps in our scientific research program; to meet increasing demands for identification of scientific specimens; and to reduce serious backlogs in classification and studies of the national collections of scientific specimens.

Seven hundred and thirty-eight thousand dollars is required for the new art galleries we are developing to be established in the Fine Arts and Portrait Galleries Building (the old Patent Office) which is scheduled for completion during the ficsal year 1967.

Six hundred and one thousand dollars is required for our research bureaus, other than museums, principally the Astrophysical Observatory. This increase is needed to participate in studies for a radio telescope in consortium with Harvard University, the Massachusetts Institute of Technology, Lincoln Laboratory, and the National Science Foundation. We have an excellent opportunity to obtain a surplus astronomical radio antenna from the Army and we plan also to install a large reflector for gamma ray experimentation.

One million one hundred and thirty-nine thousand dollars of the increase is required for the expenses of operating and maintaining the additional building space we have acquired. This includes additional part-year operation of the newly renovated Fine Arts and Portrait Galleries Building; additional halls in the new Museum of History and Technology; and additional floor space and laboratories in the west wing of the Museum of Natural History.

One million one hundred and eleven thousand dollars of the increase is requested for administrative support and education and training. The administrative expense is directly related to the proposed scope of our activities in the fiscal year 1967. The education and training request, in the amount of $150,000 is especially important to the very heart of the Institution's reason for being: the

"increase and diffusion of knowledge." This program will encourage visiting investigators and qualified students to make full use of the Smithsonian's facilities, collections, and scholars in their pursuit of knowledge and at the same time will accomplish work for the Institution by contributing to our research objectives.

USE OF EXCESS FOREIGN CURRENCIES

Mr. RIPLEY. I would be happy to speak to this and highlight some of our proposals.

Senator BARTLETT. I wish you would.

Mr. RIPLEY. The Smithsonian proposes, in our budget request for 1967, an increase of $9,184,000, of which half, approximately, represents a request for the use of excess foreign currencies abroad. Under Public Law 480, excess currency amounts are maintained in 10 countries from the sale of surplus agricultural products. We found in our experience last year that we had great success in administering a certain amount of these currencies for the aid of American scientific endeavors. We would like to continue this program and increase the amount because of the success of the program last year.

We have been encouraged by conversations with sources in the administration that led us to believe we can do this efficiently and well and believe these currencies should be used.

In terms of currencies in this country, we are requesting an increase of approximately $4,700,000 for domestic programs. This represents an increase of about 25 percent of our budget, exclusive of the foreign currency.

This increase divides itself into several particular subjects. A large item, a million dollars, is for an increase for museum programs, especially in the sciences having to do with the Museum of Natural History. Seven hundred and thirty-eight thousand dollars is for the new art galleries we are developing to be established in the fine arts and portrait galleries, as a result of Congress giving us the old Patent Office Building in 1962. We have a phased program to build up to the opening of these two galleries.

Six hundred thousand dollars is required for research, principally at the Astrophysical Observatory. We have had excellent opportunities this year to secure, at low cost, a radio antenna from the Army which I know Dr. Whipple would like to speak about. One million one hundred thousand dollars is for operating and maintaining additional building space we have acquired.

Another $1,111,000 is requested for administrative support and training and educational programs. This administrative expense is directly related to the scope of our activities in fiscal 1967. The education and training request is $150,000.

I think that, in essence, is a brief summary of what we are proposing.

EDUCATION AND TRAINING PROGRAM

Senator BARTLETT. Now, Mr. Ripley, what is this education and training program?

Mr. RIPLEY. Sir, the education and training program relates to a request we made last year which was refused by the House committee with the suggestion that we make an additional study. We have done so and we believe that the efficiency of the operation of the Smithsonian would be enormously enhanced were we able to get into this.

We have a tremendous number of requests for people to come in on various projects concerned with the collections and the existing scientific and historical staff of the museums. These people are, to a large extent, students at various levels.

Senator BARTLETT. Students where?

Mr. RIPLEY. In the United States.

Senator BARTLETT. All over the country?

Mr. RIPLEY. Yes, universities all over the country. We feel we cannot operate successfully without taking into account the fact that our faculty, our professional staff, are involved in a teaching process. They are concerned with the development of not only exhibits, but scientific papers and research projects on the collections. It would be totally inefficient and unbusiness-like for us not to relate these men and their activities to the stream of education which, in its volume, is so enormous now all over the country.

We feel the students we bring here on training grants and fellowships will succeed to the mantle of the man with who they will be associated.

Senator BARTLETT. You bring these people in from around the country to do further work in their specialities?

Mr. RIPLEY. To do further work in their specialities which are directly connected with work going on in the Smithsonian.

Senator BARTLETT. These will be teachers and students?

Mr. RIPLEY. Yes, people at different levels from postdoctorates down to undergraduates and sometimes even brilliant high school students.

Senator BARTLETT. This money, just how will you operate, select Mr. "A," pay his transportation and pay his cost of living while he is in Washington?

GRANTS BY NATIONAL ACADEMY OF SCIENCES

Mr. RIPLEY. He will ordinarily receive an outright grant. This may be a postdoctorate fellowship which will be a sum worked out by the National Academy of Sciences. Last year the National Academy of Sciences requested us to undertake certain fellowships in various areas of sciences. The demands for filling those fellowships have been about 8 to 1. We will be getting about eight applications for the one post we can offer. These men will be teachers and professors at other universities. They will spend about 1 year working in the Institution, in anthropology, geology, in areas where they could not do this work otherwise. This is a golden opportunity for them to come and learn and enhance their teaching abilities because they would have been exposed to the collections and facilities of the Institution.

Senator BARTLETT. If this grant is allowed, this appropriation is made, how many people might you be able to bring in the first year?

Mr. RIPLEY. The National Academy of Sciences program involves 10, is it, or is it more?

Dr. WHIPPLE. I think it is 10. The total is about 25 at both the predoctoral and postdoctoral levels.

Senator BARTLETT. Will you please, Mr. Ripley, describe or rather indicate the differences between this appropriation request for $150,000

and education and training requests for $500,000 which was carried in the fiscal year 1966 budget?

Mr. RIPLEY. Yes, sir.

Senator BARTLETT. That was not granted.

Mr. RIPLEY. This suffered a reduction. The $500,000 we requested to start this program last year was not granted by the Congress but we were instructed, in the language of the House report, to reconsider this. The implication was that we could bring it up again as a result of further study. We are bringing it up again at a reduced level simply because of the stringency of the 1967 budget; and with the hope that we can get started and with the conviction that the need is overwhelming.

Senator BARTLETT. The budget is strict, as you relate, and I am amazed that the Budget Bureau cleared a 38.5-percent increase.

Mr. RIPLEY. I would like to point out the real increase is half of that, because half is in the foreign currency where we have been encouraged to develop programs.

Senator BARTLETT. What is under the foreign currency?

Mr. RIPLEY. There are three general headings; archeology is one of them. I would like to refer to the complete breakdown which is in our budget estimate this year.

Archeological research and excavation, archeological restoration, systematic and environmental biology in the basic sciences, and museum sciences. Would you like me to describe these?

Senator BARTLETT. Not at this time—later when we reach this activity.

Mr. RIPLEY. Yes, sir. We would be very happy to then.

1967 BUDGET REQUEST

SALARIES AND EXPENSES

Senator BARTLETT. There also will be placed in the record the justifications for the fiscal year 1967 budget estimate of $23,437,000 necessary for salaries and expenses. This is an increase of $4,969,000 over the appropriation for fiscal year 1966. There is contemplated a supplemental estimate for fiscal year 1966 necessary because of wage increases.

(The justification follows:)

	Amount
Appropriation act, 1966 (adjusted)	$18,755,000
Budget estimate, 1967	23,437,000
Increase, 1967	4,682,000

Summary of increases, 1967

	Amount
1. Pay increases:	
Full-year cost in 1967 of salary increases to general schedule employees effective Oct. 10, 1965 (Public Law 89-301, dated Oct. 29, 1965)	$150,000
Full-year cost of salary increases to wage board employees in December 1964	107,000
	257,000
2. U.S. National Museum: To meet increasing demands on its exhibits and conservation programs and for increased shipping activity throughout the Institution (handled by the Registrar, U.S. National Museum)	186,000
3. Museum of History and Technology: For additional specialists to meet increasing demands from the public and scholars to research and interpret our country's cultural and technological achievements	123,000
4. Museum of Natural History: To further research in systematic, marine, and environmental biology; anthropology; and earth sciences	628,000
5. National Air and Space Museum—for increased activity related to planning for the projected new National Air and Space Museum, including exhibition and educational plans	45,000
6. National Armed Forces Museum Advisory Board: For accelerated program of museum planning and for building up collections, both of military and naval objects and library materials	45,000
7. Freer Gallery of Art: For increased workload of its conservation laboratory	6,000
8. National Collection of Fine Arts: For increased activity prior to move into new galleries (Fine Arts and Portrait Galleries and Smithsonian Gallery of Arts, Crafts, and Design); to continue the U.S. Information Agency art program; and for minimum support to Cooper Union Museum	369,000
9. National Portrait Gallery: To continue expanding program of acquisition and planning the exhibition of portraiture and other objects in the new gallery	343,000
10. Astrophysical Observatory: To give additional support to its programs in radio astronomy, gamma-ray astronomy, theoretical research on stellar and upper atmosphere	528,000
11. Canal Zone Biological Area: Scientific research, including the addition of a herpetologist and an ichthyologist	62,000
12. Radiation Biology Laboratory: No program increase requested	0
13. Buildings management: For building services for the Fine Arts and Portrait Galleries Building on a part-year basis, and additional exhibition and laboratory areas in other Smithsonian buildings	1,013,000
14. Education and Training Division: To establish programs of national and international cooperative research and training on an Institution-wide basis	150,000
15. International activities: To administer the special foreign currency program and the international exchange of publications	28,000
16. Administrative support: To keep pace with the increased scope of the Institution's programs in 1967	899,000
Total increase, 1967	4,682,000

Comparative summary of the 1966 appropriation with the 1967 estimates

	1966		1967		Analysis of increases*	
	Number of positions	Estimate	Number of positions	Estimate	Pay increases for general schedule and wage board employees [1]	Program
1. Museums of science and history (including research):						
U.S. National Museum	197	$2,328,000	210	$2,528,000	$14,000	[2] $186,000
Museum of History and Technology	154	1,706,000	161	1,843,000	14,000	[3] 123,000
Museum of Natural History	258	3,279,000	287	3,940,000	33,000	[4] 628,000
National Air and Space Museum	34	390,000	38	438,000	3,000	[5] 45,000
National Armed Forces Museum Advisory Board	4	95,000	9	142,000	2,000	[6] 45,000
Total, museums of science and history	647	7,798,000	705	8,891,000	66,000	1,027,000
2. Art galleries:						
Freer Gallery of Art	5	32,000	6	39,000	1,000	[7] 6,000
National Collection of Fine Arts	31	437,000	52	814,000	8,000	[8] 369,000
National Portrait Gallery	15	316,000	23	670,000	11,000	[9] 343,000
Total, art galleries	51	785,000	81	1,523,000	20,000	718,000
3. Research bureaus (other than museums):						
Astrophysical Observatory	46	1,209,000	52	1,745,000	8,000	[10] 528,000
Canal Zone biological area	18	213,000	21	277,000	2,000	[11] 62,000
Radiation Biology Laboratory	24	364,000	24	365,000	1,000	[12] 0
Total, research bureaus	88	1,786,000	97	2,387,000	11,000	590,000
4. Buildings management:						
Museum of History and Technology	240	1,901,000	283	2,109,000	36,000	172,000
Museum of Natural History	275	2,384,000	301	2,567,000	48,000	135,000
Fine arts and portrait galleries	0	0	77	292,000	0	292,000
Smithsonian Institution	54	337,000	58	488,000	8,000	143,000
Arts and industries	86	485,500	89	530,500	17,000	28,000
All other	73	550,000	82	666,500	17,000	99,500
Rehabilitation of buildings		92,500		236,000		143,500
Total, buildings management	728	5,750,000	890	6,889,000	126,000	[13] 1,013,000
5. Other activities (including administrative support):						
Education and training	0	0	4	150,000	0	[14] 150,000
International activities	16	186,000	91	214,000	0	[15] 28,000
Administrative support	167	2,450,000	208	3,383,000	34,000	[16] 899,000
Total, other activities	183	2,636,000	231	3,747,000	34,000	1,077,000
Grand total	1,697	18,755,000	2,004	23,437,000	257,000	4,425,000

*Footnote references refer to the following numbered paragraphs under "Justifications," below.

JUSTIFICATIONS

(1) *Pay increases—Need for increase.*—An increase of $257,000 is requested for pay increases. This increase is needed to pay the full-year cost in 1967 of salary increases granted the general schedule employees under the "Federal Employees Salary Act of 1965" (Public Law 89-301, dated October 29, 1965) ($150,000). The 1966 base for the 1967 estimate includes only 72 percent of the annual cost of the 1965 salary increase.

The remainder of the increase ($107,000) is needed to pay the full-year cost of salary increases granted to wage board employees in December 1964. This cost is not included in the 1966 base for the 1967 estimate and is to be financed in 1966 by an anticipated supplemental appropriation.

The costs for both the general schedule and wage board increases were determined through analysis of all positions, taking into consideration representative lapse factors.

All operations of the Smithsonian Institution have been carefully reviewed to determine whether any portion of the above amount can be absorbed. Absorption of any additional amount is impracticable because of additional workloads.

The maintenance, operation, and protection of the buildings of the Smithsonian are extremely complex. Its seven exhibition buildings are visited annually by millions of visitors. These large crowds create problems in protecting not only the visitors but also the irreplaceable collections and in maintaining the buildings in a satisfactory condition. In addition, the much needed laboratory space provided by the additions to the Natural History Building have increased the demand for buildings services.

The programs of the National Collection of Fine Arts and the National Portrait Gallery are being accelerated to establish a great national art gallery in the Fine Arts and Portrait Galleries Building, now under contract for restoration and renovation.

The Smithsonian Institution is increasing its services to the community. At the request of the Congress the Smithsonian has for the past two summers kept its buildings open during evening hours and the response from the public has been gratifying. Educational functions, such as the "Smithsonian Film Theater," have been introduced with success.

The observance of the birth of James Smithson this past September has created renewed national interest in the Smithsonian. The many newspaper and magazine stories about the Smithsonian and our research efforts and revitalized exhibits have greatly increased the requests for information.

(2) *U.S. National Museum.*—The U.S. National Museum is comprised of the Museum of History and Technology and the Museum of Natural History. Only the centralized services are included in this estimate, viz, the Office of Exhibits, the Conservation Research Laboratory, and the Office of the Registrar. These centralized services need an increase of $200,000 which includes $14,000 for pay increases.

1966 appropriation	$2,328,000
1967 estimate	2,528,000

Exhibits

The Office of Exhibits designs, produces, and installs exhibits in the Museum of History and Technology; conducts the program for the modernization of exhibits in the Museum of Natural History; carries out a program of changing special temporary exhibits on subjects of art, history, and science; maintains the permanent exhibits in good appearance and repair; and assists and advises other elements of the Smithsonian about exhibits work. The Office of Exhibits requests an increase of $109,000 which includes $12,000 for pay increases.

Need for increase.—In recent years the exhibits of the National Museum have become the standard of excellence in the museum world. In recognition of this, museum representatives from more than 50 foreign countries and nearly every State in the Union have visited the Office of Exhibits for consultation, advice, and help with their exhibits problems. To carry out the goal of the Smithsonian, to provide the most instructive and inspiring displays of the American heritage and the development of science, the exhibits must be maintained in their original excellent condition.

The National Museum, comprising the 2 museums mentioned above, has designed, produced, and installed 44 permanent exhibits halls with a total of more than 2,000 units and requiring more than a quarter of a million square feet.

Remaining to be done are another 31 halls to complete the job of bringing to the American people the finest exhibits in the fields of anthropology, natural sciences, history, and science and technology.

As the number of completed exhibits halls increases, it becomes necessary to augment the personnel required to maintain and extend the useful life of these exhibits to keep them fresh, attractive, and up to the high standards expected of the National Museum by the more than 13 million visitors who view the exhibits each year.

In the interest of prudent economy, additional funds and staff are required for this part of the exhibits program. The Smithsonian Institution, as all modern museums do to fulfill its obligation to the public, conducts a program of temporary and special exhibits. In addition to these special exhibits, planned by the Smithsonian staff to implement and highlight the permanent exhibits, the Smithsonian receives many requests from other Government agencies, top Government officials, and distinguished citizens for exhibits with important and timely national interest such as the "Profile of Poverty," the "Federal Scientist and Engineer," and "The Dead Sea Scrolls" exhibits.

A total of 8,300 man-hours were required for the production of the "Dead Sea Scrolls." This cost in time has been amply justified by the 209,643 people who viewed the exhibit during the 22 days it was on display in the Museum of Natural History. In addition, this exhibit has been seen by more than 1½ million people on its tour of major cities including Philadelphia, Los Angeles, San Francisco, Omaha, Baltimore, and Ottawa. It will continue on to Toronto, then to the British Museum in London, and several regional museums in England before concluding its tour in Jordan.

Over the years these temporary and special exhibits have averaged about 10,000 man-hours annually; but in the period ending May 15, 1965, a total of 14,652 man-hours had been expended. In fiscal year 1964, 15 special exhibits were produced; and in fiscal year 1965, the number had increased to 22.

The proposals and requests for these temporary and special exhibits have overwhelmed the present capacity of the Office of Exhibits in manpower, time, funds, and space.

Plan of work.—To employ two exhibits designers, three exhibits technicians ($47,000); personnel benefits ($3,000); rent, communications, and utilities ($7,000); supplies ($13,000); and equipment $27,000); a total increase of five positions and $97,000 for program costs.

Conservation Research Laboratory

The Conservation Research Laboratory performs research in the science and techniques of conservation and conducts analysis, examination, treatment, and restoration and preservation of the museum collections. An increase of $19,000 including $1,000 for pay increases is requested.

Need for increase.—The increase of $18,000 is necessary to prevent progressive deterioration of the collections by providing specialists to examine and treat thousands of valuable objects in the national collections of the Institution.

The overpowering number of historic and scientific objects owned by the people of the United States and shepherded by the U.S. National Museum reached a total of 59,691,301 at the end of 1965. The interest expressed in them by the visiting public and students from all parts of the United States mushrooms yearly. Such an interest carries with it the implicit obligations and responsibility for us to effectively maintain, preserve, exhibit, and interpret the collections. A parallel example which can be cited is that of the justifiably renowned British Museum, that has literally millions of objects worth inestimable millions of dollars. This treasure house maintains a large, well-staffed scientific laboratory for the guidance of the professional staff in its care of these collections. This Laboratory has its own 5-story building and a staff of 13 scientists and technicians. The Institute Royal du Patrimoine Artistique at Brussels employs 21 scientists, 35 technicians, and 11 administrative and clerical people, in research, analysis, and treatment for the conservation of art and historical objects.

The Smithsonian Conservation Research Laboratory, with its current limitations in numbers of conservators and technicians, faces the insurmountable task of conserving large numbers of objects that are irreplaceable and all of which are significant to the heritage of our scientific, historic, and artistic accomplishments.

Hundreds of significant and valuable objects in the large collections of the Smithsonian are in poor condition. The rapid rate of acquisition of new collections includes increasing numbers of objects which require repair, cleaning, conservation, and preservation treatments added to a tremendous backlog which existed before the establishment of the Conservation Research Laboratory. The backlog of conservation work required was revealed in the move of collections to the new additions constructed for the Natural History Building, and to the Museum of History and Technology from the Arts and Industries Building. To prevent the progressive deterioration of the collections, additional conservators skilled in the treatment and preservation of materials such as textiles, wood, bone, ivory, reed, metals, ceramics, glass, paper, parchment, and leather are urgently needed to examine collections, to advise the curators responsible, and to train technicians in preservation and preventative treatments.

Plan of work.—To employ two conservators for the analysis and treatment of objects of metal, leather, wood, paper, and cloth ($17,000); personnel benefits ($1,000); a total increase of two positions and $18,000 for program costs.

Office of the Registrar

The Office of the Registrar registers all accessions to the U.S. National Museum and provides transportation and mailing services for all bureaus of the Institution. The Office of the Registrar requires an increase of $72,000, including $1,000 for pay increases.

Need for increase.—The increase requested for the Office of the Registrar is required because expanded activities will result from the physical move of the staff and collections of the National Collection of Fine Arts and the National Portrait Gallery to a new building some distance from the Mall. Additional transportation, mail services, and facilities are needed to provide efficient and economical service on a timely basis. The accelerated activities of the National Air and Space Museum and the National Armed Forces Museum Advisory Board in collecting historical objects and in preparing exhibits for their new installation make additional funds necessary for transportation of large objects—both to enrich these exhibits and to keep abreast of the rapid changes in these major areas of achievement. The increased activities of the professional staff in the many bureaus have brought about a commensurate increase in travel and in the work of obtaining passports, visas, and importation permits and the shipment of field collecting equipment. The net result of these expanded services is a need for increase in supporting personnel and funds.

Plan of work.—To employ one transportation clerk, one travel clerk, one shipping clerk, and three messengers ($29,000); personnel benefits ($1,000); transportation of things ($40,000); and equipment ($1,000); a total increase of six positions and $71,000 for program costs.

(3) *Museum of History and Technology.*—The Museum of History and Technology presents educational and inspirational exhibitions of the national collections for the millions who visit it each year, to increase knowledge by scholarly research in our country's heritage and cultural history, and in the history of science, engineering, and industry. An increase of $137,000 is requested including $14,000 for pay increases.

1966 appropriation	$1,706,000
1967 estimate	1,843,000

Need for increase.—Additional curators and technicians are required to plan and direct the installation of a major part of the original exhibits in the new building, to document the collections, to authenticate the educational exhibits, and to search out, acquire, and preserve significant historical objects and source materials.

To insure the most professionally sound planning of exhibits and museum research, and to meet the increasing interest of the public and the scholarly community in communication of ideas through educational exhibits and through public service programs, additional curators and technicians are needed. We must continue to plan informative exhibits, to prepare objects for effective displays, and to improve our musical events, lecture series, and other programs for the public. Continuing studies of the effectiveness of open education through museum exhibitions are required. Research in many areas of the history of our country is essential to enliven the presentation of facts through the varied media of television, student training programs, monographs, and other publications.

To continue to meet the increasing interest of the public and scholars in the communication of ideas through exhibits of objects, to install in the active minds of youths the desire to know and to learn, to strengthen the museum's public service programs, and to research and interpret our country's cultural and technologicial achievements, gaps in our curatorial staff must be filled.

Because of the unique capabilities and fields of specialization of our professional curators, increasing demands are being made on them to study, evaluate, and report the impact of science and technology upon our industry, culture, and society.

Specialized areas of museum scholarship in which gaps exist in our staffing and for which additional curators and technicians are required include the history of nuclear energy, medical history, the history of electronics, and American studies. To support these professional historians there will be required museum technicians or research assistants and clerk-stenographers.

Plan of work.—To employ three historians, two museum technicians or research assistants, and two clerk-stenographers ($75,000) ; personnel benefits ($5,000) ; and other services ($43,000) ; a total increase of seven positions and $123,000 for program costs.

(4) *The Museum of Natural History.*—The Museum of Natural History conducts research in all forms of life on earth and the environmental factors interacting with life. The range of research includes: Systematic biology concerned with the identification and classification of all plant and animal life; environmental biology relating to the interaction of all kinds of organisms, including man, with each other and with their surrounding environment; and anthropology and the study of man, his physical nature and his culture from the earliest beginnings to the present in all parts of the world.

The Museum is also the center for basic research in the chemical and the physical structure of rocks, gems, and meteorites in the earth sciences; and sponsors marine biology and oceanography, the multidisciplinary sciences devoted to studying the kinds of plants and animals that live in the sea, their reaction to this environment, and their remains in the sediments.

Collaterally, the Museum has a national responsibility for imparting knowledge through the development and maintenance of exhibition and educational activities in these areas of research.

The scientific studies of the research staff of the Museum are unique since they are based primarily on a collection of more than 50 million specimens gathered from many sources and made available generally to the entire scientific community for scientific investigations.

An increase of $661,000 is requested including $33,000 for pay increases.

1966 appropriation	$3,279,000
1967 estimate	3,940,000

Need for increase.—The requested increase will provide for research programs that are necessary both for fully extracting scientific information from the national collections and for increasing and maintaining them for the use of investigators of natural history over the world. Because of the increasing importance of natural history studies and the inadequacy of the Museum's staffing, enormous backlogs of unordered specimens have accumulated. As an example, the Department of Entomology has a backlog of over 2,500,000 specimens, and the present staff is faced with a growing rate of 125,000 additional specimens per year. The problem of ordering and studying this backlog can only be resolved by substantial increases in professional and supporting staff.

The anthropolgy program has three goals: (1) To undertake basic research in the branches of ethnology, archeology, language of linguistics, and physical anthropology; (2) to provide anthoropological documentation to collections for studies by scientists from centers throughout the world; and (3) to make available knowledge for educational purposes and for the general public in the form of exhibits, popular publications, the answering of inquiries, and the identification of specimens.

The Museum maintains and increases one of the world's largest and most comprehensive gem and mineral collections, which are utilized in studies of mineralogy, crystallography, and geochemistry.

Currently, earth sciences is applying new and complex instrumentation, including the electron microprobe, to the identification of samples of the earth's crust and of meteorites to provide information, which will lead to a better understanding of the nature and composition of the solar system and the earth's structure.

The program of environmental biology conceives of three important growing points: (1) Systems analysis of populations by computer simulation, (2) the cycling of energy and materials in ecosystems, and (3) the role of social behavior in the natural regulation of animal numbers. In each, an understanding of how man is related to changes in the environment becomes most vital to his establishing a harmonious relationship with that environment. In addition to the traditional use of ecology in systematic studies, more intensive involvement in purely environmental studies is underway.

Systematic biology, which is the research interest of many staff members of the Museum, is undertaking to stimulate and integrate activity in taxonomy, especially along interdisciplinary lines. Museum scientists study many biological problems directly in the field, observe the behavior, life histories, and finally collect representative samples of the plants and animals involved.

The oceanographic program supports and participates in oceanic expeditions and establishes the identities of the recovered organisms and sediments. Most of the scientific effort of the Smithsonian's oceanography program is concerned with the systematics of marine plants and animals; it is directly related to the national oceanographic goals and to the long-established obligations of the Museum. The five oceans are a vast energy pump and really act as a single world ocean. This ocean may only be adequately understood in its entirety on a global basis since the distributional and dilutional forces make a large effect on one part, a diluted effect on others. A 1-pound explosion at depth in the Indian Ocean has been detected in the North Atlantic 3 hours and 42 minutes later. The principles developed for one part of the world ocean apply to all; however, variability is present and an understanding of all oceans will lead to massive understandings of weather, climate, and coastal management.

Funds are included to permit the initiation of a laboratory for studying modern and fossil pollens; such studies contribute directly to exploration for oil, description and understanding of environmental conditions in the geologic past, and to the construction of acceptable evolutionary explanations.

The requested increase will also provide adequate scientific supporting staff to relieve the scientists from subprofessional tasks, such as sorting, labeling, and filing. Technicians will permit better use of the scientific capability of the Museum and at the same time make possible a reduction in the backlogs of vitally needed collections. In addition, professional positions are required to provide research competence where none now exists on groups of organisms important to man, such as nonhuman primates, flies, and bees. Specialists are also vital to the ongoing of research on meteorites, marine sediments, and various groups of vertebrate and invertebrate animals.

Since taxonomy is the principal research activity of the Museum, this area, centered in the programs of marine and systematic biology, requires most of the professional positions requested. All of these are required to fill major gaps in our research programs and to meet increasing demands for identifications and other assistance from research workers, the public, and Federal agencies. The remaining new professional positions are for 1 anthropological linguist, 5 biologists, 2 geologists, 4 research assistants, 12 museum aids and technicians, and 4 secretaries and clerk-stenographers.

Increases in funds for equipment are urgently required for pursuing scientific investigations; appropriate scientific gear for field expeditions is critical to the success of such ventures which the Museum must sponsor to stay in the vanguard of biology. The operation of the Smithsonian Oceanographic Sorting Center is also dependent on the Museum for funds for equipment to sort and distribute the staggering numbers of collections made on U.S. marine expeditions in many parts of the world.

An increase of $50,000 is requested in the funds for support of individual research programs which formerly were financed by grants of the National Science Foundation. These are projects of such scope and depth that they are not viewed as ordinary research undertakings supportable by conventional funding means. It is planned to allocate the requested appropriated funds on the comparative merits of research proposals submitted by staff members. Review panels and the same standards of excellence used by the National Science Foundation will be employed in administering these funds. These funds together with the base amount of $350,000 appropriated for 1966, will be expended on the same basis as were the grants received from the National Science Foundation.

Plan of work.—To employ 6 biologists, 1 linguist, 2 geologists, 4 research assistants, 12 museum aids, 4 stenographers ($273,000); personnel benefits ($19,-

000); other services ($199,000); supplies and materials ($37,000); and equipment ($100,000); a total increase of 29 positions and $628,000 for program costs.

(5) *National Air and Space Museum.*—The National Air and Space Museum presents to the American people this country's past, present, and potential achievements in aerospace science and technology. This museum collects, restores, and preserves the world's greatest collection of air and space craft. engines, rockets, instruments, personal memorabilia, and other historical objects. All of these are of major significance to aviation and space flight and memorialize the famous men and women who have pioneered in this field vital to our Nation's commerical strength and military security. Scholars, writers, historians, and professionals in various disciplines work with the museum's collections and extensive reference library to create an unrivaled center of learning in the history and development of air and space exploration. This educational potential will find a ready response in the great interest and enthusiasm of American youth.

An increase of $48,000 for fiscal year 1967 is required by this museum, including $3,000 for pay increases.

1966 appropriation	$390,000
1967 estimate	438,000

Need for increase.—The requested increase is needed to meet the intensive planning and preparatory activities necessary for opening the projected National Air and Space Museum Building and to expand our efforts to inform, educate, and inspire visitors and researchers currently viewing and using the national collections.

The recognition of the great inspiration and interest these collections have for all citizens has culminated in plans for a fitting exhibition, education, and research center on the Mall which will attract a minimum of 5 million visitors a year. An Assistant Director and an additional curator will participate in the major effort required to collect and prepare objects of the greatest historical and technical significance and present them in an effective exhibit in order to impart a clear understanding and appreciation of the development of air and space activities. These additional staff are needed also to search out and acquire objects to augment and strengthen the collections, to improve and expand the current exhibit program, and to handle an increased workload of public service activties including responding to public inquiries.

For serious researchers in aerospace history and technology, the museum's vast research resources, both in documentation and in authentic, original air and space craft, must be completely cataloged and made readily available. An archivist is needed for this purpose.

As air and space craft and associated objects are acquired and preserved they must be safely housed for future public display or reference study purposes. Much of this material is located temporarily at the museum's storage facility. A warehouseman will provide essential supporting service to staff and outside users of the collections by taking care of and locating this material.

Modest amounts are required for contractual services for specialized restoration of objects in the collections, refurbishing existing exhibits, and the repair and maintenance of heavy-duty handling equipment; for supplies and materials used in authentic and delicate preparation of models and for repairs to irreplaceable full-size objects; and for purchasing necessary shop, laboratory, and office equipment.

Plan of work.—To employ one Assistant Director, one curator, one archivist, and one warehouseman ($25,000); personnel benefits ($1,000); other services ($8,000); supplies and materials ($3,000); and equipment ($8,000); a total increase of four positions and $45,000 for program costs.

(6) *National Armed Forces Museum Advisory Board.*—The National Armed Forces Museum Advisory Board provides assistance to the Regents of the Smithsonian Institution in commemorating the contributions made by our military forces to our Nation in war and in peace. This responsibility legislated by the Congress is met by collecting, preserving, and exhibiting military objects of historical interest and significance; portraying the valor and sacrificial service of the men and women of the Armed Forces and their extensive peacetime contributions; providing a study center for scholarly research into the meaning of war; and by planning the acquisition of suitable lands and buildings for the display of large military objects and the reconstruction of authentic fortifications,

trenches, and other military and naval facilities characteristic of historic American military and naval operations.

An increase of $47,000 for fiscal year 1967 is required, including $2,000 for pay increases.

1966 appropriation	$95,000
1967 estimate	142,000

Need for increase.—This increase is necessary to add five workers to the small planning staff in order to develop a dramatic documentation of history.

In concept, the museum would seek to inspire the public with a meaningful sense of the accomplishments of the Nation's Armed Forces, their contributions to our national development, and the role played by our people in providing the sinews of defense. The two additional research historians will be engaged in the acquisitions program, locating and acquiring unique and rapidly disappearing military objects needed for the collections, drawing up a well-balanced exhibit plan, and developing the architectural concept for outdoor military exhibits. The military equipment specialist is needed to protect and conserve the increasing number of irreplaceable historical objects being assembled. A library assistant, working with the professional staff, is needed to locate and organize reference materials; identify and record information on the objects accessioned; and secure, catalog, and care for books and manuscripts related to military operations and accomplishments. One additional clerical assistant will be required to assist with the large correspondence workload involved in locating objects and reference materials and developing the exhibits concept.

Funds are required also to undertake additional studies as directed by the act of August 30, 1961, with regard to the possible use of Fort Washington and Fort Foote as the sites for the outdoor museum displays.

Every effort is made to acquire military objects at no cost to the Institution.

Plan of work.—To employ two historians, one secretary, one library assistant, and one military equipment processor ($30,000); personnel benefits ($2,000); other services ($10,000); and equipment ($3,000); a total increase of five positions and $45,000 for program costs.

(7) *Freer Gallery of Art.*—The Freer Gallery of Art is concerned with exhibiting its outstanding collections of oriental art and with research in the civilizations of the East. The gallery includes a library, photographic laboratory, conservation laboratory, and a cabinet shop.

An increase of $7,000 is requested, including $1,000 for pay increases.

1966 appropriation	$32,000
1967 estimate	39,000

Need for increase.—An increase of $7,000 is requested for a secretary in the conservation laboratory, to assist the Head Curator who is responsible for the analysis and preservation of valuable objects of art.

Plan of work.—To employ one secretary ($5,000); and to provide funds for personnel benefits ($1,000); a total of one position and $6,000 for program costs.

8. *National Collection of Fine Arts.*—The National Collection of Fine Arts is the oldest gallery of art directly related to the U.S. Government. The gallery exhibits American art in the Nation's Capital and other parts of the United States and abroad. The gallery is directed by its founding act to develop the appreciation of art both past and present, to encourage contemporary creative effort, and to provide a repository for works of art belonging to the Government. An increase of $377,000 is requested including $8,000 for pay increases.

1966 appropriation	$437,000
1967 estimate	814,000

Need for increase.—An increase of $377,000 is requested for fiscal year 1967. This increase is needed to prepare to open this major art museum in the enlarged quarters now being renovated and restored in the original Patent Office Building, transferred to the Smithsonian for this purpose by the act of March 28, 1958. The opening of the museum is scheduled for March 1968 and the work of collecting and preparing exhibit materials and of planning and designing exhibits must therefore be accomplished in 1967.

A full year is required to install the exhibits. The installation will begin as soon as the building renovation is finished, in March 1967.

Another unique part of this gallery was initiated on June 23, 1965, when the President signed papers transferring the Old Court of Claims Building (the

original Corcoran Gallery of Art) to the Smithsonian Institution. This gallery will exhibit American decorative arts, folk arts, crafts, and design and will provide space for special exhibits of the arts and designs of foreign countries. The gallery will also provide an assembly hall for lectures, presentations, receptions, and other public ceremonies.

The renovated building is scheduled for completion in January 1968. The planning and design of the exhibitions must be developed in 1967. Works of art and design representing American artists must be searched out in all parts of the country also during 1967.

In addition to the permanent exhibits, other services performed by the National Collection of Fine Arts include rotating exhibits in Washington, D.C., arranging for continuing exhibitions of American art in the White House, assisting the State Department and other Government agencies with temporary exhibitions, and supervising the Traveling Exhibition Service which circulates approximately 80 traveling exhibitions throughout the country.

Funds are also included to carry out a program of international exchange of art exhibits, similar to the fine arts exhibits program formerly conducted by the U.S. Information Agency. This program will include the international exchange of fine arts exhibits and U.S. participation in the Venice and São Paulo Biennials. The program will encompass exhibits of painting, sculpture, prints, folk art, crafts, and related categories of fine and decorative arts.

Plan of work.—To employ 6 curators, 1 archivist, 1 assistant librarian, 1 design specialist, 1 conservator, 1 administrative assistant, 2 research assistants, 1 secretary, 3 museum technicians, 4 clerk-typists ($170,000); personnel benefits ($12,000); other services ($74,000); supplies and materials ($7,000); and equipment ($106,000); a total increase of 21 positions and $369,000 for program costs.

(9) *National Portrait Gallery.*—The National Portrait Gallery exhibits portraiture and statuary depicting men and women who have made significant contributions to the history, development, and culture of the people of the United States. An increase of $354,000 is requested, including $11,000 for pay increases.

1966 appropriation	$316,000
1967 estimate	670,000

Need for increase.—An increase of $354,000 is needed to prepare to open this major gallery to the public in 1968, in the new halls of the original Patent Office Building now under restoration and renovation contract. Because the Portrait Gallery began with less of a collection and without a staff, an unusual percentage increase is required to launch the gallery.

An increase of $63,000 is requested for staff required to continue an expanded program of acquisition and planning the exhibition of portraiture and other objects in the new gallery.

An increase of $134,000 is requested for the acceleration of renovation and conservation of portraits, contracts for special picture frames and exhibits.

An increase of $15,000 is requested for office supplies and construction and installation of exhibits.

An increase of $142,000 is requested for library equipment, books, furnishings for laboratories, and the purchase of portraiture for exhibition.

Plan of work.—To employ one librarian, one conservator, one photographer, one assistant registrar, two museum aids, and two secretaries ($48,000); personel benefits ($4,000); other services ($134,000); supplies and materials ($15,000); and equipment ($142,000); a total increase of eight positions and $343,000 for program costs.

(10) *Smithsonian Astrophysical Observatory.*—The Smithsonian Astrophysical Observatory carries out basic research in astrophysics, the science concerned with the origin and matter of the solar system and the universe. Research is now in progress in the fields of theoretical astrophysics, gamma-ray and radio astronomy, meteoritics, planetary, terrestrial and lunar research, and exobiology. An increase of $536,000 is requested, including $8,000 for pay increases.

1966 appropriation	$1,209,000
1967 estimate	1,745,000

Need for increase.—An increase of $244,000 is requested for gamma-ray astronomy. A large mirror (50 feet in diameter) of modest optical quality will be designed and constructed to collect the faint light emitted by gamma rays when they enter the earth's atmosphere from outer space. Gamma rays carry important information from space, in another part of the same spectrum which at

lower energies includes visible light, ultraviolet, and radio waves. Observatory scientists have pioneered this new branch of astronomy by utilizing, at night, the 28-foot reflector of a solar furnace belonging to the U.S. Army Natick Laboratories. A better instrument is needed now to carry the work forward. It will be erected in the Southwestern United States where the seeing is best. Two scientific positions will be needed.

An increase in the amount of $264,000 is required to permit the Observatory to participate in preliminary studies for a contemplated northeast regional radio astronomy facility and to continue research programs in radio astronomy. Studies are being undertaken jointly by the Smithsonian Astrophysical Observatory, Massachusetts Institute of Technology and its affiliated Lincoln Laboratory, and Harvard University. Funds will be used for three new scientific positions, for engineering studies, and to modify and operate an 85-foot Army surplus antenna on an existing radio telescope mounting provided by Harvard University. For operation and analysis, the instrument will be connected with an existing electronic computer and will fulfill two purposes. First, it will provide the Observatory at minimum expense a radio telescope for immediate research needs. Second, it will provide invaluable opportunities to solve development problems in preparation for the larger regional facility. However, the present project is self-contained and complete in itself. It does not involve any commitment to the future proposal for the larger antenna.

A $20,000 increase is requested to further the Observatory's very successful program in theoretical astrophysics. The money will be used for mathematical studies of phenomena involved in the evolution of the solar system and of stellar atmospheres.

The Smithsonian Astrophysical Observatory is unique in the Government, as well as in the academic world. It is devoted solely to basic research with none of the operational or development responsibilities that typify the Department of Defense and the National Aeronautics and Space Administration, which involve appropriations in the billions and major equipment contracts. Yet the two types of activity benefit one another without overlapping. In fact the Observatory collaborates with both agencies and performs substantial basic research for them under grants and contracts.

Among scientific institutions, the Observatory has a unique combination of academic collaboration with New England colleges and universities, close ties with Government research programs, and worldwide network of astrophysical observing stations. The Observatory operates as a service to the international scientific community, International Central Bureaus for Astronomical Telegrams, and for Satellite Geodesy to facilitate the exchange of unclassified scientific information among scientists of all countries.

As a long-range goal, the Observatory plans to develop a major astronomical observing facility, probably in Arizona. A thorough survey of sky and seeing conditions is underway to locate a site which will in the future afford astronomers the very best possible location in the continental United States from which to conduct ground-based observing with versatile modern equipment. No increase is requested for this project although it is of the utmost importance to the Observatory. We plan to fund it largely through research grants and contracts.

Plan of work.—To employ two radio astronomers and four physicists ($84,000); and to provide funds for personnel benefits ($6,000); rent, communications, and utilities ($8,000); other services ($268,000); supplies and materials ($6,000); and equipment ($156,000); a total increase of six positions and $528,000 for program costs.

(11) *Canal Zone biological area.*—The Canal Zone biological area (CZBA) represents the principal springboard for inter-American collaboration in environmental biology, oceanography, and other biological and natural sciences relating to the tropical Western Hemisphere. An increase of $64,000 is requested including $2,000 for pay increases.

1966 appropriation	$213,000
1967 estimate	277,000

Need for increase.—This biological field preserve by virtue of its strategic location in the Panama Canal serves as a center for inter-American science, using the transportation, communication, and logistic facilities available in the Canal Zone.

It should be noted that this is the only station in the world that has the opportunity to conduct long-term oceanographic investigations in two oceans,

the Atlantic and the Pacific, simultaneously from a single base. The biological area provides scientific leadership in fresh water investigations, the limnology of Gatun Lake.

It is noteworthy that the eyes of the international scientific community are currently focused on CZBA as a possible international science center to facilitate the essential biological and environmental investigations on the Isthmus of Panama preliminary to the initiation of the proposed sea level canal program.

The potential of the CZBA to both foster and facilitate scientific cooperation among the scientists of the two Americas cannot be overestimated.

Plan of work.—To employ one herpetologist, one ichthyologist, and one manager ($33,000); personnel benefits ($2,000); transportation of things ($1,000); other services ($6,000); supplies and materials ($2,000); and equipment ($18,000); a total increase of three positions and $62,000 for program costs.

(12) *Radiation Biology Laboratory.*—The Radiation Biology Laboratory has a broad program involving all aspects of the absorption and utilization of solar radiation by living organisms. The spectrum of research includes: the transmittal of solar energy into metabolic responses of living organisms, regulatory responses to solar radiation, photosynthesis with emphasis on storage processes, energy conversion in lower marine organisms with respect to high-energy phosphates, morphological and phototropic responses to radiation, and chromosomal abberations and gene mutations induced by radiation. The Radiation Biology Laboratory provides a vital base for research on principles of energy cycling in natural biological systems and their relationships to human populations.

1966 appropriation	$364,000
1967 estimate	365,000

The increase reflected above is for pay increases and not program costs.

(13) *Buildings management.*—The Buildings Management Department has responsibility for the protection, maintenance, and operation of seven Smithsonian buildings, including museums, art galleries, and scientific laboratories. This Department provides utilities and communications services; plans and supervises construction projects; performs alterations, repairs, and improvements; furnishes custodial services, provides guards, fire protection and security services; participates in the installation of exhibits programs; repairs and refinishes furniture, equipment, and museum objects; provides necessary supporting services for the curatorial and scientific activities; and is responsible for disaster and safety programs.

An increase of 162 positions and $1,139,000 (including $19,000 for general schedule employees' pay increase and $107,000 for increases granted wage board employees in December 1964) is requested.

1966 appropriation	$5,750,000
1967 estimate	6,889,000

Need for increase.—The requested increase will enable this Department to provide building services, on a part-year basis, to the Fine Arts and Portrait Galleries, to house the National Collection of Fine Arts and the National Portrait Gallery, which will be substantially completed and partially occupied in March 1967; to bring to completion six additional halls in the Museum of History and Technology Building; and to operate additional floor space and laboratories in the west wing of the Natural History Museum. Funds are also requested for heavier utility charges for air conditioning, improved heating, and lighting; and for repairs and alterations to existing buildings and grounds.

Durng the past fiscal year over 13 million people visited the Smithsonian buildings, an increase of more than 2 million over the preceding year. The increase in public use and enjoyment of the educational and inspirational exhibitions and reference collections causes an additional workload to maintain, repair, and protect the buildings.

Additional protection staff is required for the new exhibits in the Museum of History and Technology. Certain of these exhibits permit the public to view the objects without the intrusion of protective devices, such as enclosures and cases. More adequate guarding is therefore necessary.

The provision for air conditioning, heating, and lighting for the public-use buildings for increasing crowds and increasing floor areas has resulted in a higher consumpton of electricity and steam, and has required operating personnel substantially greater than normally required for office-type buildings.

The requested increase will provide funds for the installation of a fire and smoke protection system; guarding the buildings and the national collections; participating in the exhibits installation program; furnishing all utilities, including servicing and operating refrigeration, heating, temperature and humidity control systems, and related machinery and accessories, performing repairs and alterations; refinishing and paintaing offices, workrooms, and storage areas; and supplying required services for the evening concerts and special exhibition hall openings.

Funds will also be used to provide custodial services and supplies and materials for the Lamont Street laboratory building and the oceanographic sorting center at the Navy Yard.

The program for the beautification of Washington and its buildings includes increased activity in the Mall area and places an increased workload on this Department for special arrangements, public events, and improved maintenance.

The validity of the estimates for buildings management expenses has been proved by independent review and evaluation by the Public Buildings Service, upon our request.

The buildings management operations of the Institution are carefully geared to meet the extraordinary uses which the buildings serve. These buildings must accommodate the great crowds of visitors totalling over 13 million annually, serve both as national depositories and as exhibition facilities for 59 million objects of great historical, scientific, and artistic value; and provide the necessary library, workroom, curatorial, administrative, and custodial space for the professional and other staff of the Institution.

Plan of work.—To provide for 162 positions (80 man-years in 1967) for buildings management workers (guards, laborers, and mechanics—$433,000); and to provide funds for personnel benefits ($30,000); electricity (including air conditioning), gas and steam, and communications ($187,000); other services for additional cost of security and protection services; for additional halls and exhibition areas; inspection and maintenance of additional elevators and escalators; and repairs to heavy equipment, machinery, and motor vehicles ($25,500); rehabilitation of buildings ($143,500 net increase); supplies and materials for cleaning, restrooms, and workshops; uniforms for guards, elevator operators, and restroom matrons; and gardening supplies for the care and upkeep of the surrounding grounds and areas of the buildings ($90,000); and purchase equipment ($104,000) for additional public exhibition areas, offices, and laboratories, including cleaning equipment, safety, mechanical, and gardening equipment, and the purchase of 3 "carryalls"; a total increase of 162 positions and $1,013,000 for program costs.

Buildings management—Rehabilitation of buildings

1966 appropriation	$92,500
1967 estimate	236,000
Natural History Building: Installation of fire and smoke detection equipment	125,000
Freer Gallery of Art: Modification of curb, sidewalk, and construction of loading area at south side of building	15,000
Silver Hill facility: Additional warehouse space for reference collection storage (approximately 20,000 square feet)	96,000
Total estimate	236,000
Less fiscal year 1966	−92,500
Net increase	143,500

(14) *Education and training.*—A program of education and training has been established to make provision for visiting investigators and qualified students, whose contributions to Smithsonian research have been indispensable throughout the Institution's history. In order that the Smithsonian may meet its national responsibilities for the progress of certain fields of knowledge, especially where there is a shortage of opportunities or facilities in the universities, it must achieve fuller use of its unique collections and laboratories by attracting scholars and scientists of the highest quality and offering them means for the pursuit

of their work comparable to those afforded by similar institutions. To establish this program we request an increase of $150,000.

1966 appropriation	0
1967 estimate	$150,000

Need for increase.—Establishment of this program on an institutionwide competitive basis will enable the Smithsonian to offer support both where its own preexisting requirements could not be met except through the services of outside specialists, and also where it may afford opportunities for research that would not be otherwise available. The proposed use of Smithsonian resources for such purposes in fiscal year 1967 will be somewhat below that achieved in the past by generally comparable Government basic research centers. The request will permit an estimated 25 appointments, as compared to approximately 450 at the National Institutes of Health and 200 in the National Bureau of Standards. Systematic efforts to publicize facilities will produce applications well suited to the opportunities available for consultation, study, and research. The program will make available 20 graduate and 5 postdoctoral appointments and a few undergraduate positions, in order to serve that vital segment of the educational process where research and education are inseparable.

A second major responsibility of the Division of Education and Training will be the more effective management of professional-level conferences at the Smithsonian, so that maximum benefits are achieved both for the advancement of knowledge and the Institution's effectiveness in meeting its scientific and scholarly responsibilities. These conferences will play an important role in insuring that the Institution and its staff will remain in the mainstream of scientific and scholarly development.

Plan of work.—To employ one assistant to the director, one conference director, one research assistant, and one secretary ($35,000); personnel benefits ($2,000); other services ($108,000); supplies and materials ($3,000); and equipment ($2,000); a total of four positions and $150,000 for program costs.

(15) *International activities.*—The international activities program focuses on the Smithsonian's traditional commitments to basic research in the sciences and the humanities. Further advances in knowledge are largely dependent on the Institution's ability to guide and stimulate research efforts in other countries, and on the exchange of official documents and scientific and literary publications.

An increase of $28,000 is requested for this program in fiscal year 1967.

1966 appropriation	$186,000
1967 estimate	214,000

Need for increase.—The requested increase is needed for three additional employees to administer the special foreign currency program and the international exchange of publications.

A deputy director position is needed to administer a program of grants designed to contribute to knowledge of ancient civilizations; to preserve and restore archeological sites and ancient monuments; to promote studies in systematics, ecology, and hydrobiology; and to assist in the planning of educational museums in developing nations.

The International Exchange Service forwards over 1 million pounds of publications annually to overseas institutions. Numerous additional requests for help in transmitting publications are being received. An increase of two employees and additional equipment funds will enable the Exchange to respond to these requests.

Plan of work.—To employ one deputy director and two clerks ($22,000); personnel benefits ($2,000); other services ($1,000); and equipment ($3,000); a total of three positions and $28,000 for program costs.

(16) *Administrative support.*—Administrative support is necessary to facilitate the central purposes of the scientific, historical, and artistic programs of the Institution and its museums, art galleries, and laboratories. Administrative support is provided by: The Office of the Secretary, Editorial and Publications, Fiscal, Library, Museum Services, Personnel, Photographic Services, Supply, Automatic Data Processing, and Public Information.

1966 appropriation	$2,450,000
1967 estimate	3,383,000

The increase is requested in order to provide the necessary executive direction and administrative services for the expected increased scope of the Institution's programs in 1967. The increase is in proportion to the total increase in estimated appropriations for 1967.

Funds are also urgently needed to overcome backlogs in printing the scientific and historical publications of the Institution, and to provide automatic data processing for a small portion of the work of the Institution.

These units are requesting an increase of $933,000 for 1967, including $34,000 for pay costs.

Office of the Secretary

The Office of the Secretary provides executive direction, policy guidance, program planning and review, and evaluation of the diversified programs of the Smithsonian Institution.

The Office of the Secretary includes the Assistant Secretaries for Administration, Science, and History and Art; General Counsel; Budget Division; Organization and Methods Division; and Contracts Office. This staff assists the Secretary by providing professional and administrative services in directing, planning, and reviewing the programs of the Institution. This Office requests an increase of $139,000 in fiscal year 1967.

Need for increase.—The requested increase is needed to permit the Office of the Secretary to keep pace with the total scope of activities of the Institution in 1967. The increase is commensurate with the increase in "Salaries and expenses" but is less than commensurate for the total increase in all appropriations. A program planning and budget officer will be added in order to give renewed support to program planning and budgeting, to the establishment of goals, and to finding the most effective and economical way to achieve goals. The senior staff of the Institution will continue to share actively in program planning and budgeting, but it is essential to sound management to provide a position to devote full concentration on these important functions to provide continuity of the planning and budgeting effort, to appraise needs and balance among the various programs of the Institution, and to provide staff assistance in developing long-range programs and the establishment of standards, criteria, and projections.

The Assistant Secretary for History and Art is responsible under the Secretary for administration and development of the complex programs of exhibition and research in history and art throughout the Institution. A principal assistant is needed to provide professional and administrative services to increase the effectiveness of this office.

To assist in the review and analysis of financial and management operations, an internal auditor is requested.

Critical appraisal of the Institution's current and projected programs requires the assistance and advice of experts and consultants. It is planned to call upon recognized leaders in museums, universities, laboratories, and industry to come to the Institution periodically to provide this impartial review and consultation on the effectiveness of our plans and performance.

Plan of work.—To employ one program planning and budget officer, one special assistant, one internal auditor, and two secretaries ($66,000); personnel benefits ($5,000); rent, communications, and utilities ($3,000); printing and reproduction ($20,000); other services ($38,000); supplies and materials ($2,000); and equipment ($5,000); a total increase of five positions and $139,000 for program costs.

Editorial and Publications Division

The Editorial and Publications Division is responsible for editing and printing the scholarly publications of the Smithsonian. An increase of $213,000 is requested in fiscal year 1967.

Need for increase.—The need for additional printing is the result of the rise in the number of research manuscripts produced by the professional staff and the greater diversity in the kinds of research being conducted. The programs of the Institution now offer a greater variety of educational materials for the general public. We have modernized our publications and include more illustrations of great value to the reader. At the same time, the cost of printing has substantially increased.

Plan of work.—To employ three editors, one designer, and one clerk-typist ($34,000); personnel benefits ($3,000); rent, communications, and utilities ($1,000); printing and reproduction ($172,000); other services ($2,000); supplies

and materials ($500); and equipment ($500); a total increase of five positions and $213,000 for program costs.

Fiscal Division

The Fiscal Division is responsible for the administration and accounting of funds. An increase of $15,000 is requested in fiscal year 1967.

Need for increase.—The payroll, accounting, auditing, reporting, counseling, and other financial activities of the Fiscal Division are directly increased by the increased transactions required by the higher levels of appropriations.

Through the use of automatic data processing for the payroll and allotment procedures, it is necessary to request only one additional accountant for the expanded scope of activity in 1967.

Funds are requested also to finance the additional cost of penalty mail.

Plan of work.—To employ one accountant ($5,000); and provide funds for rent, communications, and utilities ($10,000); a total increase of one position and $15,000 for program costs.

Library

The library maintains a collection supporting the scientific and historical research programs of the Institution and its museums, art gallery, and zoological park activities. The library provides support through acquisition and maintenance of the library's collections and reference services. An increase of $135,000 is requested in 1967.

Need for increase.—Additional spheres of interest and intensification of study in other areas, together with increases in the size of the professional staff, have increased the number of publications and the library services required. Surveys by the professional users of the library have established that the library needs substantial improvement in acquisition, cataloging, reference, circulation, and translation.

While striving to keep pace, the library needs to begin to overcome serious backlogs of cataloging. With over half of the total of 500,000 volumes inadequately cataloged, a long-range program of recataloging the library is essential.

Funds to purchase books are inadequate and an increase must be requested. The cost of scientific and other technical books is high, but fortunately the investment will serve scholars for many years in the future.

The key to unlock the door to the storehouse of knowledge is the scientist and the historian, but the light illuminating the room is the library.

Plan of work.—To employ five library assistants ($27,000); personnel benefits ($3,000); rent, communications, and utilities ($3,000); printing and reproduction ($5,000); other services ($15,000); supplies and materials ($2,000); and equipment ($80,000); a total increase of five positions and $135,000 for program costs.

Smithsonian Museum service

The Museum service provides museum education programs and visitor services. An increase of $36,000 is requested.

Need for increase.—To increase the knowledge to be gained from the Institution's exhibits, guided tours, gallery lectures, and film presentations are needed.

The program to improve our exhibits has been applauded by the visiting public. Since 11 years ago, when our first modernized hall was opened, annual visitor attendance has risen from 3,658,881 to 13,153,000.

One Director, Audio-Visual services, would help to meet the demand for guided tours, gallery lectures, and other educational programs. Supplies and equipment are required to aid in the production of lectures and film presentations.

Plan of work.—To employ one Director, Audio-Visual services ($10,000); personnel benefits ($1,000); other services ($10,000); supplies and materials ($5,000); and equipment ($10,000); a total of one position and $36,000 for program costs.

Personnel Division

The Personnel Division supports the scientific, educational, and exhibition programs of the Smithsonian by providing personnel services, including employment, classification, employee relations, salary and wage administration, and recording.

An increase of $17,000 is requested for fiscal year 1967.

Need for increase.—This increase would be used to insure the Institution's investment in obtaining, training, and developing effective senior staff members by providing an executive health program. Annual physical examinations will be given to an average of 50 senior personnel.

Plan of work.—For transportation of things ($2,000); and other services ($15,000); a total increase of $17,000 for program costs.

Photographic Services Division

The function of the Photographic Services Division is to aid in the public information, publication, research, restoration, and preservation fields; and in the educational programs of the Institution. An increase of $24,000 is requested.

Need for increase.—The work of the Photographic Services Division is affected directly by the increased workload throughout the Institution. Photographs are invaluable to illustrate scholarly publications, to show restoration and preservation methods, to illustrate news releases, to file with valuable accession papers, and to send to interested correspondents.

Plan of work.—To employ one photographer ($7,000); personnel benefits ($1,000); other services ($3,000); supplies and materials ($2,000); equipment ($11,000); a total increase of one position and $24,000 for program costs.

Supply Division

The Supply Division is responsible for the procurement and utilization of personal property. The Supply Division is also responsible for the perpetual inventory of furniture and the stocking of line items for daily use by the entire Institution. An increase of $31,000 is requested.

Need for increase.—Modern research programs have increased the need for specialized technical equipment for the scientific staff. This type of procurement requires preparation of complex technical specifications to assure that requirements are satisfied. The efficient procurement of such equipment and the added volume of supplies and materials used in the diversified programs of the Institution requires the services of an additional contracts officer.

Plan of work.—To employ one contract specialist ($6,000); personnel benefits ($2,000); rent, communications, and utilities ($3,000); other services ($3,000); supplies and materials ($15,000); and equipment ($2,000); a total increase of one position and $31,000 for program costs.

Automatic Data Processing Division

The Automatic Data Processing Division will require an increase of $271,000 to provide for analysis, programing, and automatic data processing for the scientific, historical, museum, and administrative activities of the Smithsonian Institution. The computer is required in order to accomplish most efficiently a diversity of work not now being accomplished: data storage and retrieval, payroll preparation, experimental simulation, scientific analysis, and administrative programing.

Need for increase.—The Smithsonian's scientists are spending a portion of their time on subprofessional duties, including locating information needed for their research and answering questions from outside researchers and the public. This diversion of professional talent can be reduced with the aid of computers. Elimination of the time a scientist spends on tasks not requiring his level of competence would represent a substantial recurring saving.

Until recent years the Smithsonian relied on traditional methods of recording, storing, and recalling information. Only the Smithsonian Astrophysical Observatory and the Science Information Exchange have applied computerized storage and retrieval techniques to their research projects. Modest beginnings have been made in using computers in the Fiscal Division.

A consultant's review shows that almost every organization unit is handicapped by the lack of a computer with associated analysts and programers.

As an example, the program in ecology is particularly significant because of the ever increasing appreciation of the adjustment between populations and their environment. Computer simulation offers the advantage of compression of time, for what normally takes decades in nature can be simulated in hours by computer. Other simulations could provide insight into the harmonious collaboration by people of various ethnic, cultural, and social behavioral characteristics.

As a further example, the Radiation Biology Laboratory, which explores the absorption of radiation by living organisms, requires the use of a computer for the analysis of their findings. The development of food-producing capabilities

can improve our production methods and extend our knowledge of the sun's effects on plant and animal life.

The 60 million specimens of natural history and artifacts which document man's social, cultural, and technological development are increasing at a rate of over a million a year. Each of these specimens must be cataloged (described and documented) to show its origin and nature, environmental data, and associated plant life. This cataloging effort will ultimately require an additional 600 man-years of work. As this cataloging proceeds, we must also generate a computerized bank of the data being developed.

Action is needed now to make our library services fully responsive to the needs of the Smithsonian and other scholars. Reference, cataloging, and circulation aids involving a computer offer the most efficient means of making the library a more effective supporting service for the Institution's professionals.

The increase requested is substantially lowered by pooling resources with existing computers in the Science Information Exchange and the Fiscal Division.

Plan of work.—To employ one computer systems director, one deputy computer systems director, two systems analysts, three program analysts, one operations chief, five programers, one shift supervisor, one tabulating operator, three computer operators, one tape librarian, and two EAM operators ($179,000); personnel benefits ($11,000); rent, communications, and utilities ($67,000); supplies and materials ($2,000); and equipment ($12,000); a total increase of 21 positions and $271,000 for program costs.

Public information office

The activities of the Smithsonian Institution, its programs of research and higher education, and its museums, art galleries, and zoo are of great interest to the professional and lay publics in the Nation's Capital, throughout the country and abroad. A public information office is necessary to meet this need for service. An increase of $18,000 is requested.

Need for increase.—The Smithsonian needs to make the results of its programs known to various publics through all available media: newspapers, radio and television, motion pictures, technical and scientific journals, magazines, the collegiate press, the lecture hall, and the public forum. Only in this manner can we more adequately fulfill our mission; keeping the public fully informed of our research results and cultural activities is a fundamental part of the effective administration of our responsibility.

Since 1964, one individual in the Editorial and Publications Division has been given the primary responsibility for press relations. This new unit would be established with this individual as the nucleus. In order to establish a minimum program of information activities, an increase of $18,000 is urgently requested.

Plan of work.—To employ one secretary ($7,000); personnel benefits ($1,000); rent, communications, and utilities ($500); printing and reproduction ($5,000); other services ($1,500); supplies and materials ($2,000); and equipment ($1,000); a total increase of $18,000 for program costs.

SALARIES AND EXPENSES

Report of the number of permanent positions by organization unit

	1965 actual	1966 estimate	1967 estimate	Increase, 1967 over 1966
Astrophysical Observatory	45	46	52	6
Canal Zone biological area	18	18	21	3
Freer Gallery of Art	3	5	6	1
Museum of History and Technology	150	154	161	7
Museum of Natural History	220	258	287	29
National Air and Space Museum	28	34	38	4
National Armed Forces Museum Advisory Board	2	4	9	5
National Collection of Fine Arts	18	31	52	21
National Portrait Gallery	9	15	23	8
Radiation Biology Laboratory	23	24	24	0
U.S. National Museum	192	197	210	13
Buildings Management Department	716	728	890	162
Education and Training Division	0	0	4	4
International activities	12	16	19	3
Administrative support	146	167	208	41
Total	1,582	1,697	2,004	307

Report of obligations by objects

	1965 actual	1966 estimate	1967 estimate	Increase or decrease (−), 1967 over 1966
11 Personnel compensation	$10,308,000	$12,047,000	$13,802,000	$1,755,000
12 Personnel benefits	740,000	900,000	1,021,000	121,000
21 Travel and transportation of persons	146,000	240,000	240,000	0
22 Transportation of things	104,000	109,000	159,000	50,000
23 Rent, communications, and utilities	965,000	1,132,000	1,415,000	283,000
24 Printing and reproduction	289,000	327,000	529,000	202,000
25 Other services	1,128,000	1,803,000	2,910,000	1,107,000
26 Supplies and materials	810,000	896,000	1,103,000	207,000
31 Equipment	1,028,000	1,466,000	2,257,000	791,000
42 Insurance claims and indemnities	0	1,000	1,000	0
Total obligations	15,518,000	18,921,000	23,437,000	4,516,000
Appropriation adjustments:				
Proposed supplemental for cost of wage board salary increases	0	−166,000	0	+166,000
Unobligated balance lapsing	+22,000	0	0	0
Appropriation (adjusted) or estimate	15,540,000	18,755,000	23,437,000	4,682,000

PERSONNEL

Senator BARTLETT. What percentage of the cost of the wage and salary increases are you absorbing?

Mr. RIPLEY. We have absorbed 5 percent. The increased workload and the operation of our additional building space has required that we ask the Congress for increased appropriations. In the face of these increased demands, any amount we would absorb would simply have to be offset by an increase.

Senator BARTLETT. How many employees do you have?

Mr. RIPLEY. About 2,800 in total.

Mr. BRADLEY. That is a good figure in total. The amount under this particular appropriation is 1,624, as of January 31, 1966.

Senator BARTLETT. How many employees in Washington?

Mr. RIPLEY. All but 475—under this appropriation, all but 85.

Senator BARTLETT. In toto, how many are elsewhere?

Mr. BRADLEY. Elsewhere would be 475 employees, principally at Cambridge, Mass., where Dr. Whipple has the Astrophysical Observatory.

Senator BARTLETT. Some under the foreign currency program?

Mr. RIPLEY. These are not direct employees. Some are abroad under Dr. Whipple's aegis with the Baker Nunn camera program about 70.

SMITHSONIAN FILM THEATER

Senator BARTLETT. On page B–8 of your justification you speak of the "Smithsonian film theater." Would you describe this activity?

Mr. RIPLEY. The Smithsonian film theater is a program which we have developed over the past 2 years. Programs are presented on the average of once a week in the auditorium of the Museum of Natural History. These are educational films available to us or, in two or three cases, we have them made as part of our expeditions, or under some grant received for this particular purpose. These are enormously popular. We have to run them about three times in succession because they are greatly attractive to both parents and their children. They are interesting scientific or historical subjects.

MUSEUM OF HISTORY AND TECHNOLOGY

Senator BARTLETT. I note that for the Museum of History and Technology you have proposed a program increase of $123,000 in addition to $14,000 needed to cover salary increases. Would you please tell the committee what is planned in the way of program increases?

Mr. RIPLEY. We are, as you know, still in the phase of completing the halls in this Museum. It was opened in January of 1964 with 12 halls. Since then an average of 8 halls have been opened each year. We have a specific program over the next few years of completing the total of 50 halls. We need additional curators and technicians, seven of them, to plan and direct the installation of the major exhibits in these halls.

As we go along, we are continuing to document most effectively the national collections in a way we were unable to do before this building was built. It is extraordinary how "bricks and mortar" make a real difference in our ability to lay out materials and then perform research and document them. When material is in a warehouse it has no meaning, and is not serving to reveal truth. This building has been a most wonderful asset for the study of the history of this Nation.

MODERN AND FOSSIL POLLENS

Senator BARTLETT. In the Museum of Natural History it is indicated that you want to initiate a laboratory to study modern and fossil pollens. How much have you planned in the way of people and dollars for this activity?

Mr. RIPLEY. We would like to employ a biologist and one assistant and have $20,000 for laboratory equipment. This will make a total of $42,000. As you know, the study of fossil pollen is very important in historical and biological studies and much of this work is developed from materials formed in the far north in Alaska, Canada, and the extreme northern part of the United States.

GRANTS FOR INDIVIDUAL RESEARCH PROJECTS

Senator BARTLETT. You are requesting $400,000 this year to supplant funds formerly made available by the National Science Foundation for individual research programs. This was necessary last year, too. I understand that the reason for this is that the National Science Foundation is now prohibited from transferring any of its appropriations to you. Is that correct?

Mr. RIPLEY. That is correct. Under a statute, under the Independent Appropriations Act for 1966, the National Science Foundation was precluded from transferring funds to any other agency of the Government for research and grants without, in each individual case, specific permission of the Bureau of the Budget.

As a result of that, we requested last year a sum representing the average of the amount our individual scientists have been granted by the Foundation, just as they might have obtained grants at other institutions anywhere in the country, and this sum represented $350,000. We feel that these projects are of such scope and depth as individual research projects that they are not viewed as ordinary research undertakings which would be supported by our conventional funding means. Prior to 1966, members of our staff were permitted to submit

these proposals to the National Science Foundation; under present law they cannot do so except in special cases. As a result, our scientists submit these grant proposals to review panels within the Smithsonian. The grant is for an appropriate period of time.

The funds are intended to serve a special purpose for a project rather than for the on-going institutional normal funding we request. We feel this small amount of research money would be most advisable.

Senator BARTLETT. To effect this, do you administer these funds on the same basis as were the grants received from the National Science Foundation?

Mr. RIPLEY. Yes, sir. These funds together with the base amount of $350,000 appropriated for 1966 will be administered on the same basis as were the grants received from the National Science Foundation.

NATIONAL AIR AND SPACE MUSEUM

Senator BARTLETT. Would you review for the committee the present status of your activities with regard to the National Air and Space Museum, indicating when it is expected that this facility can be opened?

Mr. RIPLEY. The bill authorizing the construction of this building passed the House on February 7 of this year. It passed the Senate the session before. It is up now before the Senate Rules and Administration Committee and we hope it will be acted upon in this session. This bill for the construction authorization is the culmination of a long series of studies over a period of 20 years. An appropriation of nearly $2 million has already been given to the Smithsonian to develop the plans and specifications for this Air and Space Museum.

We feel that if this authorization bill is passed by Congress during this session, it should be possible to open the museum in 1970 or 1971, depending on our success in obtaining a construction appropriation. We have been gradually hiring some people for the planning and preparation activities.

I believe this museum will provide a whole new dynamic development in the understanding of the history and science of air and space. It will be one of the most exciting exhibits and research centers in the world. It will be unique. It is most fitting that it should be here in the Washington area under the aegis of the Smithsonian where scientists have been developing the whole space-age concept.

Senator BARTLETT. What is the approximate cost?

Mr. RIPLEY. $40 million, approximately, when completed.

Senator BARTLETT. Where is it to be located?

Mr. RIPLEY. On the Mall between Fourth and Seventh Streets where temporary buildings are presently located.

NATIONAL ARMED FORCES MUSEUM ADVISORY BOARD

Senator BARTLETT. Your justifications indicate that five workers are to be added to the planning staff of the National Armed Forces Museum Advisory Board. Please tell the committee how many personnel you have on this planning staff at the present time, and why it is necessary to add to them.

Mr. RIPLEY. Sir, the Armed Forces Museum Advisory Board has a staff of four people. We wish to increase this by five to provide two research historians, a secretary, one military equipment specialist, and one library assistant. We are being offered by the Armed Services historical material at a greatly increasing rate. This is with the expectation that sometime in the future there will be such a museum. We have been charged by the Congress, operating under the Armed Forces Museum Advisory Board, to anticipate and operate on this basis. We feel the momentum and constant increase in interest by the Armed Forces and others in our studies to delineate history of the Armed Forces is a must. We must keep after it.

FORT WASHINGTON, MD.

Senator BARTLETT. In the same justification, it is indicated that a part at least of the $45,000 increase in program funds is to be used for studies to determine possible use of Fort Washington as a site for outdoor museum displays. You will recall that last year the Senate Committee on Appropriations put in its report a statement to the effect that the committee does not approve use of Fort Washington by any agency of the Government other than the National Park Service unless Fort Washington is transferred by legislation from the jurisdiction of the National Park Service.

Have you planned your budget request with this recommendation of the Senate committee in mind?

Mr. RIPLEY. We have, Senator, and have no anticipation of taking Fort Washington for the Armed Forces Museum. What we have done, in fact, is to have a series of conversations during the year past with the National Park Service and Secretary Udall to determine whether some compromise could be effectively developed that would allow us both to exist somewhere in the vicinity. I believe the results of these conferences have been most successful and I have reported this to the Armed Forces Museum Advisory Board, who have approved the compromise. The Board of Regents of the Smithsonian Institution has not submitted its report on the site to the Congress.

In effect, the compromise means the Armed Forces Museum would be located in the Fort Foote area, close to the Woodrow Wilson Bridge, that it will have adequate facilities there. About 85 acres would be assigned to us by the Park Service. As a result of this compromise, we will be able to develop certain interpretative and historical exhibits in Fort Washington with the collaboration of the National Park Service. We will collaborate with the National Park Service and they will assign us the Fort Foote area. We will eventually acquire adjacent land, some underwater in the bay where there is an anchorage for ships, and they will lend us certain facilities at Fort Washington.

PROGRAM OF INTERNATIONAL EXHIBITS

Senator BARTLETT. In the general statement accompanying your justifications it is indicated that an increase is included in your budget to continue the U.S. Information Agency arts program of international exhibits. In the portion of your justifications concerning the National Collection of Fine Arts it is stated that funds are included to carry out a program of international exchange of art exhibits simi-

lar to the one formerly conducted by the U.S. Information Agency. Why has the latter Agency discontinued its sponsorship and presentation of this program?

Mr. RIPLEY. Sir, by the act of May 17, 1938, the National Collection of Fine Arts, which is a bureau of the Smithsonian, was specifically requested to develop exhibitions of contemporary art and circulate them. This is an activity which, as you say, the USIA has been doing abroad. They feel this is a part of our ongoing projects. I may say in an effort to save considerable overhead expenses, that we are in a far better position to take on this foreign exhibition obligation as part of our domestic obligation.

The National Collection of Fine Arts has developed for approximately 18 years an extremely successful program called the Traveling Exhibition Service, which brings art collections from abroad, and circulates them in this country. The Smithsonian Traveling Exhibition Service is the primary exhibition exchange agency in the United States. There are a couple of others which work in this field. One is the Asia House of New York City and another is the American Federation of Arts. We feel the Traveling Exhibition Service of the Smithsonian is amply provided with the expertise to perform this. It is logical that we would be able to save money and perform the work with authority and effectiveness. That is why we propose to take over this program of international exhibits.

Senator BARTLETT. How much is in your budget to do this?

Mr. RIPLEY. $130,000, including four people.

Senator BARTLETT. This is for traveling?

FUNDS SOUGHT FOR TRAVELING EXHIBITIONS

Mr. RIPLEY. Traveling exhibitions abroad, primarily. We will seek funds and grants to supplement this because the exhibitions will initially cost more. We will collaborate with museums. For example, a museum in New York or other city will put up funds to bring together these materials and we will submit requests to agencies like the National Arts Council and so on for budgetary aid.

Then, we will have this relatively small amount, if we can secure it, $130,000, to make a base sum for our own exhibition services.

Senator BARTLETT. Do foreign countries at their expense provide similar type programs?

Mr. RIPLEY. They do have exhibitions in this country. They usually distribute through us, the traveling exhibition service at the Smithsonian, or through the Asia House of New York City or the Federation of Fine Arts. In some cases, the foreign country pays the cost of the transportation to and from the United States with galleries paying exhibition costs and pro rata shipping costs. Each individual situation is tailored. It depends on the potential of each individual case. They are normally proud to have art and archeological materials come to this country and will pay a very significant measure of this.

Senator BARTLETT. How does it work the other way around? Do they pay any part?

Mr. RIPLEY. Yes, they will pay on a pro rata basis.

ADMINISTRATIVE SUPPORT

Senator BARTLETT. Will you please discuss the need for a $900,000 increase in your administrative support requirement in fiscal year 1967?

Mr. RIPLEY. The administrative support continues to approximate 13 to 14 percent of our "Salaries and expenses" appropriation. The increase requested in salaries and expenses this year is $4,682,000 or about 25 percent of our current budget. This would justify a commensurate increase of $613,000. To this, is added $271,000 for the application of automatic data processing to our work, $18,000 for public information, and $34,000 for pay increases, for a total increase of slightly over $900,000.

AUTOMATIC DATA PROCESSING

Senator BARTLETT. Do you not have an automatic data processing division now?

Mr. RIPLEY. We are planning to establish an automatic data processing division. We have just started exploring the project for application to a variety of programs. First of all, for our fiscal division; secondly, for problems of supply and equipment; and thirdly, in an exploratory way, for documentation for some of our collections.

Senator BARTLETT. Is there any money in the budget you are now justifying for this installation?

Mr. RIPLEY. Yes, we have one position and a total of $29,000 in 1966.

Senator BARTLETT. This is exploratory?

Mr. RIPLEY. This is for what we have already started in the current year.

Senator BARTLETT. What have you started?

Mr. RIPLEY. We now have one employee. We would like to add 21 employees. We are now making exploratory studies of automatic data processing for our various programs.

Senator BARTLETT. Do you have any of these fabulous machines?

Mr. RIPLEY. Largely under grants received, we have been working with the 1440. Dr. Whipple has a 7094 in Cambridge. This is under a grant.

Dr. GALLER. We have also one 1460 and are preparing to lease one 360/30 computer at the Science Information Exchange.

Mr. RIPLEY. The one at the Science Information Exchange operates under a grant.

Mr. BRADLEY. We have the most junior of the computers on the market, one step above the bookkeeping level. At the Astrophysical Observatory in Cambridge, on the other extreme, we have one of the most sophisticated machines because of the complexity of these astronomical computations.

Senator BARTLETT. Do you understand these things?

Mr. RIPLEY. I am as bewildered as I think you are, sir.
Senator BARTLETT. We will go to another subject, then.

MUSEUM PROGRAMS AND RELATED RESEARCH IN THE NATURAL SCIENCES AND CULTURAL HISTORY (SPECIAL FOREIGN CURRENCY PROGRAM)

THE 1967 BUDGET REQUEST

Senator BARTLETT. There will be placed in the record the statement in justification of the estimate of $5,700,000 to carry on museum programs and related research in the natural sciences and cultural history, to be financed through a special foreign currency program.

(The justification follows:)

1966 appropriation	$1,300,000
1967 estimate	5,700,000

An appropriation of $5,700,000 in foreign currencies, as determined by the Treasury Department to be excess to the needs of the United States, is requested for a grant program in the following fields:

Archeological research and excavation	$1,300,000
Archeological restoration	300,000
Systematic and environmental biology	3,145,000
Museum sciences	955,000
Total 1967	5,700,000

ARCHEOLOGICAL RESEARCH AND EXCAVATION

To continue the Smithsonian's program, $1,300,000 is requested, initiated in fiscal year 1966, of grants to American universities, museums, or other institutions of higher learning interested in archeological excavations or research in the foreign currency excess countries.

Approximately $900,000 in excess foreign currencies have already been granted to some 12 American institutions under the current or fiscal year 1966 program. Initiation of this program has made possible the following highly successful projects:

The Hebrew Union College, Jerusalem School of Archeology[1] excavations at Gezer in Israel, an ancient trading center which was a focal point of Nebuchadnezzar's campaign against the Kingdoms of Judea.

The Carnegie Museum and Pittsburgh Theological Seminary excavations at Ashdod in Israel, which have shed new light on biblical history, especially the extent of Phillistine cultural influence.

The University of Missouri excavations at Jelemie and Kafr Yasif in Israel, which have uncovered massive new evidence of ancient Phoenician glass factories.

The Peabody Museum of Natural History of Yale University excavations in the Fayum badlands of Egypt, which have produced significant new knowledge of man's earliest primate ancestry.

The American Research Center in Egypt, Inc.[2] a study center which is currently conducting six archeological projects in Egypt, ranging from an epigraphic survey of the great temples of Rameses III at Karnak to the study of early Christian and Coptic manuscripts at St. Catherine's monastery in the Sinai desert.

[1] A consortium of 33 American universities and theological seminaries.
[2] A consortium of 9 American universities with headquarters at Boston, Mass.

The American Institute of Indian Studies of Philadelphia, to establish a center located at Benares which will document, photograph, and make exploratory surveys of India's numerous temple sites and ancient monuments for the benefit of American scholars.

The American Institute for Archeology has called the Smithsonian's program "timely and much needed, an essential contribution to the advancement of our knowledge of ancient civilizations." The Institution therefore believes continued support at approximately the same level established during the program's first year is thoroughly justified.

Archeological Restoration

A total of $300,000 in foreign currencies is requested for the preservation and restoration of archeological sites and ancient monuments. The Department of State considers that the Smithsonian should be responsible for coordinating all American archeological activity overseas and has asked the Institution to give greater attention to restoration and preservation projects.

The Smithsonian believes this kind of foreign currency support is justified for two reasons. First, it is in the U.S. interest to participate in international programs of archeological restoration because such participation results in increased exploration concessions and research opportunities for American institutions in the host countries. It also results in increased sharing or the quid pro quo of archeological treasures, for the enrichment of collections and the advancement of knowledge in American museums and universities. Stated simply, it is often said that no one welcomes archeologists "who dig and run." The archeologists who are welcomed are those who leave fitting monuments to the host country's cultural heritage and help to create what are in effect outdoor museums.

Second, the preservation and restoration of ancient monuments makes a positive contribution to the U.S. relations with the excess countries and directly supports foreign aid program objectives, since properly restored monuments are a proven stimulus to tourist industries and represent aid which goes to all sectors of society, from the considerable number of laborers employed in the larger projects to the foreign scholars and scientists working side by side with Americans.

Systematic and Environmental Biology

The $3,145,000 is requested to permit the Institution to expand its long-standing and traditionally strong commitments in systematic and environmental biology by responding to unique opportunities in certain of the excess countries.

The National Science Foundation has pointed to the need for a greater level of effort in systematics and environmental biology, which disciplines have been relatively neglected in the age of molecular biology, and fully endorses the concept of utilizing excess foreign currencies to the maximum degree possible for the advancement of these basic sciences. The National Academy of Sciences has signaled the necessity for urgent ecological surveys and productivity studies, or the basic task of inventorying the earth's land surfaces, in some of the excess countries, especially in connection with preparatory studies for the forthcoming international biological program. And the Inter-Agency Committee on Oceanography has pointed out the desirability of extending oceanographic research through the development of marine study centers or temporary field facilities in India, the Eastern Mediterranean, and possibly Guinea.

The Smithsonian is today the New World's foremost research center for systematic biology, or the science concerned with the classification and interrelationships of all organisms. As such, the Institution has an obligation to support and strengthen its preeminent research area through the economically advantageous medium of excess foreign currencies, both by grants to other institutions and by projects administered by the Smithsonian itself.

Museum Sciences

The $955,000 is requested to initiate a museum program which will allow the Smithsonian to respond to many requests already received for advisory services in the planning of museums and exhibits in the excess countries, especially India and Pakistan.

The Secretary of the Smithsonian has pointed out that in 1936 there were some 105 museums in the subcontinent of India and Pakistan, whereas today there are only 39. In commenting on this situation, Dr. Ripley has written:

"It is inconceivable that this whole vast oriental region with by far the most of the world's population, an area where education is a desperate priority task consuming the thoughts and energies of national governments, the U.N., the Colombo plan countries, SEATO, and the United States, no real effort is being given to the vast educational potential of museums. From childhood on, from illiteracy up, museum education is one of the easiest and most dramatic ways to capture the human imagination."

Under this program the Institution, in conjunction with the American Association of Museums, would utilize foreign currencies for an exchange of museum professionals to and from the excess countries. American specialists are needed to help plan museums, especially science and youth or "teaching" museums, in a number of the excess countries. Foreign specialists can best learn of new exhibit techniques or experiments in cognitive studies by coming to the United States, with dollar support provided by the host museums in which they would be employed in on-the-job training.

To begin the larger task outlined by Dr. Ripley, the International Council of Museums (ICOM) has recommended that international conferences be held in various of the excess countries to help them plan for and develop educational museums, especially those designed for illiterate and semiliterate audiences. The ICOM has also recommended that outstanding science and teaching exhibits be prepared in an excess country with high professional museum competence, such as Israel, for circulation among the developing nations where they are most needed as examples of what can be accomplished through museum education. It is expected that such circulating exhibits will generate return exhibits of local relevance and character, especially in archeology and the folk arts, from the developing nations to the United States, for the benefit of our rapidly growing museum public.

The Smithsonian believes it has the capability to so advance the museum's sciences, in consonance with the purposes of the proposed National Museum Act of 1966, which provides that the Director of the U.S. National Museum shall:

"* * * cooperate with museums and their professional organizations in a continuing study of museum problems and opportunities, both in the United States and abroad."

Overseas Program, Apportionment of Foreign Currencies

Since the Smithsonian's greatest future responsibility in these programs is the thorough review of grant proposals from other institutions, an exact country-by-country project inventory is neither possible nor desirable at this time. But sound estimates can be made from three sources. First, in the case of the archeology program, there are on-going projects which the Institution considers worthy of continuing support. Second, in the case of the other programs, the Institution has already received firm expressions of interest from some of our Nation's foremost institutions of higher learning for projects in the excess countries which appear viable and capable of development with appropriate host country authorities. These are, in effect, sample or illustrative projects which the Institution believes may be successfully implemented during fiscal year 1967. Third, there are projects which the Smithsonian considers it is best qualified to administer itself.

On-going projects, sample or illustrative projects, and possible Smithsonian projects are as follows for the four major program categories:

I. Archeological research and excavation

On going projects

Recipient	Project	Grant expressed in U.S. dollars
1. American Institute of Indian Studies (a nonprofit organization of 24 American colleges and universities).	To establish the American Academy of Benares, a research center for south Asian archeology and art history. This center represents the essential first step in the important task of surveying, documenting, and recording India's numerous temples, monuments, and archeological sites. American museum directors and university scholars consider the center's work will provide them with a valuable resource in a field that has heretofore been badly neglected. The center will benefit from U.S. dollar support from the John D. Rockefeller III Fund for the exchange of Indian scholars to the United States and for other costs that cannot be met with foreign currencies.	$76,850
2. American Research Center in Egypt (a nonprofit study center supported by 10 American universities).	To support the center's research and excavation program in the archeology of Egypt, which includes Pharaonic, Hellenistic, Roman, and early Christian sites.	250,000
3. Jerusalem School of Archaeology of the Hebrew Union College.	To continue the survey and exploration of some 400 archeological sites in the Negev and to conduct seminars in biblical archeology for American graduate students in archeology.	200,000
4. Peabody Museum of Yale University.	To continue stratigraphic investigations of Oligocene and Miocene deposits at El Faiyum, Egypt, which have resulted in important discoveries relating to human evolution.	19,310
5. University Museum, University of Pennsylvania.	To continue excavations at Mohenjo-daro in Pakistan, the center of the Harappan or earliest civilization of the Indus Valley.	30,100

Sample or illustrative projects

Institution	Project	Estimated grant expressed in U.S. dollars
1. African Studies Association	To survey, identify, and test archeological sites in the northern savannah region of Guinea.	$20,000
2. Drew University and McCormick Theological Seminary.	To complete research in Israel on late Hellenistic and early Roman pottery.	40,000
3. University of Oregon	To survey and excavate human habitation sites in southwestern Guinea, with emphasis on the caves and rock shelters containing paleolithic and neolithic assemblages.	50,000
4. Peabody Museum of Yale University.	To excavate the Oligocene and Miocene deposits of the Siwalik Hills of northern India to enlarge knowledge of man's primate ancestry.	50,000
5. Peabody Museum of Yale University.	To conduct excavations related to item 4 above in Oligocene-Miocene deposits of the Pondaung region of Burma.	50,000
6. University Museum, University of Pennsylvania.	To survey and excavate early Neolithic sites in Yugoslavia, believed to contain important evidence on the origin and early production of food crops.	65,000
7. University of Michigan	To conduct research in ancient numismatics in the eastern Mediterranean (Israel).	18,740
8. American Institute of Indian Studies, American Academy of Benares.	To survey and excavate monuments and remains of the Pratihara period, especially at Bhinmal in Rajasthan.	150,000
	To survey and document the bronze sculpture of northern India.	30,000
9. Smithsonian Institution	To survey and document the art history of Tibet on the basis of objects currently being brought to India and Nepal by Tibetan refugees.	50,000
10. University of Chicago	To survey and excavate paleoarcheological sites in Tunisia.	200,000
Total, archeological research and excavation.		1,300,000

II. Archeological restoration—Explanatory note

The estimates listed below for preservation and restoration of archeological sites is based on the desire of our diplomatic missions abroad, which the Institution shares, to foster international cultural development through collaboration in work which is the logical extension of archeological research undertaken by American institutions in the excess countries. Listed below, therefore, are illustrative projects in preservation and restoration which have been recommended by the Department of State, on the advice of overseas mission, and judged meritorious by a panel of distinguished American archeologists who have firsthand knowledge of the sites and monuments in question.

Institution	Project	Amount
American Research Center in Egypt	Conduct preliminary survey leading to the restoration of archeological sites and monuments in Egypt, especially the temples of Karnak and the royal tombs and pyramids of Saqqarah.	$150,000
Smithsonian Institution	Restoration of Roman Byzantine archeological sites in Tunisia.	150,000
Total, archeological restoration		300,000

III. Systematic and environmental biology

Explanatory note: The studies and conferences proposed in connection with the international biological program (IBP) will be channeled through, and reviewed by, the U.S. National Committee for the IBP. The IBP is expected to develop into a significant international scientific effort, involving some 44 countries, aimed at taking a comprehensive biological inventory of the earth's terrestrial environments, as an essential first step in determining the relative productivity of these different environments in the face of the rising human populations that will inhabit them.

Institution	Project	Estimated grant expressed in U.S. dollars
U.S. National Committee for the International Biological Program (IBP).	To support IBP preparatory studies which will establish the scope of research and determine areas for field study for a 5-year research program, the operational phase of which is expected to begin during fiscal year 1968.	
	Funds will be apportioned as follows:	
	International planning conferences	$180,000
	Preliminary surveys to delineate natural areas for future study.	86,000
	To assist in development of research capabilities of centers in areas to undergo intensive study.	731,000
	Total IBP	997,000
Smithsonian Institution	To finance studies and field work in marine biology in such nations as India, Tunisia, Guinea, Yugoslavia, or Ceylon.	200,000
University of Michigan	To make before and after studies of the plankton communities of the Nile River delta area of the Mediterranean, which may be radically altered through changes in salinity and circulation caused by the construction of the Aswan Dam.	500,000
Smithsonian Institution	To provide for appropriate U.S. contribution to the establishment of international "Atolls for Science," or conservation sites for continuous biological study of coral reef environments in the Indian Ocean.	500,000

Institution	Project	Estimated grant expressed in U.S. dollars
Smithsonian Institution	To assist in the development of ecological studies overseas by surveys of opportunities designed to help foreign scientists identify the most deserving areas and projects for study:	
	India	$29,600
	Pakistan	29,600
	Ceylon	12,800
	United Arab Republic (Egypt)	12,800
	Israel	12,800
	Guinea	12,800
	Poland	2,100
	Yugoslavia	2,100
	Tunisia	2,100
	Total	116,700
Johns Hopkins University	To conduct ecological research in India on primates and small mammals and on game species distribution.	111,300
Smithsonian Institution	To initiate a 5-year program in conjunction with the Ecological Institute of the Polish Academy of Sciences, to study the flow of energy and matter through small rodent populations in different environments and the interrelationships of rodent and human populations.	470,000
University of Michigan	To study the changing biological conditions caused by the rising level of the lake behind the Aswan Dam.	250,000
	Total systematic and environmental biology	3,164,000

IV. Museum Sciences

Institution	Project	Estimated grant expressed in U.S. dollars
Smithsonian Institution-American Association of Museums.	To carry out the International Council of Museums' recommendation to establish an exhibits laboratory, preferably in Israel, for the construction of scientific and other educational exhibits for circulation among developing nations, as examples of the potential of museum education.	$750,000
	To provide advisory services by American museum specialists, requested by Egypt, Israel, Pakistan, and Tunisia, for the planning of specific science or youth museums.	25,000
	To hold international and national seminars and planning conferences in various of the excess currency countries, for the purpose of developing national programs in museum education.	160,000
	To support the international travel costs of bringing foreign museum specialists for on-the-job training provided by American museums.	20,000
	Total, museum sciences	955,000

INITIATION OF THREE NEW PROGRAMS

Senator BARTLETT. In addition to $1,300,000 for "Archeological research and excavation," I note three new programs which are estimated to cost a total of $4,400,000. Would you please describe these programs briefly, and indicate why it is necessary to initiate them during the coming fiscal year.

Mr. RIPLEY. I would like to point out this special foreign currency request carries no concomitant of U.S. dollar costs other than the salaries of the three persons to administer the program.

We found universities and museums to whom we award these grants very willing to pay the in-country costs.

In connection with our work abroad, we are extremely concerned and interested in research opportunities for American biologists, people working in various aspects of systematic and environmental biology, who would be more than eager to work with foreign colleagues in these countries.

INTERNATIONAL BIOLOGICAL PROGRAM

This area is of enormous interest to me, because I am very much interested in conservation, and I believe under the proposed international biological program it would be possible to really develop inventories of animal and plant species around the world.

In addition to this kind of basic research, systematic and environmental biology, I am particularly concerned that the U.S. National Museum, one of our most illustrious museums, should develop an understanding of museums abroad and by employing excess currencies, do research of great benefit to American museums on such questions as how to make our museums more effective teaching instruments.

In those areas, such as India, where the major portion of these excess currencies exists, there is a problem of illiteracy. I personally feel, underscoring the literacy problem, that museum exhibits and museum research and techniques provide most significant possibilities for educating illiterate people.

I am very heartened by the response the current Ambassador to India made to my concern. Having worked in the museum field in India myself, and having spent a number of years of my life there, I believe we have a unique opportunity here with museum-style exhibits to develop a service for museums for Indians and for the whole problem of basic subliterate education. I would like particularly to see an organization like the U.S. National Museum with its sense of obligation and competence take a prominent part in such a program.

ARCHEOLOGICAL RESTORATION PROGRAM

Senator BARTLETT. In connection with the proposed archeological restoration program, do other nations contribute funds in equal amounts to this preservation and restoration program, especially in view of the fact that all such sites are located in countries other than the United States?

Mr. RIPLEY. We encourage participation of foreign institutions to the fullest in American programs. They are not paid by these currency programs directly, but, of course, they cannot and do not contribute exactly equal funds.

However, they do provide all sorts of services and assistance, including scientists, many of whom, after being trained, turn out in later years to be the chief administrative officers of their countries.

In the Middle East, particularly, the development and encouragement of archeology has been extraordinary in recent years, and many of these young men working up to positions in their own government are people who have worked as part of American teams.

In addition, we, of course, are provided sometimes with free labor, work space, and all sorts of buildings and research facilities, so it is

difficult to put a monetary tag directly on services any individual country provides.

I may say in general they are very considerable, and most enthusiastically given. We anticipate foreign contributions will be given to these restoration programs, and our Smithsonian part will be limited to advisory services.

In this field we encourage archeological excavators to carry their work to its logical conclusion by preserving the sites they have excavated.

I may say these sites become the principal tourist attractions of these countries, once they are finished, and the sort of thing American visitors are most keen to see.

Senator BARTLETT. Is any effort made to inform the countries involved that the United States is contributing to these restorations?

Mr. RIPLEY. I believe a considerable amount of publicity appears in the press. For example, when I have been in Egypt there have been articles in the press about joint United States and Egyptian projects, and I think it has redounded greatly to the credit of the United States.

Senator BARTLETT. Are there any of these three new and expanded programs which cannot be delayed without detriment to the overall program of the Smithsonian Institution?

PROGRAMS WOULD ADD TO KNOWLEDGE OF FOREIGN CULTURES AND CIVILIZATION

Mr. RIPLEY. I would say, Senator, that we do not feel these programs should be deferred, because of the importance of the work which can be done now to add to our knowledge of foreign cultures and ancient civilizations; because, I would say, of the relationship of the United States with these countries; because of the encouragement these programs provide to research in these countries; and also because of the financial reasons set forth in a letter to the Committee on Appropriations from the Director of the Bureau of the Budget, dated January 28, 1966. In that letter, the Budget Director said foreign currency balances are increasing and it is incumbent on us to devise intelligent ways of using them to the maximum extent possible.

The Bureau letter states that the new uses proposed in this budget will be of benefit to the United States, and will be at no current or prospective cost to the American taxpayer.

RECOMMENDATIONS OF DEPARTMENT OF STATE

I may add that these projects are based in part on recommendations that we have received from the Department of State or have been completely cleared with the Department of State.

We believe the programs are complementary to our general foreign aid objectives, that the content of these programs and the Smithsonian competence are parallel, and that it is appropriate and suitable for us to be charged with the responsibility of carrying them on.

Senator BARTLETT. I think it is appropriate that you be charged with the responsibility, but I do want to dwell for a bit upon the fact that your justifications indicate a good share of these programs are presented because of recommendations made by the Department of State on the advice of their oversea missions. Is that correct?

Mr. RIPLEY. It varies in each case. Most of them have emerged as important research from within the scientific community; others, notably archeological restoration, were initiated through State Department missions. For example, in Egypt quite obviously one of the most significant things we could do would be in archeology. The Smithsonian is the father and mother of archeology.

Interest here started in 1847, and we are competent to advise and secure the advice of university personnel and specialists in the area of archeology.

CONCERN OVER DISAPPEARANCE OF CERTAIN ANIMALS

In Ceylon we are much concerned about the disappearance of certain animals in the country. The construction of forests and national parks gives an opportunity to observe unique species of animals before they disappear.

In this case, the University of Michigan and others would be glad to develop studies in this area.

I would not say in this case the Department of State or their local representatives have required us to do this, but they concur that this would be a suitable and most effective way of developing mutual programs.

Senator BARTLETT. They have suggested it?

Mr. RIPLEY. Yes; it varies in each case.

Senator BARTLETT. Then my next question follows: Do you have any information as to why they, that is to say the programs, are not included in the foreign aid program of the United States, rather than your budget request?

Mr. RIPLEY. If we are to administer the programs, then it comes under our budgetary request, and, therefore, it is not part of a specific foreign aid appropriation.

Senator BARTLETT. They might ask for the money and transfer it to you, and have the burden of justifying the budget request.

Mr. RIPLEY. Yes, Senator; this is certainly conceivable. We feel it is more efficient and more direct if we ask for it, because we know about it, and what we can do.

I found as a private citizen, before joining the Smithsonian, that it was somewhat anomalous that the Department of State would attempt to develop a whole staff of people, essentially administrators of the Department, who suddenly had to acquire knowledge in entirely new fields.

Senator BARTLETT. I agree wholeheartedly.

Mr. RIPLEY. It seemed to me it was not valid for them to ask for the funds and justify them.

Senator BARTLETT. My only thought is when you ask for a little tiny bit of money, that is in relation to some other agency of the Government, you have an increase in your budget which looks tremendous, whereas it would not be significant in the Department of State.

Mr. RIPLEY. This is true. This is perhaps a voluntary assumption by the Smithsonian of an onerous burden. We feel we should speak out on these subjects for the sake of efficiency and on the basis of our own expertise.

As you know, other parts of the Government also administer foreign currency appropriations—the Library of Congress, Department of

Agriculture, Health, Education, and Welfare, and the Bureau of Standards.

We felt there was no reason why we should not speak to this issue and, as specialists in these fields, speak to the utilization of these funds.

Senator BARTLETT. Will you speak out further on these animals that are disappearing?

DISAPPEARANCE OF CEYLONESE ELEPHANT

Mr. RIPLEY. The worst is the Ceylonese elephant, a branch of the Indian elephant, distinguished by more delicate wrists, and it is curious that the males and females virtually never develop tusks.

There is some extraordinary relation between the environment in Ceylon and other unknown conditions, which means these animals are Muchnas or tuskless animals. They are just about as large as the Indian animals. I have been chased by one, and know the dimensions pretty well.

Very little is known about their gestation period, problems of birth, reproduction, much of which is of interest to scientists because of the large brain. All we know is the elephants are disappearing, whether due to poaching or the disruption of the pattern of the animals, who are locally migratory.

It is an interesting subject in itself. The species is on our list of the most threatened animals in the world, along with others, on lists maintained at Switzerland. This is a good example of these threatened animals.

MONKEYS, MAMMALS, AND BIRDS

A number of the primates, monkeys, in Ceylon are of particular interest, their habits and social habits. These are things the ecologists are very interested in studying.

There are accessory mammals and several birds on the danger list. In addition, there is a vast threat to the parks themselves set up under the British, and largely due to financial stringency these are not well administered.

We feel biologists' research will call attention to these problems and may cause the Ceylon Government to do something about them.

Senator BARTLETT. You might say you are much better informed on animals in Ceylon than on the data processing equipment.

Mr. RIPLEY. I am sorry to say I am.

Senator BARTLETT. You shouldn't be sorry. You should be proud.

Just so the record will be complete, as it always should be, how did it happen you were chased by an elephant?

Mr. RIPLEY. I was driving a Jeep in order to get into a preserve called Yala, which is about 160 square miles, in Ceylon. The terrain consists of bushes and large boulders as high as this room, rounded, dark, and at a distance they look like elephants.

As I came around one of these boulders on a rocky road and proceeded into a rocky stretch, I suddenly realized the boulder in front of me was an elephant, and he proceeded to charge me.

I felt like one of those comic strip situations you see. I threw the Jeep in reverse and proceeded to back away. I could do about 15 miles an hour, and the elephant could do about 18 miles an hour. But by dodging around boulders, I got away.

Running a Jeep backward is not easy.

Senator BARTLETT. He was not friendly?

Mr. RIPLEY. No; he was in a state which sometimes elephants get in approximately twice a year, which is thought to be a breeding stage. He gets into a highly excitable state. It is sometimes thought to be caused also by sinus trouble.

Senator BARTLETT. Is killing elephants prohibited?

Mr. RIPLEY. Yes; except under license. But I am afraid there is much poaching. Poachers usually have Jeeps, and guards if there are any have bicycles. There is no competition.

CONSTRUCTION AND IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK

1967 BUDGET REQUEST

Senator BARTLETT. There will be placed in the record your estimate of a need for $1,589,000 to continue construction and improvements at the National Zoological Park.

(The justification follows:)

Fiscal year:	*Appropriation*
1965	$1,525,000
1966	1,539,000
1967 (estimate)	1,589,000

An appropriation of $1,589,000 is requested to carry out the 5th year project of a 12-year program of capital improvement at the National Zoological Park. In 1967, these funds will provide for the planning of a public service and administration building and for the construction of a multiclimate, animal exhibition building.

The 12-year program is designed to improve the Zoological Park for the millions of visitors by modernizing exhibits; improving visitor conveniences; eliminating of automobile traffic in the center of the park; enhancing educational and recreational values of exhibits and the natural park; subordinating buildings and other structures and increasing planting and landscaping; advancing science through the study of the animals, their health, nutrition, pathology, and behavior; and providing maintenance facilities for economy and efficiency of operation.

Funds totaling $1,275,000 in fiscal year 1963, $1,275,000 in 1964, $1,525,000 in 1965, and $1,539,000 in 1966 have been appropriated for the first 4 years of a continuing program of capital improvements at the National Zoological Park.

These appropriations have provided for: relocation of the east-west road from Connecticut Avenue to Harvard Street; construction of the bird flight cage, and remodeling of the bird exhibition building; construction of exhibits and houses for hardy hoofed stock, consisting of 7 large pens and simple shelters for the exhibition of animals that can be exhibited in the open throughout the year (the heavy antelope, oxen, eland, zebra, buffalo, ostriches, and cape buffalo); construction of the delicate hoofed-stock and deer exhibit, consisting of 2 houses with 6 large exhibit pens and 2 large paddocks for the warmer months (for such animals as okapis, klipspringer, gerenuk, sable antelope dik-dik, water buck, and bongo); construction of 2 paved parking areas for 526 visitors' automobiles and 24 buses; a property yard, warehouse, greenhouse, mechanical shop, garage, and incinerator; installation of a new sewerage system and utilities; and construction of an animal hospital, laboratory, and holding area.

When the modernization and improvement program for the zoo has been completed, the collection of animals maintained and exhibited will amount to over a thousand species (currently approximately 800) and over 4,000 individual animals (currently 2,700 to 3,000). The National Zoological Park will contain one of the major zoological collections in the world with the capability of exhibiting the collections in full accord with its purpose: "the advancement of science and the instruction and recreation of the people."

The remodeled zoo will have adequate parking facilities. A trackless train will provide internal transportation and an interesting view of many of the

animals while traveling to and from the parking areas and other points. This train will be operated on a concession basis and should make a substantial return to the Government.

Visual barriers will be largely eliminated between the visitors and animals by the use of both wet and dry moats, structural glass, and fine stainless steel tension wires.

The viewing eye level will be established at approximately 28 inches from the ground for the benefit of children. Stairs will be eliminated wherever possible and sidewalks will be kept to a maximum slope of 10 percent.

When the 12-year plan has been completed, the animal exhibit area will have increased from 17 acres to 50 acres. Twenty-three acres will be in parkland and 18 acres will be needed for primary circulation (automobile parking, roadways, and sidewalks.) The administration area which will include the educational, eating, and resting facilities; maintenance shops; and hospital and research area will total 13 acres. The total redeveloped area of the zoo will increase from 64 to 104 acres.

There follows a summary of the projects to be undertaken with fiscal year 1967 funds:

1967 program

Planning:	
Detailed plans and designs for public service and administration building	$150,000
Advance planning and consultation for 1969 projects	20,000
Total planning	170,000
Construction:	
Multiclimate, animal exhibition building	1,419,000
Total	1,589,000

PLANNING ($170,000)

Detailed plans and designs for 1968 project, $135,000

Detailed plans will be made for the construction of a combined public service and administration building. This building will house a lecture hall to seat 300 people and will be used for educational and inspirational films, TV presentations, lectures, orientations, and other public service presentations and ceremonies. Groups of people coming to the zoo will be able to assemble in the lecture hall and hear talks, and view movies and slides presented by trained zoo staff about the animals they are going to see.

In this building will be two biological demonstration laboratories. These laboratories will be used by visiting students for special demonstrations directly related to the animals of the zoo. Lectures by teachers will be followed by special tours through the zoo having significant association with the subjects under study. These rooms will also be used by the zoo staff for developing an enrichment program for advanced students interested in biology.

In the basement will be a TV and movie studio for the preparation of educational material to be used in the zoo and on an exchange basis with other zoos. A photographic library and laboratory will be included. The building will contain a library for use by the zoo staff and the visiting public. An answering service where visitors can ask questions of trained personnel will be provided.

In this area also will be constructed a restaurant and cafeteria. It is planned to have an inside seating capacity for 250 people, with outside terraces to accommodate an additional 400 visitors. The design of the restaurant-cafeteria facilities and kitchens will provide much quicker service to the crowds of visitors. The present dining facilities at the zoo are obsolete and inadequate for the large number of visitors, estimated to total 4,536,000 in 1965. At present the seating capacity of the restaurant is only 223 people, the serving lines are slow, the kitchen is small and poorly arranged.

The present restaurant built in 1941 has contributed concession fees to the Government of over one-half million dollars. Under the present system, it is estimated that the income will amount to $100,000 a year. Thus, the restaurant will amortize its investment in a relatively few years. Detailed plans and designs will be made also for the administrative offices. The office building will house the office of the Director, and the administrative staff, including offices for budget, accounting, personnel, engineering, and zoology. This building will have

about 10,000 square feet, designed to complement the present police building in the area adjacent thereto.

At present the administrative office is located in an early 19th century farmhouse, which has badly deteriorated and is heavily damaged by termites. This old dwelling, inadequate and ill-designed for administrative purposes, is located a mile from the center of the zoo. The new administrative offices will provide for more efficient functioning of the directoral and administrative activities by its central location and modern design. This entire complex for education and administration will be located near the new parking lot so that it can be sealed off from the rest of the zoo for use in the evening without disturbing the rest of the zoo.

Smithsonian Institution expenses, $15,000

The Smithsonian Institution will require $15,000 in fiscal year 1967 for the improvement program, including consultants' fees, travel for inspection of good design practices in other zoos, purchase of equipment, and similar expenses directly related to the program of improvements.

Advance planning and consultation for fiscal year 1969, $20,000

Advance plans will be made for the construction of a new exhibit for aquatic mammals, bears, canines, goats and sheep, an additional parking area, and for landscaping.

CONSTRUCTION ($1,419,000)

A multiclimate house is to be constructed as a special environment building to exhibit various types of animals that can only be properly maintained in captivity by duplicating their natural conditions of light, heat, humidity, and local plantlife. The grouping in one buildng of these exotic animals will provide the most economical installation and use of the necessary mechanical equipment. The building will contain approximately 30,000 square feet of interior space of which 80 percent will be used for animal exhibits, related servce area, and mechanical equipment, and the remaining 20 percent for visitors. There will also be approximately 10,000 square feet of cages and moated areas on the outside. Although the building will be basically single storied, it will have both sunken floor exhibits and balcony viewing areas. Service and mechanical areas will be in a partial basement. The construction materials will be plain and exposed aggregate cement, warm brown brick, painted and unpainted metals, glass, tile, and terrazzo.

The building will be designed to hold approximately 300 individual major animals of about 35 different species, and will comfortably handle 20,000 visitors daily.

In this building will be housed the gorillas and orangutans. These will be in large glassed enclosures with appropriate retiring dens and sleeping quarters for the animals. Adjacent outdoor exercise areas will be used in good weather. These exhibits will be separated from the public by structural glass with an electrically charged coating on the inside to discourage the animals from dirtying or hammering the glass. This type of exhibit has been used very successfully at Brookfield, Chicago; Milwaukee, Wis., and other American zoos. The visitor will have an unobstructed view of the animals. The outside exercise yards will be separated from the visitors by moats. The design of these cages will provide for easy cleaning and the handiest method for moving and shifting the animals. The most progressive innovations in gorilla and orangutan management will be taken into account. By mechanical controls, it will be possible to duplicate the humidity, light, and temperature of the native jungles of these animals.

Six cages will be used for special changing exhibitions. Environmental control will permit delicate and difficult-to-keep animals to be housed and exhibited.

There will be four major aquatic exhibits in this building. By grouping, the special temperature control of the water, filtration, and salinity can be controlled. These exhibits will have large aquarium glass fronts, showing both the underwater and above water scenes. There will be 4 feet of water, and at least 8 feet of "land" and space above the water. The first of these exhibits will contain the American beaver. The beaver lodge will be a cutaway, showing how the animals enter the lodge from the underwater entrance way and pass into the commodious inside chambers of the upper living area. The inside of the beaver lodge will be illuminated by red light, which the animals

cannot perceive, so that they will be perfectly at ease and yet visible to the visitor.

The second exhibit will be one for the manatee, the "mermaid" or sea cow. This exhibit will be primarily aquatic and have a degree of salinity, to duplicate the tidal estuaries where these animals live. The water would be tempered to simulate their natural conditions. Since these animals do not come out on land, the cage will be designed to simulate the South American riverbank, and will exhibit some of the natural companions of the manatee, such as the marmosets, sloths, and the hoatzin.

The third aquatic exhibit will be an exhibit for the platypus of Australia. The importance of exhibiting this animal lies in the fact that it is a rare type of mammal, is most difficult to exhibit, and is nocturnal, aquatic, and burrowing. This animal has been successfully exhibited in Australia and in New York. By providing the special environment that this animal needs, a most stimulating and interesting exhibit will be presented.

The fourth aquatic exhibit will be for penguins. The National Zoo is experienced in exhibiting the Antarctic penguins. The water will be temperature controlled; the humidity and light also must be controlled.

There will be four multipurpose, environment-controlled cages to exhibit animals from the Temperate Zone, northern climates, arid desert areas, or the tropical rain forest. These cages will be designed so that it will be possible to make them into riverbank scenes with appropriate background vegetation; desert scenes; savanna; or any other desired environment, with the exception of the Arctic. These cages will be approximately 30 feet in width, 20 feet high, and from 12 to 15 feet deep. They will be constructed for a 4-foot water level. The water filtration, recirculation, and tempering system will be in combination with the other aquatic exhibits. These cages will be most interesting to the public since it will be possible to exhibit animals seldom seen.

The National Zoological Park has always enjoyed an enviable reputation for exhibiting, keeping, and breeding rare animals. This multiclimate house, and particularly these multipurpose cages, will further increase our capability. Animals that would be contained in this area are the silky anteater; three-toed sloth; hoatzin; howler monkeys; some of the rarer forms of marmosets; pangolin; giant armadillo of South America; the giant water shrew of Africa; and many others.

The animals exhibited in this house will include a small collection of insects such as the leaf-cutting ant, the rhinoceros beetle, the very large imperial scorpion from West Africa (6 to 8 inches in length), some of the centipedes from South America and Africa (8 to 12 inches long), and the "walking stick" from the Malayan Archipelago (about 12 inches long). The entire insect area would be built for the special requirements of the insects. The uniqueness of this building and the flexibility of its design will permit many opportunites for careful observations of the animals housed and exhibited here. Closed-circuit television and observation posts for behavioral scientists will be provided.

The multiclimate building will be located north of the present bear pits.

Planned Program on Schedule

Senator Bartlett. Is your planned program on schedule at this time?

Mr. Ripley. Yes, sir; we are on schedule.

Prior programs have been substantially obligated for 1963, 1964, and 1965. The 1966 program for the hospital and research center, which is now 30 percent complete as to design, has been approved by both the Commission of Fine Arts and the National Capital Planning Commission. We expect to put the hospital and research center under construction before the close of this year.

Senator Bartlett. Describe briefly the proposed construction program for fiscal year 1967.

Mr. Ripley. The proposed program for 1967 will carry out the fifth year of a 12-year capital improvement program and consists essentially of the construction of a multiclimate animal exhibition building.

This is fascinating and entirely new to us in construction. It will

be a special environmental building for animals which can only survive in captivity if their actual habitat conditions of light, heat, humidity, and local plant life are reproduced.

It will be designed for about 300 individual major animals of 35 different species, and will handle up to 20,000 visitors a day, which is tremendous.

We are going to have a beaver lodge showing how the animals enter the lodge from under water. This can be seen by the public. One of the most fascinating things for children to see is a beaver house.

We can illuminate this beaver lodge with red light, which means the animals will be quite at ease and active during the daylight, which is the time the visitors can see them.

Many of these animals are seminocturnal. By substituting red light you can switch them to be active as we are in the daytime. This is very practical and is marvelous for viewing.

We are going to have sea cows, which are rare and only found in Florida; marmosets, and hoatzins. They are fascinating birds born with small claws on their wings so they can climb back up the branches to the nest if they fall into the water. We will also display the duckbill platypus, temperate zone animals, northern climate animals, and animals from deserts and rain forests.

It will be one of the most exciting and interesting buildings in the zoo. It is one that will be parallel to zoos in Frankfort and London. Some work is being done on this in New York. It is the latest thing in zookeeping. It is very stylish, and we feel this would be an ideal adjunct to our zoo renovation program.

We are going to have also a small administration building encompassing about 10,000 square feet.

Location of Administration Building

Senator Bartlett. Where do you plan to locate the new administration building?

Mr. Ripley. It is going to be adjacent to the police station in the center of the present zoo. The old administration building is riddled by termites, and is going to have to be torn down.

Senator Bartlett. They are on permanent exhibition.

RESTORATION AND RENOVATION OF BUILDINGS

1967 Budget Request

Senator Bartlett. Your estimate of funds required for "Restoration and renovation of buildings" is $2,300,000. The justification statement will be placed in the record.

(The justification follows:)

Fiscal year:	*Appropriation*
1966	$2,248,000
1967 (estimate)	2,300,000

An appropriation of $2,300,000 is requested for 1967. These funds will provide for restoration and renovation of the old Court of Claims Building as a Gallery of Art; planning for improvement of the Arts and Industries Building as an "Exposition Hall"; feasibility studies of the future building needs of the Institution

to include provision for reference collections, laboratories, offices, workrooms, and library in the west court of the Natural History Building; a Center for Advanced Study; a Gallery and Garden of Sculpture; Science Building; Administration Building; and a garage for the Smithsonian Institution Building; and for renovating the Belmont Study Center.

1967 PROGRAM

There follows a summary of the projects to be undertaken with fiscal year 1967 funds:

Restoration, Old Court of Claims Building	$1,870,000
Planning, Arts and Industries Building	133,000
Feasibility studies (West courtyard of Natural History Museum; Center for Advanced Study; Gallery and Garden of Sculpture; Science Building; Administration Building; garage for the Smithsonian Institution Building)	250,000
Repairs (Belmont Study Center)	47,000
Total request	2,300,000

OLD COURT OF CLAIMS BUILDING ($1,870,000)

$1,870,000 is requested for the restoration and renovation of the Old Court of Claims Building for use as a Gallery of American Arts, Crafts, and Design by the Smithsonian Institution.

This gallery is needed for the exhibition of the arts of design, including crafts, decorative arts, and industrial design. It is needed as a national gallery for public display of America's creative genius in the Nation's Capital, comparable to the national galleries that have been formed in the capitals of other nations—such as the Victoria and Albert Museum in London, the Musee de Arts Decoratifs in Paris, and the Museo de Artes Populares in Mexico City.

The gallery will display superlative selections from the Smithsonian collections, including paintings and sculpture, but with emphasis on glass, porcelain, tapestry, furniture, jewelry, and similar creations of American crafts and design. Thus it will be unique among the galleries of the Smithsonian.

The National Gallery of Art differs in that it emphasizes masterpieces of painting and sculpture, especially of European origin. The Freer Gallery is devoted primarily to oriental art. The new National Portrait Gallery is essentially historical, being concerned with portraits of men and women who have made significant contributions to the history and development of this country.

The National Collection of Fine Arts of the Smithsonian is expressly authorized by the act of May 17, 1938, to display exhibits as herein proposed. Restrictions of space in the Fine Arts and Portrait Galleries (formerly known as the Civil Service Commission Building) will not permit such displays in that building.

The Smithsonian is directed by statute to foster by public exhibition in Washington and other parts of the United States a growing appreciation of arts, both of past and of contemporary time. It is further directed to encourage the development of contemporary art and to effect the widest distribution and cultivation of such art. This museum of American arts and design will present excellence in the fields of creative crafts and decorative arts, folk and primitive arts, industrial arts and design, and the fine arts. It will provide a truly national exposition of American creativity.

A special exhibit area will present foreign exhibits arranged to coincide with the visits of foreign heads of state; exhibits sponsored by foreign embassies; and special exhibitions arranged in association with White House and civic activities. The assembly area in the large upstairs gallery will be used for receptions, lectures, concerts, and other assemblies, as well as for changing exhibitions as a part of the activities taking place at the Smithsonian Institution, the Blair House, and similar functions.

Located on Pennsylvania Avenue, across from the White House, and adjoining Blair House, the building is a part of the Lafayette Square project for the preservation of historical buildings fronting on Pennsylvania Avenue, Jackson Place, and Madison Place. When restored and renovated, this gallery will make

a significant contribution to an appropriate environment compatible with the use, design, and scale of the White House.

The Old Court of Claims Building is a distinguished building designed by the well-known American architect, James Renwick, and is a monument to Washington's cultural history. It is reputed to be the first building in the United States erected for use as an art gallery and also the first American building designed in the French renaissance revival style.

The building has been declared by the Joint Committee on Landmarks (appointed by the National Capital Planning Commission and the Commission of Fine Arts) as a landmark of both historic and esthetic importance which contributes significantly to the cultural heritage and interest of the District of Columbia and which should be preserved.

The proposed gallery will form an important center for realizing the President's goals in support of the arts.

The President has written to the Secretary of the Smithsonian Institution as follows:

"I am enthusiastic about your suggestion that the Smithsonian Institution take over the Old U.S. Court of Claims Building and establish it as a gallery of arts, crafts, and design.

"No more appropriate purpose for the building could be proposed than to exhibit, in the restored gallery, examples of the ingenuity of our people and to present exhibits from other nations, whose citizens are so proud of their arts.

"I would hope that tours of this gallery might play a memorable part in the official Washington visits of foreign heads of state, offering them not only a glimpse of our art but an opportunity to enjoy the friendliness and hospitality of our people.

"I have therefore approved your recommendation, and am instructing Mr. Lawson Knott, Administrator of the General Services Administration, to transfer the building to the Smithsonian Institution under existing authority. This is contingent, of course, upon your obtaining authorization for the funds necessary to renovate the building for use as a gallery."

Construction cost

The cost of restoration and renovation has been estimated by the General Services Administration to be $1,850,000, as shown in the following letter:

GENERAL SERVICES ADMINISTRATION,
PUBLIC BUILDINGS SERVICE,
Washington, D.C., December 16, 1965.

Mr. JAMES C. BRADLEY,
Assistant Secretary,
Smithsonian Institution,
Washington, D.C.

DEAR MR. BRADLEY: As requested by your letter of December 8 there is enclosed a revised estimate of the improvement cost to restore, rehabilitate, and adapt the Old Court of Claims Building for use as a gallery.

This estimate represents our proposed distribution to the several items of cost of the $1,850,000 allowed by the Bureau of the Budget.

Sincerely yours,

CASPER F. HEGNER,
Commissioner, Public Buildings Service.

REVISED IMPROVEMENT BUDGET ESTIMATE TO RESTORE, REHABILITATE, AND ADAPT THE OLD COURT OF CLAIMS BUILDING FOR USE AS A GALLERY OF AMERICAN ARTS, CRAFTS, AND DESIGN

Exterior work:	
Earthwork	$3,000
Concrete	10,000
Roofing and sheetmetal	45,000
Masonry (partial replacement of stonework), brick, brownstone, scaffold, sidewalk protection, cleaning, pointing	560,000
Ornamental iron	25,000
Service entrance facility	10,000
Exterior subtotal	653,000

Interior work:	
Demolition	$20,000
Marble, tile, stone, terrazzo	8,000
Metal door and trim	2,000
Plaster	220,000
Mechanical: Plumbing, HVAC, electrical	300,000
Special lighting (Museum)	30,000
Carpentry: Archway and doors, windows, supply; windows, remove; wood floors—new pine, sand and finish	30,000
Insulation	5,000
Wood floor—parquet, 8,200 square feet	80,000
Hardware—rough, finish	2,000
Painting	30,000
Glaze and glazing	1,000
Resilient floor—removal asphalt tile, new "C" group	3,000
Elevators	60,000
Service entrance	30,000
Special finishes	30,000
Interior (subtotal)	851,000
Total net construction	1,504,000
Brought forward:	
Total net construction	1,504,000
Overhead and profit	171,000
Estimated contract cost	1,675,000
Reservations and contingencies:	
GSA	150,000
SI	25,000
Total	175,000
Estimated improvement cost	1,850,000

An additional amount of $20,000 is requested in order to finance the additional cost to the Smithsonian Institution for consultants, preliminary design of exhibits, and other extraordinary expenses in connection with the construction project.

Transfer of building

The transfer of the property to the Smithsonian Institution by the General Services Administration for use as a museum and art gallery was approved by the President on June 23, 1965. The transfer is authorized under 202(a) of the Property Act. The transfer is further authorized by the act of May 20, 1932 (40 U.S.C. 122), which authorizes Federal authorities administering property within the District of Columbia owned by the United States to transfer jurisdiction of such properties for purposes of administration and maintenance.

The transfer of this building is contingent upon the appropriation of necessary funds for its restoration by the Congress.

The Institution is authorized by the act of August 22, 1949, to make repairs and alterations to buildings and grounds occupied by the Institution in the District of Columbia and elsewhere.

The Smithsonian for more than a century has held statutory responsibility for the administration of art galleries. The act of August 10, 1846, provides that objects of art located in Washington and owned by the United States shall be delivered to the Institution. Additional galleries of art were placed under the Smithsonian's administration by the Congress. These include the National Gallery of Art, the National Collection of Fine Arts, and the National Portrait Gallery. In addition, the Freer Gallery of Art was established through the gift of Charles Lang Freer and accepted by the Board of Regents in 1906, with the approval of President Theodore Roosevelt, pursuant to the statutory authority of the Institution to accept gifts.

Appendix

There is attached an appendix including the letter from the President to the Smithsonian Institution approving the transfer; a letter recommending the transfer signed by Lawson B. Knott, Jr., Administrator of General Services, and S. Dillon Ripley, Secretary of the Smithsonian Institution, and approved by the President; the historical background of the building; the General Services Administration's construction program; the status of design; and the authority to transfer the building.

THE WHITE HOUSE,
Washington, June 23, 1965.

Dr. S. DILLON RIPLEY,
Secretary, Smithsonian Institution,
Washington, D.C.

DEAR DR. RIPLEY: I am enthusiastic about your suggestion that the Smithsonian Institution take over the old U.S. Court of Claims Building and establish it as a gallery of arts, crafts, and design.

No more appropriate purpose for the building could be proposed than to exhibit, in the restored gallery, examples of the ingenuity of our people and to present exhibits from other nations, whose citizens are so proud of their arts.

I would hope that tours of this gallery might play a memorable part in the official Washington visits of foreign heads of state, offering them not only a glimpse of our art but an opportunity to enjoy the friendliness and hospitality of our people.

I have therefore approved your recommendation, and am instructing Mr. Lawson Knott, Administrator of the General Services Administration, to transfer the building to the Smithsonian Institution under existing authority. This is contingent, of course, upon your obtaining authorization for the funds necessary to renovate the building for use as a gallery.

With kindest regards.

Sincerely,

LYNDON B. JOHNSON.

GENERAL SERVICES ADMINISTRATION,
Washington, D.C., June 11, 1965.

THE PRESIDENT,
The White House.

DEAR MR. PRESIDENT: The building located at Pennsylvania Avenue and 17th Street NW., which housed the Court of Claims until 1964, originally was designed as an art gallery for W. W. Corcoran by James Renwick, who also designed the original Smithsonian Institution Building. It was occupied by the Corcoran Gallery from 1869 until 1897, and was acquired by the United States in 1901.

The Lafayette Square project, in addition to construction of a new office building and a new Court of Claims, and Court of Customs and Patent Appeals Building, includes renovation of this building and certain structures fronting on Lafayette Square for office use. Recently use of this building by the Smithsonian Institution as a museum and art gallery has been suggested. GSA's architect advises that the building is readily adaptable to restoration for the use for which it was originally designed. At best, conversion of the building for office use would be uneconomical.

One million dollars of the total project funds allotted to this building ($100,000 of which had to be spent unexpectedly to shore up the building during excavation for the adjacent new office building) will permit only a minimum program on the interior and exterior. Funds available for the entire Lafayette Square project are extremely limited, any portion of which not required for this building can gainfully be used to improve the usability of the space in the other buildings being renovated. Whether funds available to GSA to renovate the building for office use are available for its restoration for use as a museum and art gallery is of doubtful legality. The Smithsonian Institution will require appropriated funds for the restoration of the property in an amount approximating $1,850,000.

It is recommended that the property be transferred under existing authority to the Smithsonian Institution for use as a museum and art gallery.

Respectfully yours,

S. DILLON RIPLEY,
Secretary, Smithsonian Institution.
LAWSON B. KNOTT, Jr.,
Administrator of General Services.

Approved June 23, 1965.

LYNDON B. JOHNSON.

HISTORICAL BACKGROUND

The building was designed by James Renwick, of New York, to house the collection of paintings and art objects of W. W. Corcoran, a resident of Lafayette Square. Renwick had earlier designed the turreted Smithsonian Institution. Construction began in 1857 and in 1861, while the building was only a shell, it was seized by Montgomery C. Meig, Quartermaster General of the Union Army and used to house the General's staff and supplies for the Union Army.

The building was returned to the trustees of the Corcoran Gallery of Art in 1869 who were paid a rental of $125,000 for use of the building during the 8-year period. The building was restored and completed and the doors opened to the public in 1874. The opening was attended by an uninvited guest, the then President of the United States, Gen. Ulysses S. Grant. In addition to the paintings and objects of art, statues of the great artists of history by Moses Jacob Ezekiel chiseled from Carrara marble occupied the niches. It is said that W. W. Corcoran's gift to Washington represented a value of approximately $1,255,000, consisting of $250,000 for the building and site, $100,000 for the original collection and an endowment of $900,000 for the maintenance and growth of the institution. It was one of the first galleries in the United States and the Corcoran Art School was another pioneering venture.

By 1897, the growth of the galleries demanded larger quarters and a move was made to its new and present home at 17th Street and New York Avenue.

In 1899, the Court of Claims moved into the old Gallery Building which was purchased by the Government in 1901 for $300,000 pursuant to the authority in the act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1902, and for other purposes (31 Stat. 1133). Until vacated in 1964, the court had occupied the building for approximately 65 years.

GSA's construction program for the Lafayette Square area

The design of Federal Office Building No. 7 and the U.S. Court of Claims and the U.S. Court of Customs and Patent Appeals includes (1) the construction of the two basic structures and (2) the preservation of designated buildings on Pennsylvania Avenue, Jackson Place, and Madison Place. Both phases of the project are intended to preserve the dignity of historic Lafayette Square in a manner compatible with the design and scale of the White House.

The construction contract for the first phase, Federal Office Building No. 7 and the Court's Building, was awarded in January 1964 and work as of May 1, 1965, was about 20 percent complete.

The second phase was administratively authorized with a maximum limit of cost in the amount of $5,670,000, of which $5,190,000 is for improvements and alterations and $480,000 for design, engineering, and construction supervision. Included in this second phase is the repair, restoration, and improvement of the interior and exterior of the old Corcoran Gallery of Art, to provide office space for various presidential commissions and other Federal activities requiring limited amounts of office space with proximty to the White House and the Executive Office of the President.

STATUS OF DESIGN—SECOND PHASE

Design work on the second phase of the project was started in October 1964 and is scheduled for completion in September 1965. The working drawings of the old Corcoran Gallery of Art are approximately 75 percent complete. The building contains approximately 38,000 square feet of space. Of the total budget available for the entire project, the contract architect has allocated $1 million for the building which is adequate only for a minimum program on the

exterior and the interior. For example, the design contemplates expenditure of an estimated $206,000 on minimum replacement and patching of exterior stone and brickwork, whereas a detailed inspection indicates that complete exterior restoration would cost approximately $850,000.

A representative of the architect's firm volunteered that since the building was originally designed as an art gallery it was very adaptable to such use, whereas conversion for office use would result in a very low ratio of usable office space to gross building area. Much of the lobby, stair hall, and corridors could be used as display areas whereas such space has no value for office use.

The extremely tight budget for the entire second phase provides only for a very minmum program. Many of the upper floor areas of the buildings on Jackson Place although usable as office space would have very little if any restoration. Transfer of the old Corcoran Art Gallery to the Smihtsonian Institution would free up remaining available funds originally scheduled for this building. An uncontemplated expenditure of $105,000 already has been made to shore up the building simply to keep it from falling into the adjacent excavation for Federal Office Building No. 7. Remaining available funds are sorely needed for the proper execution of the rest of the project. Also, there is doubt as to whether funds available to convert the building to office use legally could be utilized to convert the building to uses contemplated by the Smithsonian.

Authority to transfer the building to Smithsonian Institution

Under the act of March 1, 1919, as amended (40 U.S.C. 1), the Secretary of the Treasury, who acquired the building, was given control of and authorized to allot all space in the several public buildings owned by the United States in the District of Columbia, with certain exceptions not here pertinent. Under various reorganization plans and statutory enactments, notably the provisions of the Federal Property and Administrative Services Act of 1949, (63 Stat. 377), as amended, and Reorganization Plan No. 18 of 1950 (64 Stat. 1270), the functions and powers of the Secretary of the Treasury and others relating to the administration of public buildings devolved upon and now vested in the Administrator of General Services. The Smithsonian Institution is an independent establishment in the executive branch of the Government and is an "executive agency" as that term is used in the Property Act, supra.

Accordingly, there are two methods whereby the Court of Claims Building may be legally transferred to the Smithsonian Institution. The first method is to transfer the proprety under 202(a) of the Property Act and applicable regulations as excess to GSA's needs. With the approval of the Director of the Bureau of the Budget, and upon certification by the Smithsonian Institution that sufficient funds are not available to effect reimbursement, the transfer can be made without reimbursement.

The second method of effecting the transfer of the Court of Claims Building is pursuant to the provisions of the act of May 20, 1932 (47 Stat. 161), as amended (40 U.S.C. 122), which authorizes Federal authorities administering properties within the District of Columbia owned by the United States to transfer jurisdiction over such properties among or between themselves for purposes of administration and maintenance under such conditions as may be mutually agreed upon. Such transfer is subject to recommendation by the National Capital Planning Commission.

We understand that the Smithsonian Institution has the authority to accept the transfer, renovate, and operate the building as a museum or gallery, subject to availability of funds.

In the case of the old Patent Office Building, formerly occupied by the Civil Service Commission, legislation was enacted (72 Stat. 68) providing for transfer to the Smithsonian Institution and operation as an art gallery. In that case, however, GSA had taken the position that the building was not excess to its needs for office use. It is to be noted that in this instance, the enabling legislation provided for GSA to perform the conversion work but required the cost be funded by the Smithsonian Institution.

PLANNING ($133,000)

ARTS AND INDUSTRIES BUILDING ($133,000)

The amount of $133,000 is urgently requested for the preparation of plans and specifications for the rehabilitation and improvement of the Arts and Industries Building.

This building, originally constructed to house large collections of great value donated by foreign governments and other exhibitors at the Philadelphia Centennial Exposition of 1876, is admirably suited for use as an exposition hall, to accommodate a wide variety of exhibitions, displays, and special events.

The building 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.

Basically, the building is a one-story brick structure with exposed steel truss system supporting a metal covered roof. Basement areas are located beneath the northeast, northwest, and southwest pavilions. The four main halls are in the form of a cross with the rotunda located at the center. Partial second floor levels have been installed and a mezzanine borders the east, west, and south halls. The original four large main halls combined with the adjoining smaller exhibit spaces on the main floor provide over 80,000 square feet of extremely adaptable space with ceiling heights ranging from 14 feet under the galleries to 42 feet in the main halls.

The decision of the Board of Regents of the Smithsonian Institution to continue using the major portions of this building for exhibition purposes furnishes an unparalleled opportunity to present industrial, technological, architectural, scientific, and other large-scale exhibits and similar presentations which cannot be accommodated in other museum buildings. Facilities for visitor orientation, lectures, demonstrations, ceremonies, special events, and other public programs will also be provided.

It is proposed to prepare plans and specifications for the installation of heating, ventilating, and air-conditioning systems for the entire building; for office, work space, and reference collection areas on the second floor level; for the installation of passenger and freight elevators, alarm systems and telephone facilities, replacement of deteriorated interior finishes, plastering, and painting; planning for installation of public restrooms and plumbing changes; and for related improvements to conform to current standards of appearance, convenience, utility, and safety.

The location of this significant and unique building on the Mall adjacent to the other buildings of the Institution provides a convenient and accessible facility for the visiting public. During fiscal year 1965, 2,028,175 persons visited this building. Of this total, more than 50 percent arrived during the hot and uncomfortable weather of June, July, and August. The installation of the temperature and humidity control systems in the building will provide a major improvement for the comfort of our visitors and for the staff occupying certain areas of the building. The proper preservation and conservation of museum objects for the future cannot be satisfactorily accomplished except by the installation of the proposed systems.

The open areas in the building, free of structural or architectural interferences, combined with the high ceilings, arched openings, and general feeling of spaciousness established the "exposition" character of the structure. This objective, originally intended by the architects, Cluss & Schulze, has been firmly established in the 84 years of museum activities in the building. A return to the "Exposition Hall" concept can be economically realized at a minimum investment in the required rehabilitation and alterations.

Estimates for alterations, renovation, and improvements were developed by the Public Buildings Service, General Services Administration.

ARTS AND INDUSTRIES BUILDING (JEFFERSON DRIVE AT 9TH STREET)

Historical background

Originally known as the National Museum Building, the Arts and Industries Building was designed by Cluss & Schulze, architects, to house the large collections of great value donated to the United States by foreign governments and other exhibitors at the Philadelphia Centennial Exposition of 1876. The original one-story plan was influenced by the preferences of experts following the Paris exposition in 1867. The modernized Romanesque style of architecture was adopted in order to express a relationship with the original Smithsonian building which was designed by James Renwick.

In the words of the architects in the year 1879, "To modernize this style was found necessary on account of the different building material, and to do justice to the purposes of the building, with its modern demands of perfect safety and

elegance of construction, of greatest possible available floor space, of easy communication, efficient drainage, a well-calculated and pleasing admission of light, free circulation of air, and all other hygenic dicta."

Funds were appropriated for construction on March 3, 1879, ground was broken on April 17, 1879, the main walls were in place by November 1879 and the construction work completed in 1881. The first use of the new building was for the inaugural reception of President Garfield on March 4, 1881.

In 1883, Spences F. Baird, Secretary of the Smithsonian Institution, remarked that "the building continues to preserve the reputation it has acquired as representing the maximum of convenience and adaptation to its purposes with the minimum of original cost and expense for repairs."

Experience through the ensuing years has clearly substantiated the soundness of the architect's approach to the design of the building and it remains today as a flexible and adaptable structure capable of accommodating the great variety of events, activities, and programs envisioned for it, while only requiring the proposed renovation and improvements to conform to present day standards.

Rehabilitation and improvement

Improvements:		
Demolition	$11,000	
Construction	592,000	
Mechanical	995,000	
Reservations	12,000	
Contingencies	121,000	
		$1,731,000
Expenses:		
Duplication, bids, etc	13,000	
Drawings and specifications	114,000	
Supervision and inspections	53,000	
Staff services	6,000	
		186,000
Estimated project cost		1,917,000
Smithsonian expenses		33,000
Total construction costs including planning		1,950,000
Drawings and specifications, duplication, and staff services, total request		133,000

FEASIBILITY STUDIES ($250,000)

Funds in the amount of $250,000 are requested to finance feasibility studies of the future buildings needs of the Smithsonian Institution. These studies are needed to provide the basis for determining the scope of building and facilities, location, the estimated cost, recommendations for financing, and any necessary legislation.

WEST COURTYARD OF THE NATURAL HISTORY BUILDING

This space is needed to house the expanded research operations in the natural sciences and the very active growth in the collections of scientific specimens by providing space for reference collections, laboratories, offices, workrooms, and the library.

The recently completed additions to the Natural History Building substantially relieved the critical space shortage problem existing in that building. These additions were justified on the basis of the immensely important and numerous exhibit and reference objects and specimens that have been collected and safeguarded within the Smithsonian since its founding and especially over a period of 30 years, starting in 1930, the year the additions were authorized. More recent additions to the collections have now made necessary this request to plan for building space increase.

During fiscal year 1965, over three-quarters of a million of natural history specimens were accessioned into the collections, now a grand total of over 49 million. Noteworthy among these additions were 10,000 ichthyological speci-

mens from the island of Dominica and 5,700 mammals from South Africa, Mozambique, and Iran.

An increasing number of scientists, researchers, students, and members of the public are using the reference collections and other facilities of the Museum of Natural History to pursue their studies. During fiscal year 1965, several hundred such persons visited the museum for periods ranging from hours to months. It is necessary to continue to provide adequate work space and library facilities to encourage these serious studies and make the natural history resources readily available to all. By statute, the Smithsonian Institution is directed to do so.

Additional library space is required to house basic scientific publications. These materials are vital to Smithsonian and outside researchers in identifying specimens and in relating them to their environment.

Steps have been taken to obtain the fullest and most effective utilization of all space. In the original Museum of Natural History Building (completed in 1911), high ceiling office, laboratory, and storage areas have had a mezzanine level added to double the usable floor area. In the attic, additionl lighting and rearrangement and addition of specimen cases have provided a substantial increase in storage space. In the new wings, automobile parking has been removed from the basements and the space converted to productive program uses.

To sustain this effort of providing adequate space to meet Smithsonian growth and research needs, it is proposed to study the feasibility of constructing additional laboratory, library, and reference collection space in the west courtyard of the Natural History Building. This court, no longer required for ventilation, offers an excellent solution to the present demand for the construction of a seven-floor building containing over 100,000 square feet of highly effective and most convenient floor space.

Adjoining areas of the existing main building would be modified to permit installation of public cafeteria seating 350 persons and a staff dining area seating 100, with a single kitchen to serve both facilities. There are no dining facilities in the existing museum.

Elevators, lighting, heating, air conditioning, plumbing, and electrical work would be included.

A feasibility study is required to determine the scope of the improvement and the estimated cost.

CENTER FOR ADVANCED STUDIES

Speaking at the Smithsonian Bicentennial, the President declared:

"* * * that ideas, not armaments will shape our lasting prospects for peace * * *. We must move ahead on every front and at every level of learning. We can support Secretary Ripley's dream of creating a center here at the Smithsonian where great scholars from every nation will come and collaborate * * *. We must assemble meetings of men and women from every discipline and every culture to ponder the common problems of mankind."

Today there are many graduate schools, but more and more scholars recognize the need for centers of advanced research and study. This is as much a goal for the Smithsonian today as it was in the day of the first Secretary, Joseph Henry. We propose to join with others in the Washington area to help to create facilities for coordinating advanced programs and a central setting for organized research. No single effort on the Institution's part could be more significant than this, to act as a catalytic agent, to further advanced research in this great heartland of our culture. We contemplate that others will join us—universities, institutions, and foundations, bodies and groups, both in and out of Government.

A feasibility study is required to determine the scope of the building and related facilities, alternative locations, estimated cost, alternative means of financing, and any necessary legislation to be proposed.

GALLERY AND GARDEN OF SCULPTURE

The beautification of the Mall and the potential acquisition of outstanding works of art and sculpture have combined to create a strong interest and urgency for action to prepare a feasibility study for a potential gallery of art and garden of sculpture. The magnificence of the Mall, its heroic proportions, and its presence as the central feature of the principal area of the Capital City require a comprehensive study for its beautification and use by the people of the city and of the country. With the collaboration of the Smithsonian Institution, the Secretary of the Interior is proceeding with such a study.

One of the key features of the Mall will be the treatment of the transverse Mall, between Seventh and Ninth Streets. Present considerations favor the creation of a garden of scupture to add grace and heighten interest in this part of the park. In collaboration with others, the Smithsonian proposes to conduct a feasibility study of this site. The study will be equally useful for other sites, should a decision be made to create the garden gallery elsewhere.

The feasibility study will determine the scope of the gallery and garden, alternative solutions, location of site, estimated land and construction cost, and any necessary legislation to be proposed.

SCIENCE BUILDING

The increasing importance of the scientific research programs of the Institution, involving national collections of scientific specimens numbered in the millions, requires resolution of the problem of providing additional space for these important purposes.

Preliminary considerations favor the provision of off-Mall laboratory and storage facilities where certain of the research departments might be housed in uncrowded, utilitarian space designed for their particular needs. This would eliminate existing overcrowding, end the utilization of unsatisfactory leased space, and make provisions for future expansion which is not possible on the Mall.

The Departments of Botany and Entomology within the Institution are most directly concerned.

A feasibility study will determine the scope of the facility, alternative solutions, location of site, estimated land and construction cost, and any necessary legislation to be proposed.

ADMINISTRATION BUILDING

The administrative support divisions of the Institution are necessarily geared to its substantive programs. These include fiscal, library, photographic, budget, personnel, procurement, editorial, and buildings management services.

The necessary growth of these administrative offices has led to an encroachment on building space needed for the research and public exhibition programs, which are the principal objectives of the Institution.

Preliminary considerations point to the desirability of constructing an administration building of modest size, possibly on a site within the existing complex of buildings on the south side of the Mall. Such a building would provide adequate office space in a location convenient to the other buildings and staff of the Smithsonian. Its construction would release equivalent areas of premium space in the existing monumental buildings for the use of public exhibition and research programs.

A feasibility study is needed to determine scope, cost, alternative locations, and necessary legislation to be proposed .

PARKING GARAGE

The continued growth of Smithsonian Institution programs has resulted in an increase in the number of employees and visitors. The limited parking space in the rear of the Smithsonian Building, the need to clear the south lawn for use by visitors, the restriction on automobile parking on the driveways of the Mall, and the addition of thousands of Government employees in adjacent buildings have combined to intensify the automobile parking problems of the Institution.

Consideration should be given promptly to the construction of an underground garage in the area immediately to the rear of the Smithsonian Institution Building. The parking garage would be a two-story underground structure of about 288,000 square feet. This would allow parking for approximately 750 cars. Pedestrian and service access would be provided to the Smithsonian Building from the first level of the garage.

This inadequacy of parking will become even more acute when the south lawn of the Smithsonian Institution Building becomes the northerly terminus of the 10th Street Mall of the southwest development program. At that time, it is expected that the existing parking lot for 205 cars will become a necessary part of the landscaped areas of the plaza improvement.

A feasibility study is required to determine the scope of the improvement, its cost, and its potential capacity.

REPAIRS ($47,000)

BELMONT STUDY CENTER

Funds in the amount of $47,000 are requested for a rehabilitation program for the Belmont Study Center of the Institution, located near Elkridge, Md.

Planned use of this facility for conferences, lectures, and similar scholarly functions requires that the buildings, utilities, and furnishings be maintained in good operating condition.

The amount requested will provide for repair and improvement of guest house and caretaker's cottage; heating, ventilating, and air conditioning of the main house; and necessary furnishings.

The completion of the renovation work will provide the Institution with a special-purpose facility to accommodate groups of up to 25 persons in attendance for official meetings of several days' duration.

Belmont Study Center, estimates, fiscal year 1967

1. Installation of heating system in guest house and caretaker's house including electrical change	$4,500
2. Heating, ventilating, and air conditioning of main house	22,500
3. Furniture, equipment, and accessories	20,000
	47,000

PLANS FOR DISPOSITION OF MONEY REQUESTED

Senator BARTLETT. Would you please describe briefly to the committee just what you plan to do with this amount of money?

Mr. RIPLEY. The principal part of this request is for the old Court of Claims Building, for use as a Gallery of American Arts, Crafts, and Design. In addition, we need to plan for restoration of the Arts and Industries Building, the first of the buildings built in 1881.

We request funds for feasibility studies for future buildings needs and for renovating the Belmont Study Center.

The Court of Claims is an extraordinary building, as you know. We feel a strong sense of kinship because it was the first building so designed in the United States as an art gallery.

The architect was James Renwick, our own architect for the castle on the Mall. The Court of Claims Building is part of the Lafayette Square project for the preservation of historical buildings fronting on Pennsylvania Avenue, Jackson Place, and Madison Place.

It is to be preserved, and it seems quite inappropriate that it be used for any other purpose than as a gallery. We would propose to use it as a gallery of arts and design to show visitors from abroad our effectiveness and accomplishments in that area.

Blair House and similar nearby areas show them something about our extraordinary ability and extraordinary interest in the traditional arts and crafts of Revolutionary design.

We want to show especially these foreign visitors that America has a part in history. We are concerned with this sort of craftwork which most people don't know exists.

We make electronic microscopes and other sophisticated hardware, as it is called, but most people don't know about our real interest, our hobbies and crafts.

ARTICLES TO BE PLACED ON EXHIBIT

Senator BARTLETT. Do you have these articles to be placed on exhibit, or will you have to acquire them?

Mr. RIPLEY. We have many of these articles already. We do not

have adequate space for many of them. We believe this gallery will attract considerable exhibits to be loaned and rotated to us from other museums.

NATIONAL PORTRAIT GALLERY

Senator BARTLETT. What does the portrait gallery contain?

Mr. RIPLEY. The proposed National Portrait Gallery will contain a certain number of portraits on permanent exhibition. These will be approved by a commission which will determine that these are people who are so distingushed they rate, as it were, permanent exhibition in galleries.

The National Portrait Gallery will consist also of a very large number of temporary exhibitions, many of which will be developed by particular States throughout the country. They find this an ideal place for historical exhibits associated with the growth and history of that State.

We will also have a tremendous research center, to develop bibliographic and biographic material on the States and on the men and women who have made distinguished contributions to the history and development of our country.

This is what I might call the heart of the Institution. "The Dictionary of American Biography" neglected to ask, in its summary of distinguished persons in this country, Where is there a portrait of this person?

This is what we hope to achieve.

Senator BARTLETT. I think that would be very important and useful.

Mr. RIPLEY. Really a unique function. We are going to have photographic exhibits also, because much of this material is unavailable in portraits.

We hope to have a contemporary area, where photographs of persons in Government can be shown. We first thought we would display drawings, but we decided photographs were more suitable and would last longer.

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

Senator BARTLETT. I would like to ask some questions about the Astrophysical Observatory.

Mr. RIPLEY. If I may, I would like to suggest that Dr. Whipple, the Director, make a statement.

Dr. WHIPPLE. It will be a pleasure to do so.

The Smithsonian Astrophysical Observatory, as its name implies, carries out basic research in astrophysics. That is the science concerned with the nature and the origin of the solar system and the universe.

Research now is underway in fields of theoretical astrophysics, gamma ray, and radioastronomy, meteoritics——

Senator BARTLETT. What is that?

Dr. WHIPPLE. The study of the small bodies striking the earth's atmosphere from outside. Naturally, that is of great interest to the National Aeronautics and Space Administration. We have two programs in optical and radar studies to ascertain the number and nature of these bodies coming in. Then we have planetary, terrestrial, and lunar research; and, of course, a large program for the National

Aeronautics and Space Administration on satellite tracking; and lastly exobiology. I believe we have the only astronomical observatory concerned directly with the biology that can occur outside the earth's atmosphere.

An increase of $536,000 is requested. Our 1966 appropriation is $1,209,000, for 1967, $1,745,000.

About half of the increase is requested for gamma ray astronomy. That almost entirely will be for the expense of building a large mirror about 50 feet in diameter to collect the faint light as the gamma rays entering the earth's atmosphere cause radiation in the atmosphere, and that can be photographed with a large, low-quality telescope.

Gamma rays are a part of the radiation spectrum. Beginning at the long wavelength end with radio waves, we then find the infrared heat radiation level, and then through the optical spectrum, the ultra X-rays, and finally the shortest rays, the gamma rays.

They provide valuable information from space. This field is extremely new, and we are in the pioneering of it at the present time. So far we have entered this field by utilizing a 28-foot reflector of a solar furnace belonging to the U.S. Army at Natick Laboratory in Natick, Mass.

We are planning to erect this large 50-foot mirror in the national forest in Arizona where the seeing conditions, transparency, and the latitude are the best for this work.

The balance of the increase, $264,000, is needed to round out our radio astronomy program as a unit, and particularly to permit us to participate in preliminary studies for a new contemplated Northeast radio astronomy antenna.

These studies are being undertaken with the Massachusetts Institute of Technology and its affiliated Lincoln Laboratory, Harvard University, and the Smithsonian Astrophysical Observatory.

The funds requested for radio astronomy will be used specifically to erect and equip an 85-foot-diameter antenna which we were able to obtain from the Army as surplus equipment. Harvard has the pedestal, which they will provide, and this antenna will be connected then with a computer in Cambridge, a distance of about 26 miles, for experimentation and learning the techniques of remote control operation for this type of instrument.

Research Radio Telescope and Solution of Problems

The program will fulfill two purposes. It will first provide the Observatory at minimum expense with a good radio telescope for immediate research needs. Secondly, it will provide valuable opportunities for the solution of problems which will be encountered in working with this larger instrument, which we hope will be developed in the Northeast.

We can solve problems with this instrument, particularly the new ones to come that are outside the range of solvable problems today.

I would like to point out particularly the present experiment is self-contained, a rounded program, and is valuable in itself. The request for this appropriation does not involve any commitment to a future proposal for the large regional antenna which may or may not develop in the future.

If I may, I would appreciate saying a few words about two questions which sometimes arise. One is, What is our relationship to other Government agencies that are concerned with astronomy and space?

The direct answer is our relationship is one of cooperation and collaboration. Our Observatory is unique in the Federal Government. It is devoted to basic research. We have no operational responsibilities.

For example, the Defense Department has the operational problem of defense; and the National Aeronautics and Space Administration, the development of vehicles in space. Their programs run into billions of dollars, with major equipment and development contracts.

In contrast, we have a request for $1¾ million, for a staff of 46 technical positions. It is a small staff, as Government agencies go, and this is characteristic of the field of astronomy. I do not foresee that we will ever become a large organization.

But it is vitally important to us to obtain this increase of $536,000 to provide for the design and installation of these two pieces of equipment, the gamma ray collector and our radio astronomy experiment.

The second question is sometimes directed to the need for additional antennas for radio astronomy. The direct answer is that the field of exploration is so vast that the need for additional regional facilities is critical.

All the instruments in operation in this country are used to the fullest extent. It is very difficult for us to obtain permission to use these existing instruments. We have to send our scientists to other sites where instruments are in operation and use them whenever we can.

Furthermore, the proposed new instruments open up entirely new vistas of studying the distant universe. Those will not be duplicated for a long time by anyone else.

Ground-Based Astronomy

In 1964, the National Academy of Sciences report, entitled "Ground Based Astronomy," cited the need for a large regional antenna and urged its design and fabrication. They also have recommended smaller instruments to fill out the national program.

One very important point in this present plan for the design of a large instrument is the fact these electronic computer techniques now make it possible to take the design for an instrument, a bridge, or a moving astronomical radio telescope, or any other structure, and calculate precisely what it will do in operation, in various orientations—wind loadings, temperature changes, hurricanes, and so on.

By "precisely" I mean on the order of two-hundredths of an inch, on a structure perhaps 200 feet in diameter.

When these are complete, we will know precisely what that instrument can do, how to build it, and know its budgetary cost with real precision, so that we will be able to predict satisfactorily the actual cost, efficiency, and utility of the instrument.

Seventy-fifth Anniversary of Observatory

Senator Bartlett. How long has that Observatory been established?

Dr. Whipple. We celebrated our 75th anniversary this last summer. That brings us back to what, 1890?

Senator BARTLETT. I assume you work very closely with the educational institutions that abound there?

Dr. WHIPPLE. Yes. Ten years ago, when I assumed the directorship, we moved the observatory to Cambridge so we could be in close contact with the educational institutions there, so our people do teach in the institutions in Greater Boston.

Senator BARTLETT. Where were you before?

Dr. WHIPPLE. Washington.

Senator BARTLETT. Is it an educational institution now?

Dr. WHIPPLE. Yes, sir. It is contributing to education. You may be interested to know that we are planning to move one of our tracking stations to what we consider the best observation point in North America.

Senator BARTLETT. Where?

Dr. WHIPPLE. South of Tucson. It will be 800 to 2,000 feet higher than the Kitt Peak National Observatory some 50 miles to the west.

Senator BARTLETT. We will see that Chairman Hayden reads this.

Dr. WHIPPLE. He is aware of this project.

Senator BARTLETT. I assume that the results of your pure research, when appropriate and possible, flow to the operating agencies such as NASA and the Department of Defense.

Dr. WHIPPLE. Yes, we publish our own journal, which is given wide distribution internationally and nationally. Results of our research also appear in current publications and in journals available to everyone.

NASA DEVELOPED INSTRUMENTS

Senator BARTLETT. Would the Institution or the Observatory—I don't know who would want to answer this—have any interest in using some of the modern instruments developed by NASA, for example, including orbiting satellites, to assist in your surveys that might lead to improved astrophysical practices?

Dr. GALLER. We are very much interested in making use of the hardware that NASA and the DOD have generated, including biotelemeters, which are essentially small radio transmitters. By attaching these to animals, in a free-moving environment, we can track them. For example the polar bear, and some of the other relatively inaccessible animals, can be tracked as they move, giving us some information both about their habitats and their behavior. These studies are being sponsored by the Arctic Institute of North America. The Smithsonian Institution is prepared to assist in the instrumentation.

In addition, we are much interested in making use of some of the communication-type satellites to provide a mechanism for relaying real-time information resulting from scientific investigations taking place in the field back to some of the research centers, such as the Smithsonian Institution and universities throughout the country.

There is a great interest in using such satellites when available, by virtue of the fact it enables raw data to come back to our computers and be worked up in a very rapid manner. At present we must wait for the investigator to return to his laboratory and work up the data manually.

I would say there is considerable attention being given to utilization of instrumentation that has resulted from mission oriented research

for the advancement of fundamental investigations in the fields of taxonomy and ecology.

We have been asked by NASA to explore the desirability of using a new location device called the IRLS in order to enable ecologists not only to learn something about the behavior of animals, but also to pinpoint their precise positions latitudinally and longitudinally, without depending on land-based stations.

Reference to Polar Bears

Senator Bartlett. I am very interested in polar bears. As a matter of fact at my request an international conference was held last year at the University of Alaska, and was attended by representatives from Norway, Denmark, Canada, U.S.S.R., and the United States, and the polar bear is a stateless animal. He doesn't know when he is crossing national boundaries, and he is a great wanderer.

We know little about the polar bear. The population count varies, as I recall, from 14,000 to 19,000.

There was a great spirit of cooperation at this meeting, and there was a desire not to overkill on behalf of all of the countries. The great emphasis was that no nation at this time, with the exception of Russia, knows whether it is taking too many, too few, or just enough animals to maintain the population in balance.

I mention Russia because that nation is to be commended. It took no chances. It limited the take of polar bears to 10 per year.

I know in Alaska the hunting has increased in recent years, yet it is very offensive to some conservation-minded people that the hunting techniques used in Alaska differ radically from the methods used in an earlier time when people who found themselves at an Arctic Eskimo village would arrange, if they were hardy enough to get a dogsled and go out on the pack ice. Only if they were very lucky would they find what they were after.

Now they go out in airplanes and, people suggest, they run the animal until it is exhausted. Then the "mighty hunter" lands and quickly kills the bear. Within an hour or two he is back in some warm room bragging about the hardy hunt he had and the risk involved in shooting this great animal, one of the hardiest in the world.

In any case, our real need is to develop some system for ascertaining what the actual population is.

I for one don't intend to volunteer to the job of putting this radio device on the polar bear. I suppose experts could do that.

Dr. Galler. It is being arranged.

Senator Bartlett. Brave men still live in this world.

Is there any possibility that one of these orbiting satellites with photographic equipment can scan that whole Arctic Sea, vast as it is, and reap any conclusion as to the number of bears, bearing in mind the fact that the landscape is white, and the seascape is white?

Dr. Galler. I can give a qualified answer. There exist infrared sensing satellites, such as the Tiros satellites, which are primarily used to obtain information regarding cloud cover and related weather information.

These satellites are at present still of a low order of resolution—by that I am trying to say they are able to detect large differences in

infrared emissions, but not from very small targets. However, the state of the art is improving to the point where it will be possible before long to make use of infrared sensing systems to detect small objects by measuring differences in infrared emissions from the animal and the surrounding environment.

I think also it is quite possible to use infrared sensors and radio telemetry to give us indications of the distribution of large animals such as polar bears.

Senator BARTLETT. This would be a wonderful, marvelous, incredible advancement.

I don't like to leave the polar bears, but we should.

EXHIBITS PROGRAM

Will you tell us, Mr. Ripley, a little about your permanent exhibit program?

Mr. RIPLEY. We have, to an extent, developed permanent exhibits in the museum. These are the result of work of the exhibit staff and the curators, who are specialists in various areas.

We are opening new exhibit halls at the rate of about eight a year in technology. They deal with ceramics, development of American technology, historical developments, and so on.

We are much concerned about the fact that continuing need occurs also for temporary exhibits. It is very hard to meet these on any easily structured basis. Many requests come in very rapidly, rather late. The leadtime is not sufficient to develop them.

Recently we have had to turn down remarkably interesting suggestions from the Peace Corps. We couldn't develop a special exhibit simply because we were unable to meet the time schedule involved.

Each year we are greatly overburdened with the installation of such temporary exhibits; yet we feel the need is great.

We have tried to meet this need by setting up temporary exhibit areas and trying to detail some of our permanent exhibits staff as the unexpected projects come along.

When you have a permanent exhibit program continually pressing on one, with new buildings to be serviced and developed, it becomes increasingly difficult to shift to temporary exhibits. Yet the recent temporary exhibits we have had have been enormously successful.

DEAD SEA SCROLLS EXHIBITS

As an example of the problem, it took 8,300 man-hours to develop the Dead Sea Scrolls exhibit from Jordan last year.

It is all very well simply to receive the material. The whole problem of having the curators develop the necessary explanatory material, and then developing the design for the exhibit takes an incredible amount of time, and is a burden on our existing staff.

The Dead Sea Scrolls exhibit was most successful. People were lined up all round the block of the National History Building. When it finally opened, it was one of the most significant exhibits we could possibly have put on. It was seen by 209,000 just in this one location in a short period of time, a month, or something of that sort, here in Washington. Then the exhibit proceeded to travel around the country.

It is a good example of the way we have to plan. We hope to

find in our staff the knowledge and information to meet the shifting and changing needs that we would like to serve.

Senator BARTLETT. In this Dead Sea Scrolls exhibit that went around the country, was interest expressed similar to that manifested here?

Mr. RIPLEY. Yes; it was a tremendous success wherever it went.

REQUESTS FOR TRAVELING EXHIBITS

Senator BARTLETT. Are these requests for traveling exhibits increasing in number?

Mr. RIPLEY. Yes; constantly increasing, as is shown by the success of the exhibits themselves.

For example, Mr. Macy of the Civil Service Commission requested us to play host to an exhibit for Federal scientists and engineers. This was a smasher, a record breaker, opened by President Johnson here in the Museum of History and Technology.

We estimated this exhibit, which later traveled, was visited by 5 million people. It was an attempt to interest people in the Federal service in the science and engineering categories, and as a result of this exhibit directly we know that 10,000 people inquired about how they themselves could get positions and qualify for this service. It was, I think, a tremendous success.

1967 BUDGET REQUEST

Senator BARTLETT. How much money is there in the budget for next fiscal year for these traveling exhibits?

Mr. RIPLEY. We are requesting an appropriation of $97,000 total for our special exhibits program in fiscal 1967. We believe that there is tremendous need for supplementing this allotment.

Senator BARTLETT. How much do you have for the current year?

Mr. RIPLEY. Sir, we have somewhat less than that now.

Senator BARTLETT. What you are telling the committee now is, I infer, that $97,000 won't do the job you are requested to do.

Mr. RIPLEY. Exactly, Senator. It won't satisfy the demand we continually get. We haven't been able the last few years to meet this increasing demand.

Senator BARTLETT. How much money do you need in the next year to do this adequately, without going overboard?

Mr. RIPLEY. I would say if we had some way of approximately doubling this request, we might be able to satisfy the needs that we have. That is, if we could have an additional $100,000.

Senator BARTLETT. I had prepared a series of questions relating to this activity, because it intrigues me very much. They are all written out. I am not going to read them now to you, or ask you to reply now. I shall submit them to you and ask you to place the questions and the replies in the record.

Mr. RIPLEY. We will be very happy to.

(The questions and answers follow:)

Question. What provision in dollars has the Smithsonian Office of Exhibits made for a special exhibits program?

Answer. We have requested an appropriation of $97,000 for our special exhibits program in fiscal year 1967. There is great need for supplementing the allotments for this program.

Question. Why are special exhibits necessary?

Answer. Special exhibits are an essential part of any museum program because they enable the presentation of timely topics which have not been planned as part of the permanent exhibit halls. They can be useful to not only the Smithsonian but to other Government agencies in providing emphasis for programs and policies. Special exhibits permit the presentation of fortuitous acquisitions of importance, and the exhibition of rare treasures which may become available once in a generation.

Question. What is the demand for special exhibits?

Answer. There is much greater demand for the production of special exhibits than our present facilities permit. Because we have had to give preference to such exhibits that relate to our collections and research activities in the museums, it has been necessary to turn down some interesting and valuable proposals by outside agencies.

Question. What is the present system of evaluation of proposals for special exhibits?

Answer. Because of insufficient staff and funds for special exhibits, it has been our policy to give preference to those proposals submitted by members of our professional research staff for exhibits that relate most closely to our functions, collections, and research.

Question. Why has it been necessary to turn down special exhibits of merit?

Answer. It has been necessary to turn down proposals for special exhibits because of insufficient staff and funds for their production.

Question. Have significant proposals for special exhibits been turned down recently?

Answer. Yes. Among such proposals which have been turned down recently was one for an exhibit on the Peace Corps to commemorate its fifth anniversary. The cooperation of returned Peace Corps veterans would have been available in the preparation of this exhibit, but present schedules for the staff and funds did not permit its consideration.

Another proposal recently received was for an exhibit for the blind. Because of the desirability of such a special exhibit, other avenues for funds were explored, and it has been possible to obtain a grant of funds from the Department of Health, Education, and Welfare. However, it is not always possible to buy time and personnel by such means.

Question. What are several outstanding special exhibits which have been produced in the recent past?

Answer. Among the outstanding exhibits recently produced or shown at the Smithsonian were the exhibits on "The Federal Engineer and Scientist." "The Dead Sea Scrolls," and "The Art and Spirit of a People (folk art)."

Question. What is the value of such special exhibits and how can they be evaluated?

Answer. Special exhibits are of tremendous importance in that they may show facets of the museum activities other than those which are customarily on view to the public, in informing the public, and in making the public think. Taking the several outstanding examples listed in the foregoing, the following was accomplished:

"The Federal Scientist and Engineer." The exhibit was first shown at the Museum of History and Technology and traveled through four major cities of the United States. It is estimated that it was viewed by 5 million people. A total of 10,000 requests for information about Federal employment were received from viewers. This was basically the purpose of the exhibit—to generate interest in careers in Federal employment. The exhibit was considered to be not only successful, but a good investment on the basis of the interest generated.

"The Dead Sea Scrolls" exhibit, which cost the Institution a total of 8,369 manhours to produce, was viewed by 209,643 people while it was on exhibit at the Smithsonian. Since then it has traveled to eight major cities in the United States and Canada and has been viewed by an estimated total of 1,500,000 people. Certainly the amount of viewing more than justifies the cost of production of the exhibit in time and funds.

"The Art and Spirit of a People (Folk Art)" represents the acquisition of one of the major collections in the United States of important Americana. The collection, which consists of a total of 450 specimens, brings the Smithsonian to the forefront in its holdings of American folk art. The exhibit serves not only as an announcement of one of the most important museum accessions in the country of recent times, but has been interpreted and presented in an unusual way, in that the specimens have been related to American life and literature, providing a completely new dimension to exhibition techniques, and displays a new and different aspect of American culture.

Question. How does the exhibit on the Alaskan Centenary fit into this program?

Answer. The Alaskan Centenary exhibit is another of the desirable special exhibits which was not anticipated in our program and for which manpower and funds must be provided from other sources. It is a desirable exhibit, and one which cannot be postponed because its effectiveness is contingent on timing.

Question. What plans have been made for the Alaskan Centenary exhibit?

Answer. The preparation of a script by a historian of Alaskan development and the selection of objects and graphics for the exhibit will be performed before the end of fiscal year 1966 from funds which will be diverted for our special exhibits program.

The production of the exhibit will proceed if funds for this purpose become available in fiscal year 1967. The amount available for this purpose will determine the size and scope of the exhibit and will be the deciding factor in whether the exhibit will be simply a flat display of photographs and graphics or a more elaborate exhibit including cases and objects. The appropriation will also determine whether it can be made into a traveling exhibit and the expensive demountable fixtures required can be afforded.

Question. What are the relative costs for the Alaskan Centenary exhibit?

Answer. The cost for the design and production of a traveling exhibit of moderate size consisting of 4 or 5 display cases and 10 free-standing panels is estimated to be $50,000.

The cost for design and production of a flat display without cases or objects and consisting of panels to be hung on gallery walls is approximately $7,500, which includes costs of transportation from Washington to Alaska, and the costs of preliminary planning as described in item 10 above.

Question. When will the exhibit be ready?

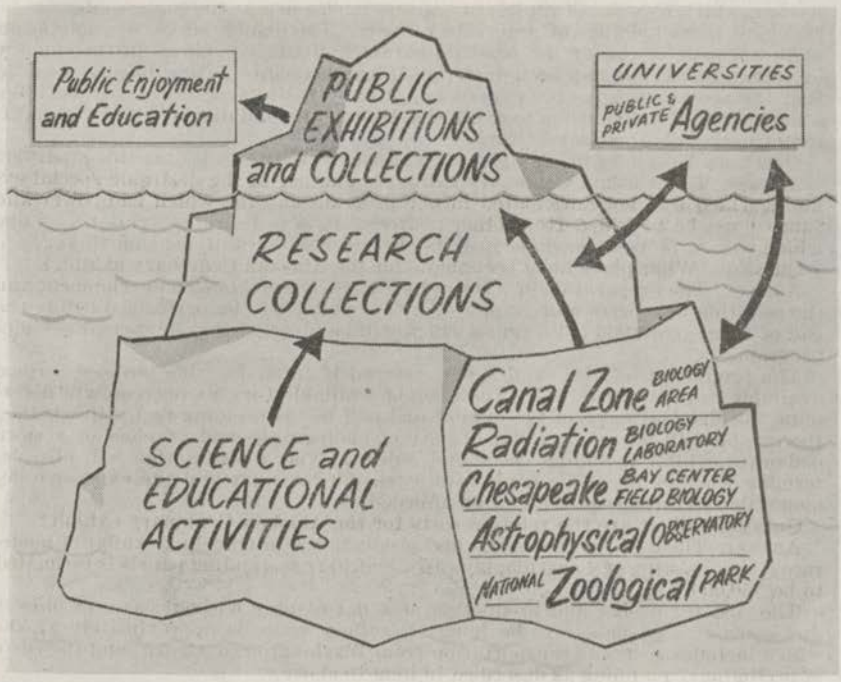
Answer. About 3 months will be required to build the exhibit from the time that the appropriation becomes available for fiscal year 1967; consequently the exhibit would be completed for November 1, 1966. It is anticipated that the exhibit would be displayed at the Smithsonian in November and December 1966, and shipped to Alaska to be available for display from the beginning of the centenary year.

Activities of Smithsonian

Mr. Ripley. We would be happy if you care to examine or place in the record this sketch which we brought in here. Commonly called a visual aid, it delineates something about the iceberg-like quality of the Smithsonian. So much of our key activities go on outside the exhibit part of the museum program.

Senator Bartlett. We will place that in the record.

(The illustration follows:)



PHOTOGRAPHIC REPRESENTATION OF PHENOMENON

Senator BARTLETT. Do you want to comment on it?

Mr. RIPLEY. It is a photographic representation of the phenomenon that the Smithsonian represents. I call it sometimes an iceberg, sometimes a "sleeping beauty," to the extent we have these internal activities, ones which are generally unknown in the community at large.

The public exhibits are shown—however, under these, are the activities which make these exhibits meaningful. They are the research collections, and the scientific investigations as shown.

The research and the research collections contribute basic information to scientists in the Federal agencies and universities located throughout the world. In other instances, we possess basic research laboratories of various sorts as shown which are not collection oriented. One of these, the Smithsonian Astrophysical Observatory, is directed by Dr. Whipple.

We have several research programs which relate directly to the environment, for example—the work in Panama, the tropical biological work which is unique for this country. In addition, radiation biology related to the effect on animals and plants, emanations both ionizing and nonionizing. The Chesapeake Bay Center depicted on the chart results largely from a bequest from a private individual, also we received a welcome grant from the Ford Foundation to purchase additional land. Now for the first time we have a field research center near the research activities of the Smithsonian Institution in Washington.

The Center is open to all universities in the neighborhood, as well as ourselves, for environmental biological investigations.

This is the thrust of this exhibit, attempting to show how we relate the exhibits to the component parts of the Institution functions.

Senator BARTLETT. That couldn't be done unless the greater area was below it?

Mr. RIPLEY. That is right.

Senator BARTLETT. Anything else, Mr. Ripley? You or your associates?

Mr. RIPLEY. We welcome this opportunity. We were glad to be here, and thank you very much for this hearing.

Senator BARTLETT. Obviously the committee enjoyed it, too, or we wouldn't have been here this long.

SUBCOMMITTEE RECESS

The subcommittee will be in recess until 10 a.m. Thursday, March 10, 1966, when witnesses will be heard with reference to the Franklin Delano Roosevelt Memorial Commission, Commission of Fine Arts, and the National Foundation on the Arts and the Humanities.

(Whereupon, at 12:15 p.m., Wednesday, March 9, 1966, the hearings were recessed, to reconvene at 10 a.m., Thursday, March 10, 1966.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1967

THURSDAY, MARCH 10, 1966

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9:30 a.m. in room 1223, New Senate Office Building, Hon. Gale W. McGee, presiding.

Present: Senator McGee.

FRANKLIN DELANO ROOSEVELT MEMORIAL COMMISSION

STATEMENT OF HON. EUGENE J. KEOGH, A U.S. REPRESENTATIVE FROM THE STATE OF NEW YORK, AND CHAIRMAN

1967 BUDGET REQUEST

Senator MCGEE. The subcommittee will be in order.

For fiscal year 1967 there is a budget estimate of $80,000 to meet the needs of the Franklin Delano Roosevelt Memorial Commission. The justification for this request will be included in the record.

(The justification follows:)

Franklin Delano Roosevelt Memorial Commission

Appropriation, 1965	-------
Appropriation, 1966	$20,000
Budget estimate, 1967	80,000

Analysis of activities

Planning the memorial, amount available 1966	$20,757
Fiscal year 1967:	
Unobligated balance from prior years	12,000
Budget estimate	80,000
Estimated total available	92,000
Total available 1967 compared to total available 1966	+71,243

The appropriation authorization for the Franklin Delano Roosevelt Memorial Commission was increased by $100,000 under Public Law 89-305, approved October 29, 1965, to enable the Commission to considfer possible changes in the winning design for the proposed memorial, or the selection of a new design for such memorial. Of the additional amount authorized, $20,000 was appropriated under Public Law 89-309, approved October 31, 1965, to provide for operating expenses of the Commission.

The balance of the authorization, $80,000 requested herein, will be used primarily to obtain the services of a carefully selected architect to prepare an appropriate plan for the Commission's consideration and use.

Itemization of estimate

	Actual, 1965	Available, 1966	Estimate, 1967	Increase (+) or decrease (−)
Program and financing:				
Total obligations	$7,187	$8,757	$92,000	+$83,243
Unobligated balance brought forward	−7,944	−757	−12,000	−11,243
Unobligated balance carried forward	757	12,000		−12,000
Appropriation		20,000	80,000	+60,000
Obligations by objects:				
11 Personnel compensation	6,000	5,000	7,000	+2,000
21 Travel and transportation of persons	732	1,000	1,000	
23 Rent, communications, and utilities	64			
25 Other services	391	1,757	83,000	+81,243
26 Supplies and materials		1,000	1,000	
Total obligations	7,187	8,757	92,000	+83,243

EMPLOYMENT OF CONTRACTOR

Senator MCGEE. The first testimony this morning is in behalf of the Franklin Delano Roosevelt Memorial. The Chairman of the Commission is Congressman Eugene J. Keogh, of New York.

Sir, why don't you proceed any way you prefer?

Mr. KEOGH. Thank you, Mr. Chairman.

Under Public Law 89–305, approved October 29, 1965, the appropriation authorization for the Franklin Delano Roosevelt Memorial Commission was increased by $100,000, to enable the Commission to consider possible changes in the winning design for the proposed memorial, or the selection of a new design for such memorial. Of the additional amount authorized, $20,000 was appropriated under Public Law 89–309, approved October 31, 1965, to provide for operating expenses of the Commission.

The Commission is requesting the balance of the authorization, $80,000, primarily to obtain the services of a carefully selected architect to prepare an appropriate plan for the Commission's use in carrying out the objectives for which the Commission was established—the construction of a permanent and appropriate memorial to Franklin Delano Roosevelt in the city of Washington, D.C.

SITE IN WEST POTOMAC PARK

Senator MCGEE. What is the present status of the site?

Mr. KEOGH. We have had set aside for the site in West Potomac Park approximately 27 acres by act of Congress which is shown in this brochure.

Senator MCGEE. I think perhaps—do we have a site description?

Mr. EATON. No, sir.

Senator MCGEE. We should have one put together for the record.

Mr. KEOGH. I will be glad to submit a copy of the act setting aside this description.

(The information follows:)

The site as described in the joint resolution of Congress (attached) is that portion of West Potomac Park bounded on the north by Independence Avenue, and on the south by the Inlet Bridge. The Potomac River and the Tidal Basin form the other two boundaries. The memorial may be located anywhere within this area, approximately 66 acres in extent, but may occupy no more than 27 acres of the total site.

PUBLIC LAW 86-214

86TH CONGRESS, H.J. RES. 115

SEPTEMBER 1, 1959

JOINT RESOLUTION To reserve a site in the District of Columbia for the erection of a memorial to Franklin Delano Roosevelt, to provide for a competition for the design of such memorial, and to provide additional funds for holding the competition

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That, in furtherance of the joint resolution approved August 11, 1955 (69 Stat. 694), providing for the establishment of a Commission to formulate plans for a memorial to Franklin Delano Roosevelt, and of the interim report of the said Commission made to the President and to Congress, on January 2, 1959, recommending a site for the memorial and a competition for the design thereof, there is hereby reserved that portion of West Potomac Park, in the District of Columbia, which lies between Independence Avenue and the inlet bridge, being twenty-seven acres more or less, to be used as a site for the proposed Franklin Delano Roosevelt Memorial.

SEC. 2. The Commission is authorized to hold a competition or competitions for the proposed memorial, and to award a suitable prize or prizes in connection therewith, but may refuse to employ any successful competitor if it deems that his design should not be used. The competition for the proposed memorial shall be carried out so as to insure that it will be harmonious as to location, design, and land use with the Washington Monument, the Jefferson Memorial, and the Lincoln Memorial. In holding the competition the Commission shall avail itself of the assistance and advice of the Commission of Fine Arts, of the National Capital Planning Commission, and of the National Park Service, and such Commissions and Service shall, upon request, render such assistance and advice.

SEC. 3. The Commission shall report the result of the competition, together with its recommendations, to the President and Congress at the earliest practicable date.

SEC. 4. There is authorized to be appropriated not more than $150,000 to be expended by the Franklin Delano Roosevelt Memorial Commission in organizing the competitions for plans for the design of the memorial, as authorized by subsection (c) of section 2 of the joint resolution, approved August 11, 1955.

Approved September 1, 1959.

SELECTION OF ARCHITECT

Senator MCGEE. Another question on my mind has to do with the design. We followed with interest some of the dialog on that question.

Mr. KEOGH. Yes; and we found in the House, particularly, that we had many more are experts in the membership of the House than we anticipated. The Commission intends now to start to select one architect of national prominence and capacity and come in with an appropriate design and to avoid any further competitions or contests, all of which are time consuming and not too productive.

Senator MCGEE. It is sort of like running foreign policy. Everyone is Secretary of State.

Mr. KEOGH. The analogy is quite appropriate, I would say. As I indicated, I did not know we had so many art experts in the membership of the House.

Senator MCGEE. I am not sure what the status of this is at the House at the present time, but I would certainly express the hope here that we can move it along with a minimum of delay along the lines you describe.

Mr. KEOGH. We hope to do so and we think the plan we have in mind would do that very thing. It must be recalled in April of this year, the late President will have been dead 21 years.

PLANS SET FOR NO FURTHER DELAY

Senator MCGEE. I can think of one or two other memorials that went up right away and I would hope there would be no more delay other than just the procedural one where you are following through this very carefully planned set of steps.

Let me say I want to salute you personally for your leadership in this and pledge anything and everything we can do to update our art critics on this side so they are in unison and can approach a consensus.

Mr. KEOGH. I am not alone in this. All members of our Commission are determined that no further delay will be brooked.

Senator MCGEE. I am glad to hear that. If you have nothing further to add, those are the only two questions I had.

Mr. KEOGH. I have nothing further than to add my thanks for the great job you are doing here today.

Senator MCGEE. Senator McCarthy, a member of the Commission, will now be heard.

Senator MCCARTHY. Thank you, Senator.

I should like to add my endorsement of the request made by Congressman Keogh that the committee approve the balance of the authorization—that is, $80,000—in order that the Franklin Delano Roosevelt Memorial Commission may proceed to carry out the objectives for which the Commission has been created.

We have reached general agreement that we should proceed by inviting a limited number of highly qualified and experienced architects, and having each discuss with us his concept of a suitable memorial. On the basis of such discussions the Commission would select the most qualified to prepare an appropriate plan. It is my belief that we will have a more satisfactory result if we place confidence in a highly qualified architect than if we authorize another competition of models.

I am hopeful that we can find an architect with the professional skill and a record of past achievement, but also one who can reflect in his work what President Franklin Roosevelt meant to his fellow citizens and to peoples in other lands and to history.

Something which reflects the lowest common denominator of appreciation will not be satisfactory. We should and, I believe, we can select an architect of great creativity and understanding, and, after consultation with the Commission members, have him prepare a plan.

COMMISSION OF FINE ARTS

STATEMENT OF MR. ATHERTON, SECRETARY AND ADMINISTRATIVE OFFICER

1967 BUDGET REQUEST

Senator MCGEE. The next testimony will bear on the Commission of Fine Arts. I guess it is beginning to look, at least on some parts of the Hill, that we have many fine artists on the Hill. It is refreshing, if they are really artistic in depth.

The Commission proposes a budget of $115,000 for the next fiscal year, $8,000 less than the amount appropriated last year. I trust that the justification for the amount will be placed in the record.

(The justification follows:)

Salaries and expenses

Appropriation, 1965	$120,000
Appropriation, 1966	123,000

SUMMARY OF INCREASES AND DECREASES

Decrease due to savings realized through cost reduction and management improvement programs	−8,000
Budget estimated, 1967	115,000

COMMISSION OF FINE ARTS

Analysis by activities

Activity	Fiscal year 1965 amount available	Fiscal year 1966			
		Total appropriation	Pay cost supplemental	Transfers	Amount available
Administration	$101,866	$115,000			$115,000
Unobligated balance lapsing	18,134	8,000			8,000
Total	120,000	123,000			123,000

Analysis by activities

Activity	Fiscal year 1965, amount available	Fiscal year 1966, amount available	Fiscal year 1967, estimate	Increase (+) or decrease (−), 1967 compared with 1966		
				Total	Pay cost	Program
Administration	$101,866	$115,000	$115,000			
Unobligated balance lapsing	18,134	8,000		−8,000		−8,000
Total	120,000	123,000	115,000	−8,000		−8,000

JUSTIFICATION

The estimate of funds needed to operate the Commission of Fine Arts during fiscal year 1967 is $115,000, which is $8,000 less than the amount available for fiscal year 1966. This estimate of lower operating expenses is based on savings realized through cost reduction and management improvement programs instituted during fiscal year 1966. The estimate provides for the staff of the Commission (which is comprised of an executive secretary (GS–15), an assistant secretary for fine arts matters (GS–13), a writer-editor, fine arts (GS–12), a writer-editor, legislative affairs (GS–11), two secretaries (stenography) (GS–8), and one messenger (GS–2), together with the necessary operating expenses including travel costs of the members of the Commission. The estimate also provides for proposed consulting services in fiscal year 1967.

1. 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 the authority of expert opinion upon questions of art arising in the course of administration. As an independent agency, it was intended to serve a twofold purpose; first, to give free advice concerning esthetic standards and matters of civic design involved in the orderly development of the city of Washington; 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 seven members of the Commission are appointed by the President and serve without pay. They give freely of their time, meeting for 1 or 2 days each month as required, with compensation only for actual expenses of travel and subsistence incurred in attending meetings. The technical and professional problems that come to the Commission fall primarily into the fields of architecture, general site planning, landscape architecture, sculpture and painting but, in recent years, an increasing amount of time has been devoted to critical review and report of proposed legislation, whose aim is to foster production and appreciation of the fine arts.

The authorized scope of the Commission's activity covers not only Federal and District Government projects in the city of Washington and its environs, but also certain designated private and semipublic construction projects under authority as noted hereafter; and its scope often includes Federal projects outside the District of Columbia and abroad, such as the World War I and World War II memorials and cemeteries, the designs for which come before the Commission by authority of Public Law 534, 67th Congress (42 Stat. 1509) as amended. During the 55 years of the Commission's existence, the 71 members who have served on it, have steadfastly insisted on the maintenance of the highest esthetic standards in the design of the Federal and semipublic projects that are referred to it by law.

2. Specific functions of the Commission comprise the following:

(*a*) Under the provisions of its Enabling Act, Public Law 181, 61st Congress, approved May 17, 1910, the Commission of Fine Arts advises generally upon questions of art when required to do so by the President, or by any committee or Member of either House of Congress.

It advises specifically on all plans for parks and public buildings, constructed by the executive departments or the District of Columbia, which in any essential way affect the appearance of the city of Washington and its environs. Authorization has been given or is pending for the design of many new Federal and District buildings, most of which are planned for erection in the central area of the city of Washington, as part of the expansion of the Federal or District Governments.

It also advises upon location and design 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 the execution of the same.

Rendering an opinion on the merit of designs for medals, insignia, coins, or other art projects created and produced by the executive department is also a phase of the Commission's duties.

(*b*) The Commission carries out the provisions of the Shipstead-Luce Act, Public Law 231, 71st Congress (46 Stat. 366) approved May 16, 1930, an act to regulate the height, exterior design, and construction of private and semipublic

buildings in certain areas of the National Capital. In this function the Commission reports its findings on the above features to the Commissioners of the District of Columbia before building permits are issued at the permit branch of the Department of Licenses and Inspections.

(c) The Commission also carries out the provisions of the Old Georgetown Act, Public Law 808, 81st Congress (64 Stat. 903, ch. 984), approved September 22, 1950, an act to regulate the height, exterior design, and construction of private and semipublic buildings in the Georgetown area of the National Capital. This action also requires review and recommendations to the Commissioners of the District of Columbia on the merits of designs submitted for building permits.

Itemization of estimate

	Actual, 1965	Estimate, 1966	Estimate, 1967	Increase (+) or decrease (−)
Program and financing:				
Total obligations	$101,866	$115,000	$115,000	----------
Unobligated balance lapsing	18,134	8,000	----------	−$8,000
New obligational authority (appropriation)	120,000	123,000	115,000	−8,000
Object classification:				
11 Personnel compensation	64,552	68,000	69,000	+1,000
12 Personnel benefits	4,283	5,000	5,000	----------
21 Travel and transportation of persons	6,440	9,000	9,000	----------
23 Rent, communications, and utilities	1,283	1,000	1,000	----------
24 Printing and reproduction	3,863	7,000	7,000	----------
25.1 Other services	5,459	14,000	13,000	−1,000
25.2 Services of other agencies	7,175	8,000	8,000	----------
26 Supplies and materials	1,097	1,000	1,000	----------
31 Equipment	7,714	2,000	2,000	----------
Total obligations	101,866	115,000	115,000	----------

STATEMENT OF WILLIAM WALTON, CHAIRMAN

Senator MCGEE. Will you please place your written statement in the record, and then summarize it orally.

Mr. ATHERTON. We have a brief statement by Mr. Walton. He is unable to be here and has asked me to represent the Commission.

(The statement follows:)

The Commission of Fine Arts is requesting an appropriation of $115,000, which is $8,000 less than the amount appropriated for fiscal year 1966. No major changes are planned in our programs for the coming fiscal year.

During fiscal year 1965, the Commission acted upon 666 formal submissions, carrying an estimated cost of many millions of dollars. A tabular listing is attached hereto showing the number of applications for the past 3 fiscal years. In addition to the increased complexity of formal submissions, there has also been a corresponding increase in the number of informal reviews and daily requests for information about Washington. With the administration's current programs proposed for the development of the Capital, I expect this trend will continue to accelerate in the coming year.

The appropriations for the Commission have remained relatively small throughout its 56-year history. I therefore hope the committee will favorably consider our request for the amount needed for the next fiscal year.

The members of the Commission are appointed by the President and serve without compensation, receiving only actual travel expenses incurred in attending meetings. Since the Commission was established in 1910 more than 60 distinguished architects, landscape architects, painters, sculptors, and laymen in field of fine arts have given freely to their Government the benefit of their experience and professional skills in advising the President, the Congress, and Government agencies on matters involving the fine arts.

Number of submisions presented to the Commission of Fine Arts during the past 3 fiscal years

	1963	1964	1965
Shipstead-Luce Act (approved May 16, 1930)	102	150	145
Old Georgetown Act (approved Sept. 22, 1950)	281	359	356
Commission of Fine Arts Act (approved May 17, 1910)	220	162	165

FISCAL YEAR 1963

Item	Cases received	Approved	Disapproved
Shipstead-Luce Act	102	73	29
Old Georgetown Act	281	204	77
Commission of Fine Arts Act	220		

FISCAL YEAR 1964

Shipstead-Luce Act	150	114	36
Old Georgetown Act	359	303	56
Commission of Fine Arts Act	162		

FISCAL YEAR 1965

Shipstead-Luce Act	145	124	21
Old Georgetown Act	356	297	59
Commission of Fine Arts Act	165		

ITEMS OF IMPORTANCE CONSIDERING BY THE COMMISSION OF FINE ARTS DURING FISCAL YEAR 1965

FBI Headquarters Building.
National Zoological Park, redevelopment.
Federal Office Building No. 5.
National Air and Space Museum.
Redevelopment of Pennsylvania Avenue.
Franklin Delano Roosevelt Memorial.
Columbia Plaza urban renewal project.
Master plan for development of Anacostia-Bolling AFB.
Navy Yard redevelopment.
Fort Myer, master plan development.
Naval Research Laboratory.
Watergate development.
Office building, 17th and Pennsylvania Avenue NW.
Office building, 12th and Pennsylvania Avenue NW.

NO CHANGES IN OPERATION ANTICIPATED

Mr. ATHERTON. In brief, we are asking for $8,000 less. We are able to ask for less because we have our equipment requested in the last year. This was a nonrecurring item. Otherwise, our operation is the same year after year and we anticipate no further changes in our operation.

Senator MCGEE. In the year ahead, the $8,000 cut does not pose any problem or anticipated problems?

Mr. ATHERTON. We always have plenty of problems but they are not budgetary, as Mr. Keogh will testify.

Senator MCGEE. I have no further questions. I do say "Amen" and will do whatever small part I can to encourage the cause. I think it is too long overdue.

Mr. ATHERTON. Thank you very much.

Senator MCGEE. They should not get me to preside. It misleads you to think everything is rosy since I happen to be sympathetic to the cause and I must say there are other sentiments lurking beneath the table and in the corners. So do not misread my enthusiasm.

THURSDAY, MARCH 10, 1966.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

OFFICE OF EDUCATION

ARTS AND HUMANITIES EDUCATIONAL ACTIVITIES

STATEMENTS OF MISS KATHRYN BLOOM, DIRECTOR, ARTS AND HUMANITIES PROGRAM; DONALD BIGELOW, ACTING DIRECTOR, DIVISION OF EDUCATIONAL PERSONNEL TRAINING; RALPH BECKER, ACTING DIRECTOR, DIVISION OF PLANS AND SUPPLEMENTARY CENTERS; JAXON TAYLOR, ASSISTANT BUDGET OFFICER; AND ROBERT C. BURGESS, DEPARTMENT BUDGET EXAMINER

1967 BUDGET REQUEST

Senator MCGEE. We will now hear the Office of Education, Arts and Humanities Educational Activities.

The Office of Education proposes a budget of $1 million for arts and humanities educational activities. It is not often we have had the opportunity to read such a phrase here in this community, let alone be trying to do something about it. It is the same amount as appropriated a year ago. The justification statement filed with your presentation statement here this morning in support of the request will be placed in the record.

Miss BLOOM. Yes, sir.

(The justification follows:)

Amounts available for obligation

Appropriation:	
1966	$1,000,000
1967	1,000,000

Obligations by activity

	1966 estimate	1967 estimate	Increase or decrease
Instructional assistance to schools	$500,000	$500,000	----------
Teacher training institutes	500,000	500,000	----------
Total obligations	1,000,000	1,000,000	----------

Obligations by object

	1966 estimate	1967 estimate	Increase or decrease
25 Other services	$500,000	$500,000	
33 Investments and loans	60,000	60,000	
41 Grants, subsidies, and contributions	440,000	440,000	
Total obligations by object	1,000,000	1,000,000	

Arts and humanities educational activities, Office of Education

	1966 estimate	1967 estimate	Increase or decrease
1. Instructional assistance to schools	$500,000	$500,000	
2. Teacher training institutes	500,000	500,000	
Total obligations	1,000,000	1,000,000	

JUSTIFICATION OF ESTIMATE

The National Foundation on the Arts and the Humanities Act of 1965 provides a two-part program to strengthen the teaching of the arts and humanities in the Nation's elementary and secondary schools. An amount of $1 million is authorized for each of fiscal years 1966 through 1968. A supplemental appropriation of $1 million has been enacted for 1966, and the full amount is also requested for 1967 in order to continue this stimulating effort to raise the quality of instruction in this area.

Instructional assistance

The act authorizes $500,000 for matching grants to States and loans to nonprofit private schools for equipment and minor remodeling suitable for education in the arts and humanities. Twelve percent, or $60,000, is reserved for loans and is allotted on the basis of nonpublic school enrollment. The balance, or $440,000, is distributed to States on the basis of school-age population and income per child of school age.

Modern teaching equipment is a vital necessity for effective instruction in such fields as music, painting, sculpture, photography, architecture, motion pictures, television, and tape and sound recording. Craft equipment, kilns, looms, and metalworking tools facilitate the learning of manual skills and the nature of materials, and help students gain an understanding and appreciation of beauty and form. A materials center well stocked with reproductions, slides, films, and filmstrips serves not only art classes which find these materials essential, but also classes in social studies, history, and literature. Students of music can benefit from orchestral instruments, tape recorders, and records.

The full $500,000 is requested to continue this program in 1967. These funds can be effectively used, not only to benefit students majoring in the arts and humanities, but also to provide an important educational component for pupils in the sciences.

Teacher training institutes

An amount of $500,000 is authorized for grants or contracts with higher education institutions for the operation of short-term or regular session institutes for advanced study to improve the qualifications of teachers and supervisors of arts and humanities. Enrollees may receive weekly stipends of $75 plus $15 for each dependent.

More than one-fifth of our secondary schools that planned to offer art courses cannot do so for lack of qualified teachers. Classroom teachers in 70 to 80 percent of our elementary schools are expected to teach music, yet more than 60 percent of these schools do not require that music training be included in the preparation of such teachers. In over half of our elementary schools the regular classroom teacher is expected to teach art without any help from a specialist or a professional in that subject.

For 1967, the requested $500,000 will continue the level of support begun in 1966, and will fund about 10 institutes. At an average of 30 enrollees per institute, about 300 individuals will receive advanced training. Instructional costs of institutions are estimated at $215,000 and stipends will approximate $285,000.

Instructional assistance to schools, fiscal years 1966 and 1967

	Grants to States [1]	Loans to nonprofit private schools [2]		Grants to States [1]	Loans to nonprofit private schools [2]
Total	$440,000	$60,000	Nevada	$568	$121
			New Hampshire	1,506	213
Alabama	11,227	1,072	New Jersey	9,918	1,923
Alaska	536	58	New Mexico	3,471	356
Arizona	4,384	497	New York	24,156	4,993
Arkansas	5,961	607	North Carolina	15,561	1,564
California	28,609	5,552	North Dakota	2,007	222
Colorado	4,518	640	Ohio	23,191	3,305
Connecticut	3,931	821	Oklahoma	6,379	813
Delaware	758	150	Oregon	4,355	664
Florida	12,806	1,561	Pennsylvania	23,457	3,668
Georgia	13,554	1,287	Rhode Island	1,736	247
Hawaii	1,803	232	South Carolina	8,725	786
Idaho	2,208	250	South Dakota	2,147	239
Illinois	16,817	3,188	Tennessee	11,474	1,113
Indiana	11,502	1,555	Texas	29,138	3,055
Iowa	6,823	939	Utah	3,248	360
Kansas	5,367	709	Vermont	1,097	134
Kentucky	9,800	948	Virginia	11,810	1,235
Louisiana	11,562	1,086	Washington	6,690	1,053
Maine	2,656	323	West Virginia	5,704	629
Maryland	7,120	1,053	Wisconsin	10,044	1,405
Massachusetts	8,469	1,618	Wyoming	882	115
Michigan	20,025	2,761	District of Columbia	969	198
Minnesota	9,114	1,241	American Samoa		8
Mississippi	7,935	697	Canal Zone		
Missouri	8,842	1,362	Guam	10,000	26
Montana	1,992	241	Puerto Rico		621
Nebraska	3,448	475	Virgin Islands		11

[1] 2 percent of $500,000 ($10,000) reserved for the outlying areas, 12 percent ($60,000) reserved for loans, and the balance distributed on the basis of the State products of the fiscal year 1966 NDEA allotment ratios and the 5–17 population, July 1, 1963.
[2] 12 percent ($60,000) of $500,000 distributed on the basis of nonpublic school enrollment, fall 1964.

STATEMENT OF COMMISSIONER HOWE

Senator McGEE. You may proceed.

Miss BLOOM. Commissioner Howe asked me to express his regrets that he could not be here and asked me to come and represent him and present his statement.

Senator McGEE. It will be printed in the record.

(The statement follows:)

Mr. Chairman and members of the committee, I welcome this opportunity to appear before you n behalf of Commissioner Howe to request $1 million for 1967 for the education programs under the National Foundation on the Arts and Humanities Act of 1965. This amount includes $500,000 for equipment and minor remodeling and $500,000 for teacher training institutes, in order to strengthen the teaching of arts and humanities in our elementary and secondary schools. The request represents the maximum authorization and is the same as the 1966 level, the first year of the program.

It is vital that an advanced society such as ours value and support not only science and technology, but also those other fields which develop and broaden man's vision and judgment.

If schools are to effectively teach and develop an appreciation in this area, they must have available modern instructional equipment such as kilns, metalworking tools, craft equipment, orchestral instruments, tape recorders, and records. A stimulating effort in this direction can be provided under this program. The act authorizes grants to States and loans to nonprofit private schools to acquire such equipment and provide any necessary remodeling. Regulations

have now been approved, and we expect States to begin submitting their plans in the immediate future and to effectively utilize available funds.

Competent teachers are another vital element in improving instruction in this area. Classroom teachers in 70 to 80 percent of our elementary schools are expected to teach music, yet more than 60 percent of these schools do not require that music training be included in their preparation. More than one-fifth of our secondary schools that have planned to offer art courses cannot do so for lack of qualified teachers. This act provides institutes at higher education institutions for advanced study to improve the qualifications of teachers and supervisors of arts and humanities. We have already approved the 11 institutes that will be supported under the 1966 appropriation. These will be conducted this coming summer for over 400 teachers, and include three in humanities, three in music, two in art, and one each in film appreciation, theater, and Latin. Our 1967 request will continue this stimulating effort to raise the quality of instruction in this most important area.

We will be happy to answer any questions you may have.

AUTHORIZATION FOR IMPROVEMENTS FOR EDUCATION

Miss BLOOM. The amount we are requesting, $1 million, is a small amount and an important amount. It is the first time there has been an authorization for improvement for education in the arts and humanities. This takes two forms: On the one hand, it is possible under this new legislation to purchase equipment and materials to improve the humanities and arts in elementary and secondary schools. On the other side, we have the authorization in this law for teacher-training institutes. We have had institutes in critical areas for some time and many of us feel the humanities are a very critical area today.

So, the possibility of 11 teacher-training institutes that can be offered during the next summer will affect more than 400 teachers in our schools and we feel will offer a great deal as models and will stimulate further activity in teaching the arts and humanities throughout the secondary level.

Senator MCGEE. Have the sites of those institutions been selected?

Miss BLOOM. Yes, with the advice of a group of outside consultants.

Senator MCGEE. Perhaps they could be put in the record.

Miss BLOOM. Yes, sir.

(The information follows:)

The first institutes under the National Foundation on the Arts and Humanities Act of 1965 have been announced for next summer by the U.S. Office of Education. They will give 431 teachers a chance to brush up on music, films, Latin, theater, art, and arts and literature. Under the $500,000 program to strengthen the teaching of the arts and humanities in the Nations' public and private nonprofit elementary and secondary schools, USOE will pay the entire cost of institutes at 11 colleges and universities. Participants will pay no tuition and will receive a weekly stipend of $75 plus a $15 weekly allowance for each dependent. Deadline for applications to be received by the schools is April 14. Full information can be obtained from the institute directors:

Humanities: Bemidji State College, Bemidji, Minn.: Humanities (interdisciplinary) for 40 teachers, grades 4 to 6, northern Minnesota, Wisconsin, eastern North Dakota; June 13–July 29; K. E. Henriques, director; University of Oregon, Eugene: Humanities, (interdisciplinary) for 50 teachers, grades 9 to 12, Oregon, Washington, Idaho, Montana, Alaska, Hawaii; July 9–August 5; Roland Bartel and Charles R. Keller, codirectors; University of Vermont, Burlington: Humanities (art and literature) for 60 teachers, grades 9 to 12, open area; July 11–August 6; Ippocrates Pappoutsakis, director.

Arts and the humanities: Memphis Academy of Arts, Memphis, Tenn.: For 25 teachers, grades 1 to 6, mid-South; June 13–July 12; Nadine Parker, director.

Music and humanities: University of Texas, Austin: For 30 teachers, grades

7 to 12, Texas, Oklahoma, Louisiana, Arkansas; June 20–July 29; Barbara Rogers, director.

Art appreciation: Ohio State University, Columbus: For 35 teachers, grades 7 to 12, open area; July 18–August 26; David W. Ecker, director.

Film appreciation: Mount St. Scholastica College, Atchison, Kans.: For 40 teachers, grades 9 to 12, open area; June 8–21; Sister Bede Sullivan, director.

Music: University of Southern California, Los Angeles: For 40 teachers, grades 7 to 12, southern California area; August 8–September 3; Robert Choate, director; University of Iowa, Iowa City: For 36 teachers, grades 6 to 12, Iowa and open area; June 14–August 10; Neal E. Glenn, director.

Theater: Wisconsin State University, River Falls: For 35 teachers, grades 9 to 12, open area; June 13–August 6; John A. Oostendorp, director.

Latin: University of Minnesota, Minneapolis: For 40 teachers, grades 5 to 8, open area; July 12–August 20; Robert P. Sonkowsky, director.

Matching Grants for Institute Funds

Miss Bloom. There is a broad representation across the board through the arts and humanities.

Senator McGee. Inasmuch as we associate arts and humanities with the finer things, the things that you associate with the big sky and heaven, we would hope one might find its way to one of the highest institutes of learning: the campus of the University of Wyoming. I know they are interested in getting into this.

Are each of the several States required to apply to your office for the matching grants? Where does the initiative rest?

Miss Bloom. For the institutes, the funds are not matched. Applications are initiated by college and universities who wish to offer institutes.

Senator McGee. The line for these grants, I presume, is long?

Miss Bloom. It is long, and we expect next year's to be very much longer.

Senator McGee. That will make it easier because it will be highly selective.

Miss Bloom. That is right.

Senator McGee. Have you obligated the full amount of the grants the past year?

Determination on Loan to Private Schools

Miss Bloom. No; but we anticipate all grant funds will be obligated by June 30, 1966.

Senator McGee. With regard to the $60,000 available for loans to nonprofit private schools, how do you determine which schools will receive a loan?

Miss Bloom. I would like to ask Mr. Becker to respond to that.

Mr. Becker. That is based on the application of the private schools. The information is disseminated throughout the States and the local private schools initiate them.

Senator McGee. They are compelled to move first?

Mr. Becker. That is right.

Senator McGee. Has the full $60,000 in this item been obligated?

Mr. Becker. It is reserved, yes; but it has not, as yet, been implemented; programed.

Senator McGee. It is committed?

Mr. Becker. That is right; reserved for each State and possession.

Senator McGee. The second half of your appropriation, in the

amount of $500,000 is for teacher training institutes, as you have indicated, and you have suggested to us that they have a good geographical distribution this first go-around and that these are more or less pilot institutes. Does that mean as you look ahead that they will be more numerous or when you say pilot, you are simply studying them for procedure, content, and substance?

Miss BLOOM. Their potential for innovation and change is important for teaching in the arts and humanities. The selection was based entirely on quality. Some of the good old ideas 20 years ago were not good enough for the people we brought in to look at these proposals.

Senator MCGEE. That is refreshing to hear.

Miss BLOOM. You might be interested to know there is quite a range of cost. One institute is being offered at a cost of slightly more than $9,000 and then they range up to $50,000. The basis of selection was quality and potential for affecting as broadly as possible this whole area that so badly needs assistance and help.

Senator MCGEE. The stipend to enrolles is a uniform figure or is this variable in terms of cost, $75?

Miss BLOOM. $75 consistently.

Senator MCGEE. That is the same everywhere?

Miss BLOOM. Yes.

Senator MCGEE. In either of the purposes for which these funds are provided, is the $500,000 enough?

PROBLEMS IN ALLOCATION OF FUNDS

Miss BLOOM. It is not enough at all. In the justfication that is filed that shows the allocation to the States for equipment, the largest States have sums allocated on the basis of population range, say of $29,000 for grants, while States and possessions with smaller population figures would have maybe as little as $40 or $500, and in one instance, $8 for loans. This has caused rather serious problems at the State educational level because it almost is not worth going through the application procedures to gain such a very small amount of money.

Also, it is almost impossible to provide equipment and materials to supply a whole State with these limitations. For that reason, emphasis is being placed on pilot demonstrations that hopefully will lead to more widespread application.

Senator MCGEE. We may have trouble with that figure because it is of the size most Members of Congress can understand. That is what we fight about. If they are larger, we usually just approve them and say they lack real meaning. I would say it would be possible on the basis of your experience in these first institutes to see enough encouragement, opportunities, and new approaches that would encourage you to come back with a very hardhitting estimate for expanding. I think we have waited altogether too long on this approach and, at the risk of making a speech, I simply want to say a good many of us feel we are going to win our battles in the realm of ideas and finer things rather than in a science lab.

We think we have to have a science lab to keep up with the Russians. Somebody out to get one of these ideas started in Russia and we would move along and try to match them. It has been so long in coming I think it was a shock to discover in theory it was actually here. We have been rather badly beaten several times on it.

Please give us all the reasons to support it that you possibly can. We look forward to that.

Included in your justification material is a table indicating instructional assistance to schools for each of the fiscal years 1966 and 1967. Is this a suggested distribution or were these amounts actually distributed?

Miss BLOOM. These are actual amounts. The State education agencies know what the amounts are. They have been encouraged informally to add to their NDEA applications which provide equipment in other fields such as science, amendments that will make it possible for them to use the amounts they know they have to work with. We have, I would say, about 15 amendments from the States in already, even though we are just in the process of sending out the formal guidelines so that we know, even though some of the States may have difficulty in using the amounts, there is a very definite interest in upgrading the quality of equipment that can be used in the schools.

NEW APPROACH TO EDUCATION

Senator MCGEE. It would be an enviable prospect to invade your institutes in the summertime. I am in the midst of a crusade to try to get as many as possible to take a new approach to education, quit pressing the kids into "what are you going to be," and warping their personalities by making them conform to a major of some sort. The result is they become excellent trained lawyers, doctors, engineers, and teachers, if you will, but they are illiterate people. I would hope we could open that wide. I think we are affluent enough to offer an education to all, then they may become competent.

Miss BLOOM. One of the summer institute programs is offered by the Memphis Academy of Fine Arts for art teachers and the chief emphasis of that summer institute will be to teach teachers how to use original objects in working with their class, to teach them more about art history so they would have a better grounding to work with their students and we feel this opening up of resources will have a significant effect on the teachers and the work they do.

Senator MCGEE. I am glad to hear it.

Those are all the questions I have. Do you have anything further to add?

Miss BLOOM. I would like to say we feel with the program begun as it has during the current year, we will have some definite progress and hopefully some rather dramatic progress to offer the next time we come back.

Senator MCGEE. I hope we have enough time. I am not thinking of next year, but time in these changing times around the world to come up with a truly educated population. I am sure medicine, engineering, and the legal profession will survive, but I am not sure the rest of us will, if we do not change this whole focus and this seems to me where the large portion of the problem lies.

Miss BLOOM. Thank you.

THURSDAY, MARCH 10, 1966.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

NATIONAL ENDOWMENT FOR THE ARTS

STATEMENTS OF ROGER L. STEVENS, CHAIRMAN; LIVINGSTON BIDDLE, DEPUTY CHAIRMAN; AND CHARLES MARK, DIRECTOR OF STATE AND COMMUNITY OPERATIONS

NATIONAL ENDOWMENT FOR THE HUMANITIES

STATEMENTS OF DR. HENRY ALLEN MOE, CHAIRMAN; PHILIP S. BROUGHTON; MRS. KATHLEEN PERKINS; MERRILL COLLETT, ACTING ADMINISTRATIVE MANAGER FOR THE TWO ENDOWMENTS; AND CHARLES RUTTENBERG, COUNSEL FOR BOTH ENDOWMENTS

1967 BUDGET REQUESTS

Senator MCGEE. The Chairman of the National Endowment for the Arts and the National Endowment for the Humanities will now speak to their 1967 budget estimates.

Mr. STEVENS. We are pleased to have the opportunity of appearing before the subcommittee but I think I will skip through the formal presentations and merely touch on the highlights.

Senator MCGEE. Is Dr. Moe here? Would you like to be up here at the same time?

GRASSROOTS SUPPORT

Mr. STEVENS. We are very much aware of the immense grassroots support for this legislation. It was clearly evidenced during the hearings last year before the Congress which led to the final drafting of the act. I can personally testify to the enthusiasm for this legislation as a result of invitations which I have accepted to attend cultural presentations or speaking engagements on one or more occasions in 32 States since President Johnson appointed me as Chairman of the Arts Council a year ago.

Within the next 3 or 4 weeks either I or program directors of our agency will be consulting with cultural leaders of all the States.

I might say, Mr. Chairman, I have not had an invitation from your State and would be delighted to cover it someday.

Senator MCGEE. Let me say we have had a little exchange on that. We have people champing at the bit, but we have some illiteracy out there at the administrative level that stifles that. In one of our areas we have a natural—if you were not an artist when you got there, you

would be one before you got out. At the university, they are bursting at the seams. Someone had the notion you had to go through administrative channels to find this, but that was not the ceiling.

Mr. STEVENS. I feel it is my duty to cover every State in the Nation.

STATE ARTS CONFERENCE

Senator MCGEE. I think this is going to be corrected even if we have to secede from something in order to do it.

Mr. STEVENS. It might interest you to know in January we invited the Governor of each State to send representatives to a conference we held in Chicago, so that the States could be fully informed on how best they can benefit from the act and its provisions of making possible matching grants of up to $50,000 for each State, beginning next July 1. I refer to the $2.75 million authorized for the States under section 11(c) of the legislation.

Remarkably enough—at least we believe it is unusual for a beginning Federal program—every State sent at least one delegate to the conference at their own expense. Just a few years ago, less than a quarter of the States had some kind of arts agency, or council, in being or in the process of development. We believe that by May 1 of this year, which is our current deadline for State applications, every State will apply—in a meaningful fashion—for funds under this section. I cannot emphasize too strongly the enthusiasm manifest for this legislation at our recent conference for the State; and, of course, it reflects the grassroots support at a community and local level.

PILOT PROJECTS

Finally, I would like to stress that we can only at this time support pilot projects, from the standpoint of the endowment, and at a national level with the funds authorized under section 11(a) of the act.

The National Council on the Arts recognizes that this should be our endowment's initial function and has authorized me to make this presentation to you. By pilot projects, I mean those which will assist in the development of the arts on a nationwide basis, and so as to encompass the more than 20 categories of the arts which come under our purview. To date, we have sought to devise projects which meet standards for priority action. We have by no means covered the whole spectrum of the arts defined in the law. In our presentation analysis, we have summarized new pilot projects which we can implement in the next fiscal year, and which in our best judgment are in accord with the spirit and purpose of the act and our future objectives of making the arts and their values available to wider audiences in every community throughout the United States.

IMPACT OF PILOT PROJECTS ON DEVELOPMENT OF THE ARTS

If we are to be effective and construct a balanced initial program for the arts, we need to put as many of these pilot projects into action as possible. We believe that these projects, this "seed money," will have a most beneficial impact on the development of the arts—and that it will serve to stimulate the support of additional private resources, and private foundation giving to the arts, which is a major objective of the legislation.

NEWSWEEK ARTICLE

From what we have done so far, we have had a rather favorable press and I cannot resist reading a paragraph out of the current issue of Newsweek which describes the American way of philanthropy. It is relevant to my last statement about pilot projects.

The article is mostly about foundation-giving and the Ford Foundation in particular.

Senator McGEE. I would suggest before you read that extract that we put the full piece in the record and then you read the part you want to mention.

(The article follows:)

[From Newsweek, Mar. 14, 1966]

EDUCATION—THE AMERICAN WAY OF GIVING

A few years ago some officers of the Ford Foundation were discussing various ways Ford's millions could generate social reform. As the brainstormers saw it, the existing power structure of business, labor, and government was too firmly entrenched to make really significant changes. Finally one officer offered a simple suggestion: "Let's just buy Rhode Island and make a fresh start."

Though Rhode Island wasn't for sale, the Ford Foundation, which this year will spend at least $250 million around the world, would have had little trouble paying operating costs for the State. Gov. John H. Chaffee plans to get by on $188 million in 1966. And the notion of such ambition by U.S. foundations is not as farfetched as it may sound. Each year Ford and the Nation's 15,000 other foundations dispense some of $1.1 billion through a system of organized private giving for public purposes so potent that some social historians have called it the fifth estate. Indeed, the dollars they have poured out have exerted a strong influence in shaping the quality of 20th-century life.

Foundation money helped eradicate hookworm, yellow fever and malaria in many areas of the world (the Rockefeller Foundation); built 2,509 libraries in the United States and other English-speaking counties (Carnegie Corp.); supported Robert H. Goddard's rocket research when the military could not see a need for it (Smithsonian Institution and the Daniel and Florence Guggenheim Foundation); modernized Mexican agriculture (Rockefeller) and sustained U.S. educational television (Ford); developed the new math for U.S. schools (Carnegie), brought new contraceptive techniques to villages in India (Ford and Rockefeller) and supported almost 7,000 artists and scholars (John Simon Guggenheim). Even such everyday items as Pyrex glass and the outer white lines on highways are the result of efforts by the Carnegie Institution of Washington and the Dorr Foundation.

WARPATH

Despite these successes, foundations have often had to fight to protect their sovereign status. Congressional committees, which once suspected that foundations were nothing more than shrewd schemes for holding on to great fortunes, later worried that they were serving international communism. Today certain foundations are under attack from liberals who decry the right-wing pamphleteering that masks itself as educational activity. Some critics claim that large foundations are a benevolent-aid society for the eastern establishment: Dean Rusk went from the State Department to Rockefeller to State, John W. Gardner from Carnegie to HEW and last week McGeorge Bundy went from the White House to Ford. And the occasional abuses of the tax-exempt status of foundations for private gain has Wright Patman, of Texas, on the warpath again.

"We still suffer from the old John D. Rockefeller kerosene trust," the 72-year-old Congressman said last week. "Foundations are perpetuating themslves in office. It's like feudal Europe." He proposes limiting the lives of foundations to 25 years, a remedy already rejected by the Treasury Department. But in a 1965 report on foundation tax exemption, the Department recommended tighter restrictions on foundation finances, including a law barring them from owning more than 20 percent of a business.

SLOW BEAT

Significantly, philanthropoids themselves are reexamining the foundations. "Philanthropy generally is not attuned to the tempo of the times," John D. Rockefeller III said recently. "We are prone to be too complacent." One reason for the discontent is the fact that foundations no longer enjoy a benevolent monopoly. The Ford Foundation was once described as "a large body of money surrounded by a lot of people who want some." Foundations in the Great Society are large bodies of money surrounded by even more money—that of the Federal Government. In nearly all the traditional foundation fields—education, health, international aid, and research—the Government is now spending more than the private foundations. And, significantly, much of the money is going for research and development of new ideas.

TURNABOUT

The Government's National Foundation on the Arts and the Humanities promises to be one particularly adventurous agency and may even reverse traditional roles. Arts council chairman, Roger Stevens, has authority to finance pilot projects and then ask private foundations to put up matching funds or take over the projects. While foundations claim that they are the venture capital in a pluralistic economy, examples like this have prompted critics to say that Government has captured the lead in innovation as well. Foundations, in short, are being forced to search for new purposes for their billions.

One critic on record that the Federal Government often makes better grants than private foundations is the Ford's new president, 46-year-old McGeorge Bundy, who once sought grants when he was a Harvard dean. "Bundy arrives," says a top Ford officer, "when a congruence of forces both within and outside the foundation make it a critical time to have a younger man in charge of the foundation's fortune."

"When McGeorge Bundy was announced," cracked one staffer, "a lot of people ran to the windows to jump." But so far Bundy, who can be ruthlessly efficient when he must, has been rather genial. At a meeting with the foundation's officers on his first day in office last week he managed, says one impressed staffer, "to give everybody the idea we were going places. I've seen people take over organizations before, but never with a tour de force like this." Then Bundy made a tour of the cramped Ford offices on New York's Madison Avenue (the foundation will move to new 12-story headquarters near the United Nations Building next March), introducing himself to everyone including secretaries.

Nevertheless, some of the jumpiness among the 147-man professional staff is justified. Bundy probably will trim Ford's administrative pyramid to achieve greater flexibility. One prospective appointment, the State Department's David Bell, may come in July to be international vice president.

LOLLIPOPS

Foundations can be called trusts, funds, societies or endowments, and they can support anything the IRS will allow as charitable, social, religious, or educational. The purpose can be as lofty as Rockefeller's ("to promote the well-being of mankind throughout the world") or as circumscribed as that of the Lollipop Foundation of America which distributes 300,000 all-day suckers each year to hospitalized children. The Benefit Shoe Foundation offers persons with one foot, single shoes, the Mount Everest Foundation will assist U.S. mountain climbers; two foundations stand ready to help preserve the prairie chicken; and the Headache Research Foundation has an obvious mission. And "until the end of the world," schoolchildren in Scotch Plains and Fanwood, N.J., are promised a scoop of ice cream a year by the Dr. Coles Trust Fund.

The most influential contributions, however, have not been made by such scattered hands. By near unanimous opinion three foundations stand out above all. "It would be awfully hard to find any money in the United States," claims University of California President Clark Kerr, "as well spent as that spent by Ford, Carnegie, and Rockefeller."

Andrew Carnegie preached a gospel of wealth to his fellow millionaires which held that their surplus wealth should be treated as a public trust. Before income tax was a problem, the immigrant Scot argued that wealthy people had an obligation to help those who had the talent and will to follow.

For his part, John D. Rockefeller felt a religious obligation to give, but he, Carnegie, and other industrial captains soon found their wealth outstripped their

capacity to disperse it. Concerned that their philanthropy be capricious, they seized on the foundation as a way to spend money as efficiently as their corporations made it. Carnegie, after establishing numerous specialized funds, founded the first general-research foundation, the Carnegie Corp., with $25 million in 1911. The Rockefeller Foundation was incorporated in 1913 with $35 million, later received $148 million more from its founder.

EXODUS

Ford, the third member of the Big Three in foundations, was a product of post-World War II taxes. "The man who dies rich," Carnegie had argued, "dies disgraced." The IRS also made sure the rich couldn't leave very much anyway, causing a mass exodus of wealth into foundation havens. For Henry and Edsel Ford, the foundation device offered a convenient way "to advance human welfare" and at the same time keep the Ford company in the family—it would have had to sell most of the stock to pay estate taxes when they died. The foundation inherited 88 percent of the Fords' stock (nonvoting), creating what may remain the world's largest foundation.

The major foundations, and the best of the smaller funds, still "advance human welfare," but selectively. Foundations account for only 8 percent of private giving, but their influence has come from their ability to use money to get at the causes of problems and encourage more money to follow. "Big foundations like Ford, Rockefeller, and Carnegie," says John W. Gardner, Secretary of the Department of Health, Education, and Welfare on leave from the presidency of Carnegie Corp., "have an extraordinary opportunity to look beyond crises of the day, dig deeper and arrive at independent judgments they can make available to the people."

If the ends of philanthropy remain basically the same, the means have changed considerably from the days when a John D. Rockefeller could hear about the evils of hookworm and decide to eradicate it. Now, the money is dispensed by philanthropoids (a term coined by former Carnegie Corp. President Frederick P. Keppel). In major foundations, these men are polished specialists operating under defined programs. Typically, the philanthropoid is an ex-academic or Government bureaucrat who travels widely looking for new ideas and talent.

MONEY MEN

"The philanthropoid is not particularly imaginative," says one former foundation man who has returned to teaching. "He might have become a dean or vice provost—he's happier in administration." But many are extraordinarily able men drawn by the foundations' power to effect change, and Harvard's David Riesman claims that "some of the most reflective men I know are in foundations."

A problem for philanthropoids is the awe and obeisance of some of the people they deal with. James W. Armsey, who administers Ford's lucrative ($277 million thus far) matching-grant program for colleges, ruefully notes that "every phrase I write is scrutinized and dissected for meaning." So strong is Armsey's word that one college president admits "there are a lot of us who would run down Fifth Avenue naked if Jim Armsey said it would help get one of his grants." Peter Caws, a former officer at Carnegie, observed that "wherever you go you are welcome, every suggestion you make is regarded as a special kind of illumination from above. When I went to Carnegie, a friend told me, 'You'll never have another honest conversation again in your life.'"

BISHOPRICS

Hovering around the major foundations are a variety of specialists, usually in the academic world, who consult or informally advise the philanthropoid. "Each foundation has its bishoric," explains one of Ford's academic bishops. "If you look at the professors on the senior level of any university you can distinguish to what bishopric each belongs." Serving the foundations this way can be lucrative in more ways than prestige and access to grant money. Foundation executives, says Carnegie Acting President Alan Pifer, frequently make recommendations for college presidents and deans, and they tend to nominate those they know.

Each foundation has a distinct style. Although it is one of the youngest large foundations, Ford is already one of the most highly bureaucratized. Graced with a larger endowment than ever before imagined in philanthropy, Ford has

struggled to find a sensible way to manage its fortune. But while critics fault Ford for being "bureaucratized," Ford has managed to move effectively. Last year, for example, it allocated $5 million for orchestras, and it has created "satellite" organizations such as educational facilities laboratories, which test ideas in school construction.

In the early years when Paul Hoffman and Robert M. Hutchins ran the foundation, Ford was a whirling picture of innovations, liberalism, and occasionally zanny grants. "Every now and then the newspapers would pick up some wild grants," recalls a staffer at the time, "and Henry [Ford II] would come in and roar 'Jesus Christ, why can't we be a nice foundation like Rockefeller?' "

Eventually the trustees found a man more to their tastes, Henry T. Heald, who, with a background in engineering, had proven himself an able administrator at Illinois Institute of Technology and New York University. Under Heald, Ford gained coherency, pioneered in the United States and abroad in poverty, education, and birth control, but, say some, failed to use all its resources imaginatively.

THE WAY UP

Ford grants usually carry a long internal history (p. 90). Every grant must work its way through a "discussion paper" prepared for the staff officers in a particular program, such as education. The next step takes it to all the officers and, finally, through the president to the trustees. Trustee approval of programs or projects is far from automatic. The trustees are bankers like Eugene R. Black, publishers like John Cowles and academic administrators like new chairman, Julius A. Stratton. "Given this world," says one Ford staffer, "they are liberal men among conservatives." "In presenting proposals," he adds, "we don't make a grant seem like a breaking-down-the-barricade proposition."

To skeptics, the system hasn't work very well. "It's a contradiction in terms," scoffs Hutchinson, "to say a mammoth organization is going to be adventurous. Picture the Ford board at a meeting—it's almost a drain on the intelligence just to imagine all those weighty responsibilities they have taken on in so many places." And to insiders, the foundation has not always been a happy place in recent years. Even some admirers of Heald felt his stewardship had grown heavyhanded. Heald, who maintained that a foundation should be a "cutting edge," indirectly answered charges that the foundation hadn't been cutting enough by noting in his last annual report that "a vast amount of social change consists of skillful, painstaking introduction and perfection of ideas already articulated—processes that do not attract brilliant spotlights." And despite the fact that the foundation has sold a large part of its Ford stock, Heald says that "people at the Ford Motor Co. were at times just as unhappy as they could be over some of our actions."

TALENT SCOUTS

Before the rise of the Ford superfoundation, the biggest spender was the Rockefeller Foundation. An early supporter of basic research the foundation has had enviable success in picking talent; about one-third of the winners of Nobel Prizes for science or medicine received, some time before the award, Rockefeller money for their research. Fittingly, the foundation commands a 42-story-high view of New York, but in organization it resembles a graduate school. For a long time the staff was divided into various academic disciplines, and recently the foundation reorganized into interdisciplinary areas, just as the most up-to-date campuses have. Even the board of trustees has a strong academic orientation—9 of its 19 members hold positions in colleges or universities.

With at least half of its $33 million annual budget going to overseas projects, Rockefeller has often led the way for U.S. Government foreign aid. A significant example of the foundation's ability to move years before the Government was Rockefeller's project in Mexico, which increased corn, wheat and bean production threefold in 20 years. But when Washington is willing, Rockefeller President J. George Harrar says he is eager "to collaborate with the [U.S.] Government."

Rockefeller is also willing to join with other foundations. The International Rice Research Institute in the Philippines, which may revolutionize agriculture in the Far East, is staffed by Rockefeller, but the $7.5 million starting cost was paid by Ford.

The Carnegie Corp., which has an annual budget of $12 million, takes pride in its unbureaucratic ways. It makes a point of congeniality and invention. The doors at its Fifth Avenue offices are open to grant-seekers. "Carnegie," says corporation secretary Florence Anderson, "likes to be a cutting edge for other foundations. We're smaller, so we have to be brighter."

Under the leadership of John Gardner, whose influence far exceeded the grants he approved, Carnegie was among the most imaginative of foundations. Shortly after World War II, Carnegie funded the Russian research center at Harvard, setting an example for area-study centers at universities. Other foundations, notably Ford and Rockefeller, have since put their greater resources behind the idea. Carnegie began supporting new mathematics curriculums a year before Sputnik I and paid for James Bryant Conant's influential studies of American schools.

The foundation's flexibility has allowed it to react more quickly to small, individual requests for funds than some of the larger foundations. John Kenneth Galbraith reports he had little trouble persuading Carnegie in 1950 to give him a modest grant to allow him time for developing one of the first courses on the economics of developing countries.

FULL HARVEST

Traditionally, universities and colleges have been a favorite planting ground for foundation money. Rockefeller's General Education Board spent $95 million to help make American medical schools among the best in the world. Carnegie pioneered in establishing music and art as part of the college curriculum. Ford granted $260 million to raise teachers' salaries across the Nation and sponsors the National Merit Scholarship Corp., which gives scholarships to top high school graduates. It also pioneered in teacher education. Danforth and Wilson fellowships have encouraged some of the best students to continue on in graduate school to become college teachers. And individual foundation programs in various disciplines have prodded universities into new areas of study and, in many ways, prepared the ground for the multiversity built with Federal funds.

But foundation dollars can be a mixed blessing. Foundations, reports Wisconsin historian, Merle Curti, have made universities become "places where talented scholars hang their hats while pursuing the answers to problems of advanced research." These "executive professors" with foundation connections can fly around the world on consulting or research missions almost at will. "The amount of money you can get for research," says Columbia's Paul F. Lazarsfeld, "is practically infinite." Projectitis, the disease of obsessive group research, is growing. Economist Galbraith, who is a trustee of the 20th Century Fund, is "struck with how scarce good projects are," particularly since the fund gets so many requests from "people who want to be great entrepreneurs of research, sitting on top of a project pyramid. The failure rate," he reports, "is pretty high." An important side effect of projectitis, of course, is that teaching is downgraded and Berkeley fever begins to spread among students.

NAME GAME

Nonetheless, grantsmanship remains among the most popular of academic activities. Like speaking a foreign language, grant-seeking is easy and enjoyable for those who know how, but rather difficult for the uninitiated. A lot depends on whom you know.

A grant, says master fund-raiser, Richard F. O'Brien, who lured $113 million to Stanford before taking over the University of Chicago's $160 million drive, often begins informally. "A faculty member has an idea, and when he's in New York he drops in at a foundation where there are people he knows. If they think the idea sounds good, the faculty member comes back and draws up a formal proposal." For a neophyte who thinks in modest terms, O'Brien stands ready to "help him shape the proposals, making sure, for example, he has anticipated all costs, reminding him that he can get aid for assistants and equipment.

"What it boils down to in the end," says David C. McClelland, professor of psychology at Harvard, "is that if someone on the inside has confidence in you, you get the grant. Once you get above a certain level of visibility, the opportunities are fantastic."

Though most major universities and colleges keep a constant check on foundation interests and such friendly contacts as alumni on boards of trustees, when a school embarks on a major hunt for capital, foundation-watching and wooing

becomes a major administration preoccupation. At the University of Southern California, where a 20-year master-plan drive for $106.7 million may be achieved this spring, only 5 years after its commencement, a blackboard in the office of Vice President Thomas P. Nickell, Jr., gives a daily bulletin on the school's progress in matching a $7.5 million Ford grant on a basis of $3 for every $1 of Ford's. "A Ford grant," says Nickell, "is viewed as an international stamp of approval."

THE SHADOW

But foundations are finding it is harder than ever to make a real difference. Money doesn't buy as much as it used to, and foundations are a relatively smaller source of money in the society than they used to be "Foundations," predicts Cornell President James A. Perkins, "are not going to have the visibility they used to have. Ford is the only one left with enough money to go into an area and create a real change in institutions. But 10 years from now even Ford won't be big enough to change institutions."

The Federal Government casts the major shadow over the foundation's path, and staying ahead of Washington's public philanthropy, admits Ford Vice President W. McNeil Lowry, "is a far more acute and difficult job in 1966 than ever before." Foundation ideas are being pirated before foundations have had a chance to work them out. Some of the cutting-edge thinking behind Ford's gray-areas program was quickly adopted by the war on poverty. The Government has moved in so quickly, in fact, that foundation officers often fly to Washington for briefings on what's new.

As politically daring as the Great Society appears to be, there still remain many areas where Government fears to tread or lacks the necessary dexterity. And even though Government may spend more, foundations can make a considerable case for not deserting their former pastures. "Countercyclical giving" is the foundation phrase for it, meaning that private money can be used to correct distortions or fill in the gaps of Government programs. "I'm becoming a great believer in competition in the public interest," says Paul N. Ylvisaker, director of Ford's public affairs programs.

APPRAISER

Another option for foundations is the job of public investigator and appraiser—both of what is happening with Washington's money and in other areas of society. The Rockefeller Brothers Fund demonstrated the possibilities of foundation appraisals in a series of six reports on public policy in 1958–60, and top Carnegie officials feel one of Carnegie's most important roles in the future may be in evaluations of Government and other institutions.

Of the various outlets for foundation money and imagination, however, the problems of civil rights, and the poverty and disintegration in the cities may offer the greatest opportunities, even if most foundations have been slow in seizing them. The inability of the Government to assure civil rights by law and the still inconclusive battles being fought in the poverty war have left plenty of room for "risk capital" to maneuver, but foundations as a group have hesitated to act.

It is ironic that most foundations should have been so myopic about civil rights. The first substantial foundation in the United States, the Peabody Education Fund, spent much of its money on Negro education in the Reconstruction South, and Carnegie initiated and supported Gunnar Myrdal's study of the Negro in America which produced his epochal book, "An American Dilemma." But it took the Civil Rights Act to pry loose much money for Negro aid outside schools. In 1964 all foundations spent $2.3 million on race relations. The figure jumped to a still modest $27 million last year. An official of the Urban League, which has received some support, feels foundations "have just been piddling. They still retain the stereotypes. They ask, what does the Negro want?"

SMALL VOICES

Getting out of the universities and into the streets involves real risk. "We don't need to do all that much more thinking," declares Harvard's McClelland, "we need some people acting. And we need some new types of institutions to allow us to bring the know-how we already have to bear on the actual problem." On the whole only small foundations have been willing to try. The Eleanor Roosevelt Memorial Foundation has used some of its small resources to aid SNCC workers, and the $43 million Field Foundation, in civil rights since 1944, last year aided a program of voter-registration education for southern Negroes

and supported a program to help communities adjust when Negroes move into white Chicago suburbs. Taconic and New World are two other small foundations with imaginative social-action programs. Unfortunately, these have been only small voices, usually speaking without major foundation assistance.

There are hopes that Ford, which has supported education and now the arts so lavishly, will soon accelerate its work on social problems. It has recently been active in planning projects for the Watts section of Los Angeles. And McGeorge Bundy is not a man with patience for overextended studies. He has said he appreciates "applied intelligence"—knowledge that reflects "a sense of politcal responsibility, with an awareness that action has consequences." He is likely to seek the same sort of consequential thought at Ford.

The foundation has already started to "think about what schools will be like in the 21st century," a project which involves thinking about what the cities of that time will be like. Says Bundy, "I don"t think there's any shortage of problems and opportunities for foundations."

EDUCATION, THE AMERICAN WAY OF GIVING

Mr. STEVEN. March 14, Newsweek, under "Education, the American Way of Giving."

Since we are representing Congress and the President, as I said, I thought you would be interested:

The Government's National Foundation on the Arts and the Humanities promises to be one particularly adventurous agency and may even reverse traditional roles. Arts Council Chairman, Roger Sevens, has authority to finance pilot projects and then ask private foundations to put up matching funds or take over the projects. While foundations claim that they are the venture capital in a pluralistic economy, examples like this have prompted critics to say that Government has captured the lead in innovation as well. Foundations, in short, are being forced to search for new purposes for their billions.

It isn't often the Government gets that kind of praise.

Senator MCGEE. Not often, but I think we will have occasion to use that.

NINETEEN HUNDRED AND SIXTY-SEVEN BUDGET REQUEST

Last September legislation was enacted establishing the National Foundation on the Arts and the Humanities. The legislation authorizes an annual appropriation of $20 million, plus administrative funds, in addition to $1 million to be appropriated to the Commissioner of Education.

Before our committee now is a budget estimate of $13,930,000 to provide for grants-in-aid to be made by the National Endowment for the Arts, the National Endowment for the Humanities, and for the encouragement of private philanthropy; as well as for the administration of the act.

It is the justification for this request that will be made a part of the record.

(The justification follows:)

"SALARIES AND EXPENSES

"For expenses necessary to carry out the National Foundation on the Arts and the Humanities Act of 1965, including functions under Public Law 88-579, to remain available until expended [$5,700,000] *$13,930,000*, of which [$5,000,000] *$12,750,000* shall be available for carrying out sections 5(c), 5(h) and 7(c) of the Act: *Provided*, That, in addition, there is appropriated for the purposes of section 11(b) of the Act, an amount equal to the total amounts of gifts, bequests and devises of money, and other property received by the Endowments, during the current fiscal year, under the provisions of section 10(a)(2)

of the Act, but not to exceed $2,000,000 for the Endowment for the Arts, and $3,000,000 for the Endowment for the Humanities, less the amounts respectively appropriated to such Endowments for the purposes of section 11(b) in the Supplemental Appropriation Act, 1966. (Supplemental Appropriation Act, 1966.)"

JUSTIFICATION OF ESTIMATE

The National Foundation on the Arts and the Humanities established by Public Law 89–209 has as its congressional mandate the development and promotion of a broadly conceived national policy for support of the arts and humanities in the United States.

The legislative concept envisions a partnership between the Federal Government and private resources, State and local governments, and institutions and organizations responsible for the arts and the humanities. The objectives are—

(*a*) To support and stimulate programs and projects of artistic and cultural significance, encourage creativity, and help make the arts more broadly available across the Nation and,

(*b*) To provide financial assistance for research, scholarships, publications to support and foster a better understanding and appreciation of the humanities.

The act establishes within the National Foundation on the Arts and the Humanities a National Endowment for Arts and a National Endowment for the Humanities. The National Council on the Arts, established in 1964 by Public Law 88–579, advises the National Endowment for the Arts regarding the administration of its program responsibilities. Under the new law the Council is transferred from the Executive Office of the President to the Endowment. Similarly the Endowment for the Humanities is advised by the National Council on the Humanities established under the new public law. Each of the Councils is to be composed of 26 members. Members of each Council are appointed by the President from among private citizens of the United States selected so as to collectively provide on each appropriate Council a distribution of membership among the major art fields and a comprehensive representation of the views of scholars and professional practictioners in the humanities.

Each of the Endowments, in carrying out its program within its area of concern, is authorized to make grants-in-aid and otherwise support activities that will promote and further an interest in and understanding of the arts and the humanities in the United States. The program to be supported in fiscal years 1966 and 1967 is described in the following sections of this justification.

National Endowment for the Arts

Promotion of the arts 1966 estimate	$2,500,000
1967 estimate	[1] 7,750,000
Increase	[1] 5,250,000

[1] Includes $2,750,000 which in accordance with sec. 11(c) of the act is not authorized for appropriation until fiscal year 1967.

Prior to enactment of the Foundation's basic act (Public Law 89–209), comprehensive testimony before the Congress clearly demonstrated that the arts in the United States are confronting a time of growing financial crisis.

The individual artist in the United States suffers from an acute lack of financial resources and sufficient time for creative work. Only a handful of qualified artists in many fields are able to earn their living from their chosen profession. The great majority are obliged to earn a livelihood at other occupations, often from teaching, in order to survive. Thus we are deprived of many talents which could otherwise contribute to the Nation's cultural progress. This progress is fundamental to our future goals and the heritage we leave behind.

Most of our arts institutions are also facing increasing financial difficulties. The number of performing professional organizations able adequately to produce highest quality productions grows annually smaller. Surviving institutions are restricted to serving only the largest metropolitan centers, leaving the rest of the country without performances of high standard.

For example, a survey by the National Council on the Arts showed that of 771 cities of 25,000 population or more, only 131 have had a professional concert during the last 3 years.

The Rockefeller Bros. panel report, quoted extensively in the congressional hearings on the arts and humanities legislation, included the following statements:

1. The 754 groups now presenting opera are almost twice the number so engaged a decade ago. But only 35 to 40 are fully professional, and not more than 10 of these provide performances more than 15 days a year.

2. The number of dance companies approaches 200. However, in the entire country there are only five or six that meet high professional standards and posses any real degree of institutional stability; only one approaches giving year-round performances.

The same findings apply to the theater, to orchestral groups, to museums—a rapid growth rate in surface numbers, but an inability to implement it with adequate financing in a period when our people are becoming more and more aware of how the arts and an appreciation of their values can benefit their daily lives.

On merely an interim basis, the Rockefeller panel recommended an additional and immediate annual expenditure of approximately $60 million to resuscitate the performing arts alone.

The Chairman, members of the Council and staff have traveled extensively throughout the United States, meeting with arts organizations and cultural leaders in hundreds of different localities, and can testify personally to the urgency of the needs in virtually all aspects of the arts.

Since passage of the act, the Endowment has received many requests for financial support and assistance, together with many times the number in requests for information and guidance on making grant applications. This response to the action of Congress clearly indicates the public's interest in the Endowment's program and the need for financial asistance to groups and individuals in the field of the arts.

FISCAL YEAR 1966

To meet in part priority needs in areas carefully studied by the Council and staff of the Endowment, the $2.5 million appropriated to the Endowment for immediately fundable programs during fiscal 1966 has either been obligated or allocated. The initial actions, as approved by the National Council on the Arts, can only be considered as pilot projects and an attempt to answer a few of the most urgent needs in the field of the arts. A summary of these beginning projects follows:

(*a*) *For the individual artist, $758,000*

Grants for teaching artists: Up to fifty 1-semester sabbatical or leave grants-in-aid to painters, sculptors, poets, writers, and composers teaching at educational institutions, to enable them to have greater time to pursue creative work in the arts. Costs will vary with individual cases but are estimated to average $7,500 per each grant, $375,000.

Grants to composers and symphony orchestras: Up to 50 grants-in-aid to composers to enable them to defray costs of copying scores and parts for orchestral presentation of their work; and grants to 25 orchestral commissions for new works, $150,000.

Grants to choreographers: Up to 10 grants-in-aid to choreographers to help them create, rehearse or produce new works, $103,000.

Grants to creative writers: Up to 20 grants-in-aid to creative writers to enable them to supplement their income from already published works. Many new books published today receive high critical acclaim, but do not return to the writer sufficient financial reward to encourage the writer to continue his work. This program would enable such a writer to receive a modest, but perhaps all-important, extra sum over and above his otherwise-received royalties, and at the same time permit a wider distribution of his works, $50,000.

Graduation awards: Up to 80 graduation awards to art students of outstanding promise for further study at art centers, museums or other institutions in the United States. These grants would be made through educational institutions, $80,000.

(*b*) *Programs for arts organizations, $1,742,000*

American Film Institute: For a study of all existing educational facilities with recommendations to serve as a basis for developing a plan for an American Film Institute, $100,000.

Laboratory theater project for education: In cooperation with local school boards and districts, and the U.S. Office of Education three theater companies of the highest professional quality will be assembled by recognized producing groups for a research program to improve the instruction of dramatic literature in secondary schools. These companies will play in cities where classical theater is not readily available. They will give free performances to student audiences five afternoons per week, and play three evenings per week to the general public at a reasonable charge. Three cities, to be selected by and eligible for Office of Education grants, with appropriate geographical distribution in the United States, will be selected for initiation of the project. The endowment's cost will average $167,000 per city and will consist of preperformance expenses of the producing unit, including assembling of the units' casts and directors and rehearsals. Extensive field investigation has already been carried out for this project, $500,000.

The American Ballet Theater: An emergency matching grant of $100,000 has been made to enable this historic company to open and continue its 1966 season. An additional allocation of $250,000 has been made for an additional matching grant of $250,000 to assist in underwriting the expenses of a nationwide tour, $350,000.

National touring exhibition of painting and sculpture: For an invitational competition of American contemporary artists with 35 to 50 paintings and sculptures to be selected for national tour to cities with populations under 250,000. During the tour, the participating artists will receive a rental fee of $100 per month for one selected work. Cities wishing to participate will provide 50 percent of the touring costs for their area. The artists will receive a minimum of 12 months' rental, but must agree to make their selected works available for rental for 36 months, $125,000.

Artists' housing projects: To establish a revolving fund for the planning of artists' studio-living quarters. Under certain conditions, the Housing and Home Finance Agency can provide 100 percent financing to certain foundations created for the purpose of supplying low-rent housing to artists. Before any loan can be granted, the housing agency must have preliminary plans and specifications for said project. Funds from the revolving fund used for these purposes would be recovered after successful renovation, $100,000.

Playwrights experimental theater: There are plays of literary merit by known and unknown playwrights which cannot be produced under economic conditions facing the commercial theater today. In order to help a playwright secure a public performance of high professional standards, the Council allocated funds for helping in the presentation of up to seven new plays for production outside the New York area in university and community theaters. These funds would enable the producing unit to pay the author a reasonable fee and to increase the effectiveness of the production by added rehearsal time, and the employment of actors and directors necessary to give the production higher professional excellence, which is difficult to achieve with the limited budgets now available to these theaters, $175,000.

The Martha Graham Foundation for the Contemporary Dance: To enable the Martha Graham Dance Co. to conduct, for the first time in 15 years a national tour in North America in the 1966–67 season. The company will perform two new dances to be planned for the 8-week tour, $141,350.

The Academy of American Poets: A dual-purpose program to bring poetry and poets into public high schools in New York, Detroit, and Pittsburgh. The first half of the project will present leading poets in a series of lectures, "Dialogs on the Art of Poetry," for high school teachers. The second part is a followup in which poets will read and discuss poetry in classrooms. Students thus will benefit not only from their teachers' contact with major American poets, but by their own direct contact with poets. The academy is making a special effort to reach students who have had little or no contact with poetry or "live poets," $46,750.

Technical assistance programs to organizations of the arts through national associations: A program to provide technical and administrative assistance to arts organizations. Through grants-in-aid to national associations, e.g., the American Symphony Orchestra League will be financially assisted so that they can conduct workshops and provide skilled technical and administrative advice and assistance to arts organizations. Many local arts organizations need and require such assistance from their national associations in order that their

programs may be planned, developed and presented so as to more successfully meet the cultural needs of their communities, $130,000.

American exhibit at the Venice Bienalle: A program to provide a U.S. exhibit, assembled by the National Fine Arts Collection of the Smithsonian Institution, for the September 1966 Bienalle in Venice. The Arts Council agreed to assume 50 percent (but not to exceed $50,000) of the cost of the exhibit, the remainder to be matched from private sources, $50,000.

Indian arts: In cooperation with the Institute of American Indian Arts and the Bureau of Indian Affairs for a performing arts festival in Washington during the spring of 1966, $23,850.

FISCAL YEAR 1967

Continuing projects

During fiscal year 1967, $995,400 will be necessary to fund continuing pilot programs begun in fiscal year 1966 as follows:

Laboratory theater project for education: This pilot program, in three selected cities, will require a continuing commitment to extend the program for another full year. The second-year program will include new productions in each of the areas selected and adequate rehearsal time for the producing units. During the year, students as well as the adult community will be given the opportunity of seeing a new series of productions. It is anticipated that at least 3 years will be required to test the benefits of this program in a given area. A second year of operation is therefore essential, $500,000.

Invitational competition of American contemporary artists:

Costs, based on the annual rental fees to the approximately 50 individual artists whose works will be included in the exhibition tour described above in the fiscal year 1966 program: 50, at $1,200 annual rental fee	$60,000
Additional costs including approximately one-half of the touring expenses of the exhibition of the art works in 26 cities, less than 250,000 in population, estimated at $400 per city: 26, at an average of $400	10,400
Total	70,400

Playwrights experimental theater: This pilot program has been acclaimed by leading representatives of the theater as being a highly economical means of bringing greater excellence in theatrical productions to wider audiences, especially at the community level and in areas where such excellence is not readily available. At the same time it affords playwrights, actors, and directors with important new opportunities to bring their talents to public attention. During the second year it is planned to expand this program from 7 to 17 producing units. Per-unit costs are estimated at $25,000 each: 17 units, at $25,000 each, $425,000.

New projects

In addition to the continuing projects many new ones are under consideration for support. Some have already been reviewed and approved in principal by the Arts Council. Subject to working out the details of implementation and contingent upon the availability of funds, selections will be made for initiation of new projects in the next fiscal year from among the following:

(*a*) *For the individual artist, $280,000*

Artists in residence in high schools: This program will serve artists who are not associated with colleges and universities. (Such artists are assisted by other grants approved by the Council.) Under this plan grants will be made to artists in the various creative arts to act as artists in residence in those secondary schools applying for such services. The demands of the school on the artist's time would be modest enough to allow for adequate free time for creative work, and would give young people an opportunity of learning about the arts from a practicing artist. Grants would be equal to the average teaching salaries of the participating high schools. Grants would average approximately $5,000 each for about 20 grants, $100,000.

Artists apprenticeship program: Over the centuries the arts have flourished through the instruction handed down by master artists to students of outstanding promise. Leading artists would be contacted as to their willingness to have an apprentice of promise under their tutelage. Participating artists would be asked to select applicants who have applied directly to the endowment for a grant to work under these particular artists. Selected artists would normally have completed their higher education training. Each would receive a 1-year grant of $5,000 plus $1,000 for each dependent. Master artists selected would have appropriate geographic distribution. This program, as a pilot initially, would include five grants averaging approximately $6,000 each, $30,000.

Leave grants for photographers: This pilot program will be directed toward aiding photographers of ability and experience to develop their art through travel and work in the United States. Just as the artist in other fields needs more time to develop his talents and his experience, so would the photographer benefit from additional time for work in areas of his particular interest. Leading photographers have recommended such a program to the Endowment. The artist would use his grant for travel beyond his home area and thus would broaden his knowledge of the country and would be enabled to record on film the results of this experience for his own satisfaction and the satisfaction of the larger audience he is thereby able to reach. Fifty grants would average $2,000 each, $100,000.

Program for visual artists: One of the most frustrating day-to-day problems facing the artist is lack of funds for properly crating, shipping, and insuring his works when he is participating in exhibitions. Such costs are often prohibitive to the artist, especially to the sculptor. As a result, opportunities are lost for the exhibition of works. This pilot program is aimed at correcting this situation for artists who need such assistance. An invitation from a museum or gallery would accompany application for this grant; a copy of the catalog from the particular exhibition would supply evidence that the artist had properly used the funds provided. The program would involve 100 grants-in-aid, averaging $500 each, $50,000.

(b) Assistance toward the development of regional institutions of the arts, $1,750,000

The National Council on the Arts has become increasingly concerned about the uneven distribution of the arts at the professional level throughout the country. Although the quality of our artistry as a Nation is at least equal to every other country in almost all of the arts, and though generally our country has arts institutions of highest quality comparable to those of other nations, this high quality tends to be concentrated in the major metropolitan areas. Many of our finest arts organizations travel extensively, but they tend to perform mostly in the larger cities and universities and bypass the smaller communities.

The solution to this problem can be found in part in more intensive touring on the part of major organizations, but also it is necessary to gradually build the touring ability of other groups through long-range planning. The concept of the National Council on the Arts is one of regional development of the best organizations and companies existing in each area. The development plan will necessarily be unique in every region and more rapidly accomplished in some areas than in others. The investment on the part of the endowment will involve coordination with the institutions to be developed, the cultural leaders within the regions, and the communities themselves. However, the National Council on the Arts is firmly of the belief that only through strong regional development of our institutions of the arts can we build a large and appreciative audience for the arts and effectively enrich the lives of our citizens. It is a reasonable estimate that over 1 million people will benefit from this program in the first year. Most of the audience will experience a professional performance for the first time in communities which have not regularly had opportunities to see or hear excellence in the arts.

Development of regional theaters: 30 nonprofit professional resident theaters are now in operation in various areas of the country, most of them having been established during the past few years. Several of the companies have carefully cultivated the potential audience which surrounds their home city and have proven that a large audience for theater exists in these previously untapped outlying communities. The national endowment intends to assist these companies to some extent to broaden their area of service, but intends to give even greater emphasis and support to the other companies whose financial situation has prevented them from extensive touring.

1. Grants to 10 nonprofit theater companies for touring to areas within a prescribed region but outside their usual audience area. On the average a $10,000 grant per theater would finance a 4-week tour, with 5 performances per week, since the cities visited, the resident theater, and the box office receipts would supply a minimum 50 percent of the total touring costs	$100,000
2. Grants to 20 nonprofit theater companies for touring as described above, but on a more extended basis for an average tour of 8 weeks' duration, with 5 performances per week	400,000
Total	500,000

Development of regional opera companies: The field of opera is not as easily organized for regional purposes. Though over 200 independent opera companies exist in this country, only approximately 10 are able to operate on a permanent professional basis from year to year. Three opera companies tour extensively, and three on a limited basis, though several others are artistically capable of touring but lack sufficient financial support to undertake the expense. Since opera is the most expensive of the arts to effectively stage and tour, the National Council on the Arts does not envision an elaborate system of regional companies in the near future. The plan here is rather to encourage the existing groups to gradually expand their touring efforts, or mount special productions for touring as a first experimental step.

This aspect of the regional plan cannot be implemented until after funds are available and discussions can be held with the five or six existing companies that studies have shown exhibit the most favorable success factors. From these discussions and further study of the factors involved in each region, grants will be made based on specific plans, $500,000.

Development of regional dance companies: Nearly all of the dance companies of the highest artistic standard are based in New York City. Nearly 10 of these groups travel extensively throughout the United States on a fairly regular basis. Discussions with the officers of these companies indicate that under acceptable circumstances some of the groups would be willing to relocate to other cities and tour from a new home base. This procedure would be a reversal of the plan for theaters and opera. In this case, the dance companies would gradually narrow the areas of their tours as regional audiences are developed. Universities and community cultural centers have been suggested as logical new homes for the companies.

Dance groups of high artistic standards which are located outside New York would also be aided by this program through assistance which would enable them to expand their present touring activities, or initiate tours on a pilot basis.

1. 2 grants to relocate dance companies in regional homes. (Sponsors, i.e., universities, communities, etc., would provide half the total costs, including performance facilities and rehearsal space for the company)	$100,000
2. 2 grants to expand the touring activities of 2 companies. Grants would be equal to one-half the costs of 2 weeks' activity	50,000
3. 2 grants to 2 companies to initiate pilot touring activities. Grants would be equal to one-half of the cost of a 2-week tour for each company	100,000
Total	250,000

Development of regional symphony orchestras: Nearly all the 26 major orchestras of the Nation tour extensively as do a number of the 50 orchestras whose budgets are between $100,000 and $300,000 per year. However, the financial position of these orchestras has not permitted them to cultivate properly the potential audiences close to their home city, but has forced them to accept widely scattered engagements which vary from year to year. An organized plan to assist particular orchestras to become the primary musical ensemble in a certain region would both increase their base of support and bring a more meaningful musical life to their region.

Grants would be to 20 selected orchestras to expand, or initiate, touring activities. Grants would equal one-half the total costs of tour. Tours for each orchestra would average 2 weeks in length and involve 10 to 14 cities in the prescribed region, $500,000.

(c) Other projects, $3,990,000

Exhibitions to aid painters and sculptors: 12 exhibitions will be organized in cooperation with qualified art museums in each of the particular areas. Museums will cosponsor the shows and share in the expense. The 10 best works will be selected from each exhibition by an expert jury from the entries. The 120 works will be assembled in Washington, D.C., for a national exhibition at one of the museums and then made available to museums across the country which are willing to pay to costs of transportation and insurance. Within each region the following awards will be made: 10 best works of the show—$1,500 each (paintings and sculptures to be available for tour for 2 years and then returned), $15,000.

Other prizes

10 most promising artists over 30 years of age, at $750 each	$7,500
10 most promising artists 20 to 30 years of age, at $750 each	7,500
10 most promising artists under 20 years of age, at $500 each	5,000
Total prizes per region	35,000
Total prize money	420,000
Costs for administering and organizing regional shows and national shows	220,000
Total	640,000

Artmobiles: The need for traveling exhibitions of fine paintings is well documented. A major obstacle to bringing works of art to many communities of the Nation is a lack of facilities which are sufficiently safe and adequate for display purposes. Creation of special exhibition halls is expensive and impractical without a permanent collection available at all times for public exhibition. Artmobiles, or mobile art galleries, have proved extremely successful in both metropolitan and rural areas as an appropriate means of developing appreciation for the visual arts among new audiences.

Grants for the purchase of 10 mobile galleries at an average cost of $70,000 per unit would be made available to museums with sufficiently large permanent collections. Museums wishing to participate would be required to appropriate a sum equal to the purchase price of the vehicles for maintenance costs and agree to route exhibitions through remote areas of their region. Both communities at large and the schools of the region would be benefited, $700,000.

Program to advance inter-American cultural achievements: It is apparent that many citizens of the United States are unaware of the cultural contributions of our Latin American neighbors, and that a similar situation exists in the countries south of our borders. To help remedy this situation and to foster better inter-American understandings, while at the same time assisting U.S. artists in finding new opportunities for employment, the Endowment proposes to carry out a reciprocal program, to—

(*a*) Translate outstanding works of creative literature of Latin-American origin into English, and similarly distinguished works by American writers into Spanish and Portuguese, so that these works may be available for publication and distribution in both North and South America;

(*b*) Translate, in similar fashion, significant works by Latin American dramatists into English, and the works of American dramatists into Spanish and Portuguese, so that these plays may be available for production;

(*c*) Adapt for orchestration significant compositions of Latin American composers which would not be otherwise available for orchestral performances in the United States; and at the same time make available through appropriate means the recorded or taped works of significant American composers for distribution in Latin America and in its educational institutions, $500,000.

National Environmental Design Center: This program would be initiated on a matching grant basis with a leading institution, or institutions, of higher learning as a semiautonomous unit within the university administration. It would be a counterpart of the institutes for science and research which exist at several institutions.

The purpose of the center would be to carry on programs of study, development, and research into the problems and factors of good design as they apply to our visual and physical environment. Equally important, however, would be an active promotion and education program among the organizations and individuals who are responsible for the products and structures which surround the daily

lives of every citizen. The range of study and research would include urban and regional design, architecture, public product design such as street lights, benches, fountains, etc., and private design of industrial products which are used in semipublic structures such as office buildings. Excluded from the program would be products of an expendable nature, such as clothing, furniture, interior appliances, etc.

The National Council on the Arts has concluded that a great need exists for better public knowledge and appreciation of the permanent objects which surround our lives, and that beautiful vistas, buildings, and essential public objects are indeed basic to the creation of finer total environment. Our architects often cannot fully develop the intent of their plans because of a lack of imaginatively designed products. The beautification of America depends not only on broad and imaginative planning, but also on everyday details.

To distribute the results of its work, the center will carry on a continuing program with private industry, Federal, State, and local governments, private civic leaders, and other individuals and agencies responsible for creating our physical environment, $500,000.

National Product Design Center: Without doubt, the countries which have had the greatest impact upon world trade in the past 25 years have been those which have developed effective national design centers. The United States has not engaged in this activity as a government, and has not had the proper agency to encourage a private center for product design.

The National Council on the Arts recognizes the commercial value as well as the cultural value of creating a center for study, development, and research into the problems of industrial and fashion design.

The center would be established in cooperation with a leading institution of higher learning on a matching grant basis and devote itself to aiding and advising individuals and industrial companies concerned with the creation of expendable products which involve personal consumer taste. Symposiums, seminars, monographs, and demonstration programs would be included among the center's activities, $250,000.

Youth orchestras: This project combines two recognized needs in the field of music. Vast areas of our country have little or no opportunity to hear good music well played. Many of our young musicians have no opportunity for employment following their academic training. The two problems can be combined into one solution through the establishment of youth orchestras located in strategic areas of the country. These orchestras would provide excellent ensemble training for our young musicians, serve as an example and inspiration to other young people, and be capable of performing the best of musical literature at a cost which is less than that necessary for operating our major symphony orchestras.

Five such orchestras would be established in cities most willing to provide matching suport to the program. The selection of the cities would be made on a competitive geographic basis and the orchestras would tour extensively to communities in their region. Endowment funds would be used to offset the costs in excess of the income of the orchestra,

Total annual budget per orchestra	$400,000
Estimated income from ticket sales	200,000
Financial support from local resources	100,000
Financial suport from Arts Endowment	100,000
Total	500,000

Rural traveling exhibitions of folk, graphic, and craft art: One of the major obstacles to distributing the benefits of the arts to a larger audience is the shortage of adequate and completely safe facilities. Important paintings and sculpture cannot be justifiably displayed in galleries which are not fireproof, humidity controlled, and protected by security guards. However, some graphic, craft, and some folk art objects do not impose the same stringent requirements.

Therefore, the National Council on the Arts is seriously considering a program to organize a number of such exhibitions designed for circulation in rural areas. These shows would be partly self-contained to minimize lighting and mounting requirements at many locations. The program includes four grants at approximately $50,000 each for exhibitions in particular regions, on tour for 2 years, $200,000.

Local arts council incentive project: Since 1949 nearly 150 cities have formed community arts councils following varying patterns of organizations. The effectiveness and efficiency of these federations has been amply demonstrated over the years. Encouragement of these organizations by the National Endowment for the Arts is of advantage to the Endowment and to local cultural progress. It is also a method of serving the amateur and professional institutions of the arts without direct involvement since all the performing arts as well as museums and visual arts associations are usually member groups of these councils.

Fifteen cities of varying size have annual united campaigns for support of local agencies which incur operating deficits. The major problem facing these councils is their inability to generate contributions as rapidly as the demand for cultural services increases. Every year progressive arts programs must be trimmed from the budget in order to establish a realistic campaign goal. If 100 percent of the goal is raised, the cultural level of the community is preserved, but not increased. If the arts fund falls below 100 percent, the present programs need to be curtailed.

Challenge grants from the National Endowment would be used to match local funds for existing councils and to give incentive to the development of new local councils. The precise plan will be developed through a panel of advisers and staff work in time to be effective in the campaigns conducted during the winter and spring of 1967. Costs are based on first year funding, $450,000.

Special grants to individuals and groups for special study and research projects: It has been wisely suggested to the National Council on the Arts by Federal officials of other grantmaking agencies, by private foundations officers, and private persons, that a small portion of the funds made available to the National Endowment for the Arts be set aside annually for supporting projects which fall outside prescribed programs. Many other granting agencies have such earmarked or allocated funds under a general category called "discretionary funds."

These funds will be used with extreme caution and committed only as grants for projects which are of an emergency nature, and uniquely worthy of support from the Endowment, $250,000.

The above list of projects more than exceeds the Endowment's full fiscal year 1967 authorization of $5 million under section 11(a) of the act. It is therefore requested that the full authorization be appropriated so that the Endowment may select and through grants-in-aid get as many of the projects underway as soon as possible after July 1, 1966.

(*d*) *Assistance to States, $2,750,000*

The declaration of purpose in the National Foundation on the Arts and the Humanities Act recognizes that support of national progress in scholarship in the arts and humanities while a matter for appropriate concern to the Federal Government is primarily a matter for private and local initiative. The provisions of the act give substance to the declaration by specifically providing for the partnership between the States and the Federal Government for the development of the arts. Section 5(h) of the act would implement this partnership by providing for grants to be made to the States to assist them in supporting projects meeting the objectives of the act.

In order to receive such assistance each State shall submit a State plan. The plan shall designate or provide for a State agency as the sole agency for administration of the plan and also provide that Federal funds paid to the State as grants-in-aid shall be expended soley on projects and programs approved by the State agency. Such projects may be supported from Federal funds to the extent of 50 percent of their cost. A total of $2,750,000 as authorized in section 11(c) of the act is requested for this purpose to be allotted equally among the States as required by the act. This will result in not more than $50,000 being paid to each State annually.

If a State has not organized the prescribed State agency, $25,000 of a State's initial allotment of funds may be awarded and expended to conduct a study to plan the development and to establish such an agency and its program. Costs of the study to a maximum of $25,000 may be paid from the Federal allocation without matching requirement.

The Governors of all 50 States and the five other areas included in the act were invited to send official representatives to a special meeting to discuss the provisions of section 5(h) of the act. All the States and three of the terrritories sent representatives to the 2-day session. While there, proposed guidelines were discussed and all representatives indicated their States intended to make appli-

cation for grants if appropriations were made by the Congress. A May 1, 1966, deadline was established for official intent to apply and since the January meeting numerous discussions have been held with individual States concerning their particular plans. Also, one of the two territories which did not attend the special meeting has now indicated its intention of applying for its grant. Appropriation of the full authorization of $2,750,000 is therefore requested.

National endowment for the humanities

Promotion of the humanities:	
1966 estimate	$2,500,000
1967 estimate	5,000,000
Increase	2,500,000

PREAMBLE

When the Congress authorized the establishment of the National Endownment for the Humanities it recognized that our American tradition is humanistic.

It was deep reading in history and philosophy, in works on government and jurisprudence, in the great literature, the essays and drama of the Western World that shaped the thinking of the Founding Fathers. It was out of this reading—not from a computerized survey of needs and opinion—that we have in our heritage the Declaration of Independence, the Constitution, and the federalist papers.

There is nothing esoteric, nothing "egghead" about this word humanistic. This is what it means: That we know our culture and tradition, the roots of our history, and that we pay discerning attention to the ideas that made America what it is.

This does not mean a backward, antiquarian look. It means knowledge, but it also means creativity, innovation, original scholarship. As your one-time congressional colleague, the late philosopher T. V. Smith, pointed out, the great ideas are great because they must be constantly interpreted and applied to the emerging new facts of a changing world.

The world is changing. In the billions of dollars poured by Congress into science and into global programs there has been much done to make it change. This is what the Senate report on the Arts and Humanities legislation called attention to when it said: "There is at present a serious imbalance between Federal support for the natural or pure sciences and for humanistic research and studies * * * the humanities are the very basis of those qualities essential to achieving the goals of a leading democratic society: sound judgment, clear understanding, an ability to analyze the past wisely and constructively in terms of the present and future * * *."

As President Johnson, in his state of the Union message, on January 12, 1966, said, "We must change to master change."

Provisions of the act and the endowment's consequent responsibilities

The National Endowment for the Humanities, in accordance with the provisions of Public Law 89-209, 89th Congress, September 29, 1965, plans to—

"(1) develop and encourage the pursuit of a national policy for the promotion of progress and scholarship in the humanities;

"(2) initiate and support research and programs to strengthen the research potential of the United States in the humanities by making arrangements (including grants, loans, and other forms of assistance) with individuals or groups to support such activities;

"(3) award fellowships and grants to institutions or individuals for training and workshops in the humanities. Fellowships awarded to individuals under this authority may be for the purpose of study or research at appropriate nonprofit institutions selected by the recipient of such aid, for stated periods of time;

"(4) foster the interchange of information in the humanities;

"(5) foster, through grants or other arrangements with groups, public understanding and appreciation of the humanities; and

"(6) support the publication of scholarly works in the humanities * * *."

Moreover, we shall be mindful of the purposes of the act as declared by the Congress:

"* * * (3) 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;

"(4) that it is necessary and appropriate for the Federal Government to complement, assist, and add to programs for the advancement of the humanities and the arts by local, State, regional, and private agencies and their organizations;

"(5) that the practice of art and the study of the humanities requires constant dedication and devotion and that, while no government can call a great artist or scholar into existence, it is necessary and appropriate for the Federal Government to help create and sustain not only a climate encouraging freedom of thought, imagination, and inquiry but also the material conditions facilitating the release of this creative talent;

"(6) that the world leadership which has come to the United States cannot rest solely upon superior power, wealth, and technology, but must be solidly founded upon worldwide respect and admiration for the Nation's high qualities as a leader in the realm of ideas and of the spirit; * * *."

It is clear from the foregoing declarations of the Congress that the National Endowment for the Humanities has several sets of possible clienteles:

The creative scholar who advances humanistic knowledge and understanding;

The creative teacher who teaches it;

The student who receives the fruits of the scholar's and the teacher's mastery of subject matter, dedication and devotion to ideas and ideals in the realm of the spirit;

And very importantly, the citizen who needs wisdom and vision lest he become the unthinking servant of technology.

The Congress has so enacted and the stated purposes will be ours, enthusiastically ours.

Concerning development of the Endowment's policies and programs

The act provides for a National Council on the Humanities, consisting of 26 members in addition to the Chairman; and the act specifies that—

"The Council shall (1) advise the Chairman with respect to policies, programs, and procedures for carrying out his functions, and (2) shall review applications for financial support and make recommendations thereon to the Chairman. The Chairman shall not approve or disapprove an application until he has received the Council's recommendation unless the Council fails to make a recommendation on the application within a reasonable time."

The President appointed the Council on January 27, 1966, and, to the date of this writing (February 10, 1966), it has not been possible to have a Council meeting. The consequence is that the following suggested policies and programs of the National Endowment for the Humanities can only reflect the judgments of the Chairman and such other members of the Council with whom it has been possible for the Chairman to have informal consultation.

The thinking of the Chairman has been toward developing policies and programs, within the purposes of the act, having regard to the following facts:

There are in the United States about 3,400 humanistic museums—i.e., museums chiefly of history and archeology—and related organizations;

There are about 360 State and local historical societies which bring understanding of our cultural heritage to the grassroots, many of them very ably;

There are at least 100 professional societies aimed at (and often fulfilling) the fostering of humanistic learning in its higher reaches;

There are thousands of privately endowed foundations, many aimed at supporting humanistic enterprise in particular segments within the purposes of the Humanities Endowment;

There are uncounted elementary and high schools and 1,524 degree-granting colleges and universities devoted in part to humanistic studies, supported by Federal, State, and local moneys—all taxpayers' money—and by private philanthropy. No doubt, it is the most inclusive school system in the world, and is probably, for a democratic society, the world's best. Some criticisms of it are valid; most are not, considering its high purpose to give as much education as each student can master.

The act declares, in effect, that financial support from the Humanities Endowment shall not be used to displace private and local funds and initiative. It provides also in section 13(a) that there shall be cooperation, in developing

teacher training institutes, between the Commissioner of Education and the Chairman of the National Humanities Endowment.

More generally, it provides that the Chairman shall coordinate, insofar as practicable, the programs of the Humanities Endowment "with existing Federal programs and with those undertaken by other public agencies or private groups, and shall develop the programs of the Endowment with due regard to the contribution to the objectives of this Act which can be made by other Federal agencies under existing programs."

The act also places on the Federal Council on the Arts and the Humanities the duty to "plan and coordinate appropriate participation (including productions and projects) in major historic national events." Because the Federal Council has no appropriation, it follows that this duty imposed by the act must be carried on either by the Arts Endowment or by the Humanities Endowment, jointly or severally, under the aegis of the Federal Council on the Arts and the Humanities.

It is clear that to coordinate, or more properly to avoid duplication of use of money and time in fostering the enacted purposes of the Humanities Endowment, we shall need to have a great deal of information about programs of public and private agencies. Such information never could be theoretically complete; but it would seem that the members of the Humanities Council and of consultant persons and organizations will have sufficient of it to enable the Humanities Endowment to set up and operate programs that do not infringe on the programs of other relevant agencies, public and private.

Suggestions, subject to the Council's amendment, concerning policies and programs

Concerning policies and programs for the Humanities Endowment, the Chairman's thinking has gone along these lines:

Fellowships.—Support for students to assist them to leadership is age old; and no better way to assist development of leadership in all fields of the mind and spirt has ever been discovered or created. Such support was age old even in Biblical times; for it is told in the fourth chapter of the Book of Daniel that Nebuchadnezzar made such provision for developing leadership in the young. His success was notable; for among the recipients of his training grants—as we should call them—was a lad who afterward became the Prophet Daniel. That was good selection, indeed.

It is hoped by the Chairman that the Council will vote to establish a program of fellowships to be awarded by the Humanities Endowment—a program that has regard to existing public and private fellowship programs. In this connection, the Endowment's program should have regard, for example, to the following:

The Office of Education has announced a program to award for 1966–67, 6,000 fellowships for studies toward doctoral degrees. These are fellowships for 3 years each; and the Office of Education has committed $55 million to this program. For 1967–68, it is expected that the total number of these fellowships will be 7,500. About two-thirds of these fellowships will be in humanistic fields and in those social science fields with a humanistic content.

Clearly, and as commanded by the act establishing the National Endowment for the Humanities, the Endowment may safely leave the area of predoctoral fellowships to the Office of Education. For, even while admitting that no educational program in the United States can be theoretically complete, the Humanities Endowment—with its limited appropriations of $3 million for all its programs—cannot and ought not try to complete with the $55 million predoctoral fellowship program of the Office of Education.

There is, however, at least one fellowship area which is largely unoccupied and that is the area of scholars and teachers at, very roughly indicated, the assistant professorship level—the young scholar who usually has the doctorate, usually has a large teaching load, often has a family coming along, and simply hasn't the time and energy for creative scholarship. Not incidentally, creative teaching largely depends on good scholarship; so does good curatorship in museums and in historical societies.

To make opportunities for such young persons, say in their thirties, to develop themselves would seem to be a prime and proper objective of the Humanities Endowment. Creative college and university teachers more often than not, are good scholars; and among the objectives of fellowships for such young scholars would be to recapture the importance of teaching and to put the scholar and teacher into some kind of balance—which is important and is recognized to be

needed. There is no better way then through creative teaching by good scholars to multiply, magnify and make cogent a larger and larger aristocracy of brains and character among our citizens, upon whom the future of the Republic will wholly depend. From such teachers who are such scholars, will come a quality of education which will have the greatest impact on the citizenry who will lead us in future.

Moreover, there are these consideration, in reference to such a program, of relevance to the Humanities Endowment:

Fairly soon it will be necessary for the Council on the Humanities to recognize (*a*) fields of study of importance to the public welfare which are underdeveloped and may be developed, and (*b*) fields of study which are practically nonexistent and urgently must be developed for the good of the Republic. (Parenthetically, there also are fields of study which have reached the point of diminishing returns—or the point of almost no return—which should be eschewed: pedantry, not relevance, generally is their product.) Such fellowships as are herein suggested would give the Humanities Council both the incentive and the means for deciding on viable fields for the Edowment's programs vis-a-vis the colleges and universities.

The fellowships herein envisaged would provide the best possible opportunity to search out talent on a nationwide basis; for excellence in humanistic study and teaching may be found in all kinds and conditions of colleges and universities, in museums and in historical societies. Creative humanistic results do not depend, as does creative accomplishment in modern physics, for example, on expensive instrumentation. What humanists need, above all, is time for study, reflection and research: they need libraries, too; but interlibrary loans ameliorate this situation, and with time and funds at their disposal, developing humanists can go to the libraries and museums they need. Time, with money which buys time for them, it should be repeated, is what they need most.

The Humanities Endowment should not avoid help to those in the great institutions of learning; but neither should we think that most of the humanists are to be found in them. We should be sure that, with proper search, potentially first-rate humanists may be found in Siwash as well as in Yalesota.

It would be important that, if such a program of fellowships be authorized, it should be thought of as for the long term. One-shot programs of this kind often do more harm than good. This is so, because if a budding creative scholar sees hope for the future of his work in the announcement of such a program, he will strive to bring himself up to participation in it, whereas if the program be cut off after a year or so, all his hopes will be dashed and his striving for excellence in both teaching and research will be gravely diminished. Humanists, too, are human.

Considering that there are 1,524 degree-granting colleges and universities in the United States, it seems reasonable to say that at least 100 excellent prospects for such fellowships may be turned up each year, for 1-year fellowships.

Grants to individuals.—By grants to individuals, as distinguished from fellowships, we mean to imply that their recipients will be persons accomplished in scholarly investigation. They may be young or old; for able people differ in the speed of their development. But whether young or old, the touchstone of choice will be their creative powers. There are risks in making this kind of choice—as there are in making choices for fellowships; but the risks—given selectors who are sensitive and sensible and know their business—are worth taking, indeed must be taken for the good of the Republic. The breakthroughs in understanding come as the English historian, Henry Thomas Buckle, has said: "There is a spiritual, a poetic, and, for aught we know, a spontaneous and uncaused element in the human mind, which ever and anon, suddenly without warning, gives us a glimpse and a forecast for the future, and urges us to seize truth as it were by anticipation." The Endowment must be aware enough to sense persons who may be about "to seize the truth as it were by anticipation."

This is not as impossible as it may sound to those who are inexperienced in such matters. But it is comforting to add the thought that if one does not get a "breakthrough in understanding" from such a grant, one will at least get some respectably solid scholarly work out of it.

Breakthroughs even in science come from individuals, however much they may be converted into practicable developments only by teamwork. Thus, while the manmade satellites are made and sent aloft by great, smoothly functioning teams of scholars, technicians, workers, and great manufacturers, the concepts on which their accomplishments are based were, in large part, "the work of a handful of men, scattered over a continent and a century—men who were willful, uncom-

promising, quarrelsome, arrogant, and creative." So Dr. Clifford Ambrose Truesdell III, professor of rational mechanics at the Johns Hopkins University, in a memorable article (Science: v. 127, p. 736, 1958) described those who had created the "classical mechanics." The descriptive adjectives are worth remembering: "willful, uncompromising, quarrelsome, arrogant, and creative."

It is worth remembering, too, that it took them a century to create a scientific base for the moon shots. Likewise, the Humanities Endowment will fail to achieve the congressional purpose if it is in a hurry for results.

And if the above is true—as it is—in respect to fast-moving science, we should be prepared to believe that it is even more true in respect, say, to freedom and liberty—basic to all humanistic concepts. For while extensions and defenses of liberty and freedom are always group actions, the concept of liberty—without which there would be no group action—was created, stated, and developed by individuals.

When John Adams had read the Declaration of Independence, he said that there "is not an idea in it but what had been hackneyed in Congress 2 years before." Thomas Jefferson's reply was that it had not been his purpose "to find out new principles * * * to say things that had never been said before, but to place before mankind the commonsense of the subject" and to harmonize "the sentiments of the day, whether expressed in conversation, in letters, in printed essays, or the elementary books of public right." In short, Mr. Jefferson, the individual, created the Declaration of Independence on the basis of what he had learned from other individuals. It took the Continental Congress and the Continental Army—and the shrewdly politic Benjamin Franklin—to make the declaration effective; but the humanistic declaration was what led to the group action—in which all sorts and conditions of men pledged their lives, their fortunes and their sacred honor.

Grants to scholarly groups.—The act defines the term "group" to include "any State or other public agency, and any nonprofit society, institution, organization, association, museum, or establishment in the United States, whether or not incorporated"—which surely takes in a lot of humanistic territory. It takes in so much territory, which contains so many first-rate opportunities for humanistic service that only a frighteningly few can be indicated in this budget presentation. Examples are:

Editing and publishing of the papers of great Americans: As is well known, the papers of Jefferson, Franklin, the Adamses, Hamilton, Madison, are on the way. Others also have been started. Some are well financed in comparison with others; all will need more funds than are now in sight from private sources. The National Historical Publications Commission has done noble work in promoting the availability of these great documents of American history, both with money appropriated by the Congress and by kindling enthusiasm which resulted in the granting of great sums from private funds. The Humanities Endowment should have a part in these enterprises, avoiding duplication of congressional appropriations for them, and taking care not to dry up private initiative and private funds by assuming too large a share of the financial burdens.

Editing and publishing definitive editions of great American authors: Some of these are on the way, too many of them going forward too slowly because the scholars involved are operating on a shoestring. Here, as in respect to the papers of great Americans, care must be taken to negative some hopes that Federal money will assume the whole burden and provide opulent to replace lean budgets. But it should be said, too, that humanistic scholars have been trained to frugality by straitened circumstances and, in the main, we know that they will be financially reasonable.

Archeological-historical excavations, carried on by American institutions, both in the United States and abroad: Support for such digs should be judged by the scholarly quality of their proponents, and by the relevance of their prospective finds to enhance—in the words of the act—"worldwide respect and admiration for the Nation's high qualities in the realm of ideas and of the spirit." They should also be designed to be effective teaching grounds for future American archeological historians.

Training programs to improve the quality of editing and publishing by nonprofit university presses: University presses are the principal publishers of the papers of great Americans and of the editions of great American authors, and of the translation and publishing of important works relevant to American tradition and public policy. They publish well, but their production could be improved; and they are anxious to do so, to bring themselves up to and to better

the quality of the best of the university presses of Europe and thus demonstrate American leadership in their areas of ideas and of the spirit.

Computer research in the study of foreign languages and in preparing concordances to the greatest of creative literature: This is a live subject among humanistic scholars. Obviously, the humanists will need the advice of scientists in these matters; and we, of course, would consult with the staff of the National Science Foundation.

The development of needed training programs if humanistic studies are to progress: There will be many of these; and it is my expectation that members of the Endowment's Council will be in position to choose these that may provide breakthroughs both as respects content and method. It is the chairman's hope that the classics may be emphasized; because as a member of the Endowment's Council, Dr. Else, has written "* * * the role of the classics in present-day American life is nil, while their relevance is enormous."

Assistance to humanistic learned societies: Here, assistance may take the form of small grants to significant journals, assistance toward the publication of scholarly works of great merit, and in other relatively inexpensive ways.

Doubtless, as soon as the Council has approved programs and guidelines for presenting applications, we shall be inundated with proposals of these and other kinds, from groups as well as from individuals.

In evaluating applications from groups, it never should be forgotten that the success of all group enterprises follows only when there is first-rate leadership.

And always should be remembered what the late great president of Yale University, Dr. A. Whitney Griswold, said in his 1957 baccalaureate: "Creative ideas do not spring from groups. The spring from individuals. The divine spark leaps from the finger of God to the finger of Adam, whether it takes the ultimate shape of a law of physics or a law of the land, a poem or a policy, a sonata or a mechanical computer. Groups map exploit, change, in some cases even improve upon this creative essence; without it they would have nothing to do."

Grants to groups whose activities relate not so much to scholarly production as to education of the citizenry to the end that they shall better their understanding and appreciation of "the American way"—which some sophisticates think to be a joke; but it isn't. Among such groups and their activities may be instanced the following:

Humanistic museums and historical societies, in the United States, have 75 million visitors a year. They are, therefore, not small change in the total effort for humanistic education in the United States. They aim to enhance historical appreciation, encourage critical judgment and deepen perception: their clientele includes children, serious students, collectors of items of American and world history, and casual visitors who, however casual, learn something they carry with them the rest of their lives.

State and local historical museums are, by and large, the stepchildren of American educational enterprises. People do not enter them "for credit" in an academic sense, but for love of learning and for interest in their origins—family, State, and local. Most of them are poor as church mice, many have important items in their collections that they don't know what to do with: They don't know what to do with them either to conserve and preserve them for posterity, or to make them useful educationally. The poorest of them financially, which includes some of the most important, are kept going by devoted citizens who are paid nothing or a pittance. They need everything; but what their devoted personnel need most and know they need most is training—for adequate cataloging, for museum display techniques, for whatever contributes to excellence of museum operation and education.

Relatively simple programs may be devised to provide a good deal of the needed training of personnel—for research in collections and their cataloging, for preparing exhibition catalogs, for conservation of objects, etc.

Considering the number of the lives they touch and inspire annually, humanistic museums deserve the Endowment's perceptive concern for their welfare. Those which need help the most are small and local: they operate at the grassroots; and they truly are bearers of the American humanistic tradition.

In view of our mandate from the Congress, to continue to merit support by the taxpayers' money, the Endowment must put itself into position to demonstrate some impact of our efforts on our total American culture. What the Humanities Endowment does with the taxpayers' money must, to merit continuing support, make some visible, recognizable impact on the lives of people outside the academic community. These people are much more numerous than the academic community, they pay more taxes in total, they are eager to learn and are capable of much more learning and creative thought than the academics usually credit them

with. Clearly, the Congress hoped that the Endowment will bring the humanities to a major segment of our lay population and it is clear that if the Endowment can do this the result will be to better understanding of our society and melioration of our lives.

Humanistic museums provide one good and broad avenue to nourish the people's eagerness for learning and understanding.

Educational television: Dr. Barnaby C. Keeney, a member of the Council who is scheduled to replace the present Chairman on July 1, 1966, has thought deeply on this subject; and, in a talk to the Council of Graduate Schools on December 2, 1965, said:

"The Endowment is authorized to operate in adult education, in extramural education, and in the area that is the boundary between education and entertainment—obviously, television.

"Extramural education has in its quality an even greater range than American education in general.

"One can easily find extension or adult education programs that provide a mere pastime to those whose hours are not fully occupied. One can, on the other hand, find such programs that have great meaning and great importance to those who participate in them.

"Little that is significant is done through the mass media, and much more could be.

"Perhaps, with the decline in attenion to popular television, this is an opportune time to propose commercial programing of serious intellectual content.

"Programs such as these can be set in action fairly quickly."

Indeed, the Chairman already has under discussion support for educational TV programs that he deems to be of excellent intellectual content.

Talking books: "These are books read onto sound-reproducing recordings for the use of blind persons. By title 2 of the United States Code, section 135a, the administration of this program is in the Library of Congress. The legislation specifically states that the talking books are "* * * for the use of blind residents of the United States."

But there are many persons in the United States who cannot read for reasons other than blindness—including, for example, many wounded veterans, quadriplegics, some percentage of persons who are mentally ill. Much study will have to be given to this matter before any program could be developed for the Humanities Endowment; but that there is a cultural need here seems beyond doubt.

In England, for another kind of example, "talking books" on long-playing records are now available, commercially, to teach better speech. This, too, surely would be a proper concern of the Humanities Endowment; and if the idea of recordings for such purpose were later deemed to be a good commercial proposition, that would be all to the good.

American history: The history of the United States, in its main stream, is a history of the guarding of the ramparts of freedom. Of no other part of the world can this be said with equal truth. Freedom is the supreme treasure of our country.

It must be a high purpose of the Humanities Endowment to further both original historical research and to increase popular understanding of the meaning of the United States, to itself and to the world, in terms of our national experience.

In large part, fulfillment of this high purpose will depend on scholars carrying on and publishing their researches, and on their teaching of students in colleges and universities. In other large parts it will depend on the writing and publishing of first-rate readable articles and books for the lay public; it will also depend on the messages that the 75 million annual visitors to our humanistic museums receive in those museums. The Humanities Endowment will, it should be strongly hoped, make the message of the United States one of its primary concerns, and grant financial assistance to those who can contribute, in first-rate ways only, to understanding and dissemination of the message.

This should decidely not mean that we start with 1776, nor even with 1066. It must mean that scholars, teachers and popularizers, all, must have regard to the Mesopotamian origins out of which the world of Western man developed. We must follow the expansion, in a long curve upward, of the dignity and concomitant freedom of men—from Mesopotamia, the lands between the rivers, through Judea where the expansion added concerns of the spirit to lawgiving and from whence came the Man of Galilee; through Greece where were added dreams and accomplishments toward "a race of beings living a beautiful, complete, and human life;" via Rome, the greatest lawgiver of all time from which

the Founding Fathers found their models for creative political innovation; in the Renaissance of Italy and France; in the steppingstone of Britain before freedom took its giant stride across the Western Ocean.

Nor should we forget what was in this hemisphere before the men of Europe arrived—fine art, great architecture, stupendous engineering works, and a civilization from which we still have much to learn.

In Africa, China, India, the islands of the vast reaches of the Pacific Ocean, there were spiritually great civilizations from which we have drawn and still have much to draw.

And we should not ever forget that Ellis Island should be cherished—just as much as is Plymouth Rock.

There are great things to be done in all the fields of American history, in learning more and in stating that learning better. And in so doing, in so promoting humanistic learning and appreciation, we must never doubt the truth of what one of the greatest of Federal judges, the late Learned Hand, told the board of regents of the University of the State of New York as to what are the principles of civil liberty and human rights: "I answer that they lie in habits, customs—conventions if you will—that tolerate dissent and can live without irrefragable certainties; that are ready to overhaul existing assumptions; that recognize that we never see save through a glass darkly; and that at long last we shall succeed only so far as we continue to undertake 'the intolerable labor of thought'—that most distasteful of all our activities."

"Tolerate dissent," "live without irrefragable certainties," "ready to overhaul existing assumptions," "recognize that we never see save through a glass darkly," "undertake the intolerable labor of thought"—Judge Hand has charted our proper intellectual and spiritual course not only in respect to American history but also in respect to all that we shall do.

Again, it should be said, and emphasized, that the policies and programs suggested herein represent only part of the thought of the Endowment's chairman as of this date. Indeed, others are in process of being drafted for the consideration of the Council; but the chairman has no doubt that equally good and better programs will be suggested by the Council; that's what the Council is for. Further, based on much experience, the chairman declares that he knows that better ideas are developed outside of the office of philanthropic administrators than are developed within them.

At this point someone may ask for price tags on specific projects. We have hesitated to put on price tags for two reasons.

First, under the law, we must consult with the Council on the Humanities before going forward on policies and programs. If, in our first two or three meetings, the Council should shape programs quite differently than suggested herein, we would then seem to have misled your committee.

An equally large reason lies in good administration. At one point I took some of the illustrations which have been used in the pages of this statement and attached to them my own estimates of cost. Then I discussed these estimates with several of my associates. I found that on almost every item we could double our estimate or cut it in half. The decision would depend on good endowment management practice; on how good the proposals which come in to us are, on how needed they are, on the availability of personnel to do them.

So with your leave, I would prefer to indicate reasonable cost probabilities by groups:

1. Research and publication would include the editing and publishing of literary and historical papers of great Americans; the production of definitive editions of American authors; computer research in the humanities; assistance to learned societies; for publications in American history and biography. The probable totals for this group exceeded $1,500,000.

2. Fellowship grants and research grants to individuals, training programs for university press personnel, training programs for teachers, to take just three possibilities, could well total an additional $1,800,000.

3. National, State, local, and community agencies and events; for humanistic museums and historical societies, for educational television, for talking books for the handicapped, I could visualize projects which would use well not less than $1,700,000. Here I did not take into account the possibility that Congress might wish development in the years ahead of special programs of research, scholarship, and public information on our Nation's bicentennial, and the invention and formation of our Federal system.

All these figures are only indicative. I have simply added up experienced guesses of several of us who have had much to do with foundation projects in comparable fields. A year of experience may show that there are many more promising young men and women who wish to develop themselves in fields of teaching and research in the humanities than we think there are. In that case, the prospects for fellowships and stipends would be increased and we would so report. We might find that production of scholarly works will move more slowly or that historical societies or historical museums may be inspired by the challenge of the new act to make their resources more widely and effectively used by the public. It would not be good administration on our part to be dogmatic or to make financial decisions before the evidence is in.

One great midwestern university has already sent us almost 50 applications totaling, at the date of writing, more than $3 million. No other institution has sent us more than half a dozen and no other institution's applications would total as much as $1 million. There doubtless will be categories and methods of aid which emerge from our applications. A foundation should respond only to creativity and imagination.

We won't promise you genius for every grant, but we hope we can recognize promise when it comes to us. If 10 historians or biographers of great promise come to us next year we should grant money to them for their needs. If not one shows up for 3 years we won't grant a cent to them. That's our responsibility, as it has been in private philanthropy. And we hope, too, that our 3-year self-restraint won't cost us the privilege of making grants to the 10 if they all arrive in the 4th year.

The main point is that there is so much utterly first-rate work to be done within the purposes of the National Endowment for the Humanities that, whether or not the suggested programs be approved by the Council, others equally good or better surely will be available for granting to the limit of the available funds.

Encouragement of private philanthropy

	1966 estimate	1967 estimate	Increase
Amounts to equal gifts, bequests and devises of money and other property received by:			
The endowment for the arts	$500,000	$1,000,000	$500,000
The endowment for the humanities	500,000	1,000,000	500,000
Total	1,000,000	2,000,000	1,000,000

One of the major objectives of the National Foundation on the Arts and Humanities Act of 1965 is to stimulate private philanthropic support for the arts and humanities by providing funds to match gifts made to the Endowments for the purpose of the act. To this end, section 11(b) authorizes to be appropriated to each Endowment an amount equal to the total gifts received by the Endowment in accordance with subsection 10(a)(2), up to a maximum of $2,250,000 for the Endowment for the Arts and $5 million for the Endowment for the Humanities in any one fiscal year. The amounts provided by such gifts, together with the matching funds appropriated in accordance with this authorization, will be available to support the program of the Endowments, as described in preceding sections of this justification.

It will be one of the functions of the National Councils on the Arts and the Humanities to explore and propose projects which would be jointly funded by private sources and the Endowments. Until the Federal Council on the Arts and the Humanities and the two national councils have had an opportunity of presenting specific proposals before interested individuals, organizations, and foundations, it is not possible to predict the extent of such support.

An authorization is requested for fiscal year 1967 divided between the two Endowments as indicated above. This will enable the chairmen for the Endowments and the National Councils to have available matching funds to obtain support under the provisions of the act.

Administration

Administration:

1967 estimate	$1,180,000
1966 estimate	727,000
Increase	453,000

The increase of $453,000 provides annualization for a full year of operating expenses of the Foundation. No increase in the 75 full-time positions authorized in 1966 is provided.

SALARIES AND EXPENSES

Program and financing

[In thousands of dollars]

		1965 actual	1966 estimate	1967 estimate
	Program by activities:			
	1. Promotion of the arts		3,500	9,750
	2. Promotion of the humanities		3,500	7,000
	3. Administration		727	1,180
10	Total program costs, funded—obligations		7,727	17,930
	Financing:			
13	Receipts and reimbursements from trust fund accounts "Donations"		−1,000	−2,000
	New obligational authority		6,727	15,930
40	Appropriation:			
	Definite		5,700	13,930
	Indefinite		1,000	2,000
42	Transferred from "Salaries and expenses, National Council on the Arts" (79 Stat. 849)		27	
43	Appropriation (adjusted)		6,727	15,930
	Relation of obligations to expenditures:			
10	Total obligations		7,727	17,930
70	Receipts and other offsets (items 11-17)		−1,000	−2,000
71	Obligations affecting expenditures		6,727	15,930
72	Obligated balance, start of year		5,227	5,227
74	Obligated balance, end of year		−5,227	−12,757
90	Expenditures		1,500	8,400

Object classification

[In thousands of dollars]

		1965 actual	1966 estimate	1967 estimate
	Personnel compensation:			
11.1	Permanent positions		351	793
11.3	Positions other than permanent		60	48
11.5	Other personnel compensation			
	Total personnel compensation		411	841
12.0	Personnel benefits		30	61
13.0	Benefits for former personnel			
21.0	Travel and transportation of persons		50	70
22.0	Transportation of things			
23.0	Rent, communications, and utilities		40	104
24.0	Printing and reproduction		20	15
25.1	Other services		98	55
25.2	Services of other agencies		13	25
26.0	Supplies and materials		10	7
31.0	Equipment		55	2
32.0	Lands and structures			
33.0	Investments and loans			
41.0	Grants, subsidies, and contributions		7,000	16,750
42.0	Insurance claims and indemnities			
43.0	Interest and dividends			
44.0	Refunds			
99.0	Total obligations		7,727	17,930

Personnel summary

	1965 actual	1966 estimate	1967 estimate
Total number of permanent positions		75	75
Full-time equivalent of other positions		6	4
Average number of all employees		39	74
Average GS grade		9.4	9.4
Average GS salary		$10,343	$10,674

Detail of personnel compensation

	1965 actual		1966 estimate		1967 estimate	
	Number	Total salary	Number	Total salary	Number	Total salary
Grades and ranges:						
Special positions at rates equal to or in excess of $25,382:						
Chairman (arts)			1.0	$28,500	1.0	$28,500
Chairman (humanities)			1.0	28,500	1.0	28,500
GS-18. $25,382:						
Deputy Chairman (arts)			1.0	25,382	1.0	25,382
Deputy Chairman (humanities)			1.0	25,382	1.0	25,382
GS-17. $22,217 to $25,325:						
Legal Counsel			1.0	22,217	1.0	22,994
GS-16. $19,619 to $25,043:						
Director, State and Local Operations			1.0	19,619	1.0	20,297
Director, Office of Research			1.0	19,619	1.0	20,297
GS-15. $17,055 to $22,365:						
Program director, special arts programs			3.0	68,220	3.0	70,580
Special Assistant to the Chairman (arts)			1.0	17,055	1.0	17,645
Special Assistant to the Chairman (humanities)			1.0	17,055	1.0	17,645
Director, Office of Training			1.0	17,055	1.0	17,645
Director, special humanities program			1.0	17,055	1.0	17,645
Director of Administration			1.0	17,055	1.0	17,645
GS-14. $14,680 to $19,252:						
Program director			4.0	58,720	4.0	60,752
Public affairs director			2.0	29,360	2.0	30,376
Director, education program			1.0	14,680	1.0	15,188
Special assistant (arts)			1.0	14,680	1.0	15,188
Special assistant (humanities)			1.0	14,680	1.0	15,188
Grant management officer			1.0	14,680	1.0	15,188
Director, studies and analysis (arts)			1.0	14,680	1.0	15,188
Director, studies and analysis (humanities)			1.0	14,680	1.0	15,188
GS-13. $12,510 to $16,425			3.0	37,530	3.0	38,835
GS-12. $10,619 to $13,931			2.0	21,238	2.0	21,974
GS-11. $8,961 to $11,715			4.0	35,844	4.0	37,068
GS-10. $8,184 to $10,704			1.0	8,184	1.0	8,464
GS-9. $7,479 to $9,765			4.0	29,916	4.0	30,932
GS-8. $6,869 to $8,821			1.0	6,869	1.0	7,097
GS-7. $6,269 to $8,132			8.0	50,152	8.0	51,808
GS-6. $5,702 to $7,430			7.0	39,914	7.0	41,258
GS-5. $5,181 to $6,720			7.0	36,267	7.0	37,464
GS-4. $4,641 to $6,045			4.0	18,564	4.0	19,188
GS-3. $4,149 to $5,409			6.0	24,894	6.0	25,734
GS-2. $3,814 to $4,975			1.0	3,814	1.0	3,943
Total permanent			75.0	812,060	75.0	836,178
Pay above the annual stated rate						3,050
Lapses			−43.5	460,660	−5.5	45,928
Net permanent (average number, net salary)			31.5	351,400	69.5	793,300
Positions other than permanent: Intermittent employment				60,000		48,000
Total personnel compensation				411,400		841,300

DONATIONS

Program and financing

[In thousands of dollars]

		1965 actual	1966 estimate	1967 estimate
	Program by activities:			
	1. Promotion of the Arts		500	1,000
	2. Promotion of the Humanities		500	1,000
10	Total program costs, funded—obligations (object class 41.0)		1,000	2,000
	Financing:			
60	New obligational authority (appropriation)		1,000	2,000
	Relation of obligations to expenditures:			
71	Total obligations (affecting expenditures)		1,000	2,000
90	Expenditures		1,000	2,000

CREATION AND PURPOSES OF THE FOUNDATION

Senator MCGEE. Last fall, $5,700,000 was appropriated in the Supplemental Appropriation Act to enable the National Foundation to begin operation. However, this is the first time, as you mentioned before, that the Foundation has been before the regular Senate committee in support of an annual budget.

PURPOSE OF FOUNDATION

Please describe concisely the purposes of the National Foundation on the Arts and the Humanities. You may supply that for the record.

Mr. STEVENS. Yes, sir. We have it with us.

(The information follows:)

Section 4(b):

"The purpose of the Foundation shall be to develop and promote a broadly conceived national policy of support for the humanities and the arts in the United States pursuant to this act."

Section 2 (4) of the act is also particularly pertinent: "that it is necessary and appropriate for the Federal Government to complement, assist, and add to programs for the advancement of the humanities and the arts by local, State, regional, and private agencies and their organizations."

PERSONNEL

Mr. STEVENS. We have allocated the $2½ million which is the share the National Endowment for the Arts has for its various projects, and so far they have been quite favorably received by the press.

We have now almost assembled our staff and we are operating at what you might call full capacity. I think we only have three vacancies which we expect to fill momentarily.

I have a list of the projects and they are listed in our justification.

TABLE OF ORGANIZATION

Senator MCGEE. I think it would be helpful if we could put in the record a chart or statement that would place in proper perspective the National Foundation on the Arts and the Humanities, the National Endowment for the Arts, the Federal Council on the Arts and the Humanities, the National Council on the Arts, the National Endowment for Humanities, and the National Council on the Humanities.

Mr. STEVENS. Yes, sir; we have that, and will provide it for the record.

(The information follows:)

Purpose of the Foundation: To develop and promote a broadly conceived national policy of support for the arts and humanities throughout the United States.

The bill establishes a National Foundation on the Arts and the Humanities, consisting of a National Endowment for the Arts, a National Endowment for the Humanities, and a Federal Council on the Arts and the Humanities.

National Foundation on the Arts and the Humanities (in the executive branch of the Government)

National Endowment for the Arts: National Council on the Arts	Federal Council on the Arts and the Humanities (to coordinate by advice activities between the two Endowments and with related Federal agencies)	National Endowment for the Humanities: National Council on the Humanities

Arts

The National Endowment for the Arts provides matching grants to States, to nonprofit or public groups, and grants to individuals engaged in the creative and performing arts for the whole range of artistic activity. Where appropriate, renovation or construction of facilities are included.

The National Council on the Arts established in 1964 by Public Law 88-579 is transferred to the National Endowment for the Arts and increased by 2 members to 26, plus the Chairman of the Council who becomes Chairman of the Endowment. The Council, composed of private citizens, advises the Chairman on policies and programs and reviews applications for financial assistance, and also carries out its planning and advisory responsibilities set forth under the 1964 law.

Humanities

The National Endowment for the Humanities provides grants and loans for research, awards fellowships and grants to institutions for training, supports the publication of scholarly works, provides for the interchange of information, and fosters understanding and appreciation of the humanities.

The bill establishes a National Council on the Humanities appointed by the President and composed of 26 private citizens and the Chairman of the Humanities Endowment, as Chairman of the Council. The Council advises the Chairman on policies and programs and reviews applications for financial assistance.

Federal Council

The nine-member Federal Council is composed of the Chairman of the two Endowments, the U.S. Commissioner of Education, the Secretary of the Smithsonian Institution, the Director of the National Science Foundation, the Librarian of Congress, a member designated by the Secretary of State, the Director of the National Gallery of Art, and the Chairman of the Commission of Fine Arts. The Secretary of the Smithsonian has been appointed Chairman.

NATIONAL COUNCIL ON THE ARTS

Senator MCGEE. All right, I think that is going to be necessary, if we are going to explain that to our colleagues. I suppose this will describe each of the groups, the sections and that sort of thing, what it is, what they are supposed to do. Could we have a list of the members of the various councils also?

(The information follows:)

Roger L. Stevens, chairman, National Endowment for the Arts, National Council on the Arts.
Miss Elizabeth Ashley, actress.
Leonard Bernstein, conductor, composer, pianist.
Anthony A. Bliss, lawyer, president, Metropolitan Opera Association.
Mr. David Brinkley, NBC correspondent.
Dr. Albert Bush-Brown, president, Rhode Island School of Design.

Miss Agnes de Mille, choreographer, author, lecturer.
Mr. Rene d'Harnoncourt, director, the Museum of Modern Art.
Mr. Richard C. Diebenkorn, Jr., painter.
Mr. Ralph Ellison, author, lecturer, teacher.
Paul Engle, poet, writer, teacher, director, program in creative writing, University of Iowa.
Philip Hanes, Jr., president, Arts Councils of America.
Rev. Gilbert Hartke, O.P., director, Speech and Drama Department, the Catholic University of America.
Herman David Kenin, international president, American Federation of Musicians.
Miss Eleanor Lambert, fashion authority; honorary member and director of public relations, Council of Fashion Designers of America.
Dr. Warner Lawson, musician, educator, dean, College of Fine Arts, Howard University.
Miss Harper Lee, author.
Mr. Gregory Peck, motion picture actor-producer.
William L. Pereira, FAIA, architect.
Mr. Richard Rodgers, composer, lyricist, producer.
Oliver Smith, theatrical producer-designer, painter.
Isaac Stern, concert violinist.
George Stevens, Sr., film director-producer.
James Johnson Sweeney, author, director, the Museum of Fine Arts.
Otto Wittmann, director, the Toledo Museum of Art.
Minoru Yamasaki, FAIA, architect.
Stanley Young, author, publisher.

Compensation for Council Members

Senator McGee. Are members of the various councils compensated other than for travel expenses and for time actually worked?

Mr. Stevens. They receive $75 a day plus subsistence for out-of-pocket expenses.

Senator McGee. $75 for their working hours; they have no regular salary?

Mr. Stevens. No, sir.

Staff

Senator McGee. You mentioned you are now staffed. How many staff employees do you have?

Mr. Stevens. Mr. Collett, that is 33?

Mr. Collett. The Endowment for the Arts has committed 30 positions. The Endowment for Humanities committed 12 of 27 positions they have, and some 18 positions which are in the shared staff which serves both groups. I would say in the Endowment for the Arts they are very close to their ceiling.

Senator McGee. That ceiling being——

Mr. Collett. This is an agreed upon sharing of a total of 75 positions between the two endowments and shared operations.

Mr. Stevens. We were asked to cut like most of the other agencies from our approved 100 positions and found by sharing with the Humanities, we could cut without too much loss of efficiency.

Positions for the National Foundation on the Arts and the Humanities by Title and Grade

Senator McGee. Will you please place in the record a listing by grade and title of the several positions for the National Foundation on the Arts and the Humanities?

Mr. Collett. Yes, sir.

(The listing follows:)

National Endowment for the Arts

Title	Grade
Chairman	Presidential appointment.
Deptuy Chairman	GS–18.
Director, State and Community Operations.	GS–16.
Special Assistant to the Chairman.	GS–15.
Program Director	GS–15.
Program Director	GS–15.
Program Director	GS–15.
Special Assistant to the Deputy Chairman.	GS–14.
Public Affairs Director.	GS–14.
Director of Educational Programs.	GS–14.
Program Director	GS–14.
Program Director	GS–14.
Director, Office of Studies and Analysis.	GS–14.
Secretary to the National Council on the Arts.	GS–13.
Director, Government Liaison.	GS–13.
Project evaluator	GS–12.
Project evaluator [1]	GS–12.
Secretary	GS–11.
Secretary	GS–7.
Grant processor [1]	GS–7.
Research assistant [1]	GS–7.
Secretary [1]	GS–6.
Secretary	GS–6.
Secretary	GS–6.
Secretary	GS–6.
Secretary	GS–6.
Secretary	GS–5.
Program assistant	GS–5.
Grant processor	GS–5.
Secretary	GS–4.
Clerk-typist	GS–4.
Clerk-typist	GS–4.
Secretary	GS–3.
Clerk-typist	GS–3.

[1] These positions will be affiliated with the Grant Management Officer on the shared staff, in order to insure maximum efficiency and overall economy in administration.

National Endowment for the Humanities

Title	Grade
Chairman	Presidential appointment.
Deputy Chairman	GS–18.
Director, Office of Research.	GS–16.
Special Assistant	GS–15.
Director, Office of Training.	GS–15.
Program Director	GS–15.
Special Assistant	GS–14.
Public Affairs Director	GS–14.
Program Director	GS–14.
Program Director	GS–14.
Director, Office of Studies and Analysis.	GS–14.
Secretary to National Council on the Humanities.	GS–12.
Grant analyst	GS–11.
Secretary	GS–9.
Grant analyst	GS–9.
Secretary	GS–7.
Secretary	GS–7.
Secretary	GS–7.
Grant analyst	GS–7.
Research assistant	GS–7.
Secretary	GS–6.
Secretary	GS–6.
Secretary	GS–5.
Secretary	GS–5.
Clerk-typist	GS–4.
Clerk-typist	GS–4.
Clerk-typist	GS–3.

Shared staff

Title	*Grade*	*Title*	*Grade*
General Counsel	GS–17.	Secretary	GS–8.
Director, Office of Administration	GS–15.	Administrative assistant	GS–7.
Grant management officer	GS–14.	Secretary	GS–6.
Assistant to General Council	GS–13.	Do	GS–6.
Assistant to Director	GS–13.	Project records clerk	GS–6.
Grant analyst	GS–12.	Clerk-typist	GS–4.
		Do	GS–3.
		Do	GS–2.

ADMINISTRATION OF PROGRAM

Senator McGEE. In addition, Mr. Collett, I hand you these questions pertaining to administration of the program which I will appreciate your answering for the record.

(The questions and answers follow:)

OBLIGATIONS AND PERSONNEL

Question. $1,180,000 of the $13,930,000 budget estimate is for administration of your program. In fiscal year 1966, $727,000 was appropriated. How much of last year's appropriation will actually be expended before the end of this fiscal year?

Answer. We now confidently expect all but perhaps $50,000 of the appropriated funds will be obligated before the end of this fiscal year.

Question. I understand that there are a number of employees who are common to both the endowments. Which ones are these?

Answer. The endowments agreed that certain positions could be utilized more effectively if made available to both. Generally, these are: the general counsel and staff, the administrative officer and staff, and the grants management officer and staff. The number at present totals 18 positions.

Question. How soon do you expect the full complement of 75 employees to be on the payroll?

Answer. We expect to have selected all of the employees authorized by June.

ENCOURAGEMENT OF GIFTS

Question. $2 million is requested for encouragement of private philanthropy. This is the fund which is to be available only to match donations received from private sources. One million dollars was made available in fiscal year 1966. How much philanthropic support has been received thus far?

Answer. To date, the Martin Foundation has assured an unrestricted gift of $100,000 to the National Endowment for the Arts.

Question. How much do you expect to be donated by the end of this June?

Answer. The Arts Endowment is optimistic that it can stimulate the $500,000 in gifts estimated in its justification. The Humanities Endowment concurs, with respect to its estimate. The Chairman of the Arts Endowment has contacted 119 leading foundations to cooperatively support that Endowment's activities. The Arts Endowment has also just completed negotiations for a consultant who has had long experience with the foundation field.

Furthermore, the Nation's leading artists will be canvassed with regard to the possibility of their making gifts of works of art to the Endowment to assist it in carrying out its programs. Such gifts could have substantial value. The Endowments are authorized to receive "money and other property," and if such gifts are unrestricted, to match them with Federal funds.

Question. Do you have any real expectation that $3 million will have been donated, matched, and firmly obligated to specific projects by June 30, 1967?

Answer. In view of the above answer, both Endowments are optimistic that the full amounts estimated in their justifications will be raised in terms of gifts and bequests, and that these funds with the matching Federal amounts authorized will be obligated to worthwhile projects by June 30, 1967.

Although we have some reservations concerning the total amount of "unrestricted" donations we can generate (the only type of donations which can be matched with Federal funds under the act), we believe that only time and our best efforts will provide the full answer to this question. Certainly a major purpose of the act is to stimulate private philanthropy in behalf of the arts and humanities. We will report on this subject at the earliest appropriate time.

GUIDELINES ON GRANT REVIEW AND APPROVAL PROCESS

What procedure is followed in selecting the individual artists to whom grants in aid are made?

Mr. STEVENS. We have a routine procedure which I can put on record.

Senator MCGEE. You may put it in the record.

(The information follows:)

I. RECEIPT AND PROCESSING OF APPLICATIONS

A. Upon receipt of an acceptable application, i.e., one which is clearly within the purview of the NFAH grant program, the process of review and approval begins. A bona fide application is one which indicates or includes:

1. A description of the proposed project or activity in sufficient detail to enable a specialist to judge its substantive merit and significance.
2. The total amount requested, including some degree of budget detail.
3. The proposed beginning date and/or the period for which support is requested.
4. Moreover, in the case of applications from institutions or groups, the transmittal must have been signed or endorsed by an authorized official of the institution or group.

B. The application is sent to the Office of Grants and assigned a number designating the Endowment to which it relates:

C. It is then logged in an application ledger including such information as:

1. Name of applicant(s).
2. Title or subject of proposal.
3. Amount of funds requested.
4. Date received.
5. Date acknowledged.

D. The application is promptly acknowledged, and the applicant advised of any technical exceptions, e.g., omission of vital information.

E. At this point the application is coded to allow for the rapid retrieval of basic data. More extensive data storage will be maintained on approved applications, including items such as:

1. Future estimated support.
2. Costs estimated in specific budget categories.
3. Number of professional personnel involved in a given project.
4. Congressional district of the applicant.

F. Distribution of applications for review:

1. The application and a copy of the letter of acknowledgment is sent to the appropriate arts program director or humanities division director.
2. A copy of the application is retained by the Office of Grants for review. (Another copy is available for reproduction purposes.)

II. STAFF AND EXPERT REVIEW

A. The Office of Grants reviews the application for:

1. Compliance with grant policies and requirements, and
2. Reasonableness and propriety of the proposed expenditures.
3. The Office of Grants submits its comments to the arts or humanities endowment staff.

B. The professional program staff screens the application to determine which panel will review it. They decide whether or not a review panel outside the Endowment will be required.

C. In the process of expert review, an applicant may be requested to supply additional information pertaining to his proposal.

D. The services of an expert or panel of experts outside the Endowment may be employed for review purposes.

E. The review panel submits to the Council through the Endowment recommendations for approval, disapproval, or deferral of the grant application.

III. COUNCIL ACTION

A. The Council receives those applications which are considered by the expert panel as worthy of approval. In addition, those applications not approved by the panel are submitted to the Council in summary form.

B. The Council may review in more detail any application demed unacceptable by the reviewing panel.

C. Having taken into account the panel's recommendations, the Council in turn, submits its recommendations to the respective Endowment for final disposition.

IV. APPROVAL AND AWARD

A. The Chairman of each Endowment bases his approval upon Council recommendations and the availability of funds.

B. When an application is approved an award notice is sent to the grantee.

1. The award notice serves as the legal instrument which commits the Federal Government to a specific course of action, and requires certain assurances on the part of the grantee.

2. In addition to any restrictions or requirements dictated by the nature of the project, the notice cites the manner of payment, and any other information necessary for effective disposition.

C. Letters advising of disapproval or deferral are sent promptly to respective applicants.

V. PAYMENT AND REPORTING REQUIREMENTS

A. The General Services Administration handles the NFAH grant payments.

1. One copy of the letter of award for each grantee and a document listing all the grants awarded at a given time are submitted to GSA for obligation.

2. After having assurance of the grantees' acceptance a payment notice is submitted to GSA for immediate action.

3. After processing each payment GSA advises the Office of Grants which maintains such payment records as are necessary.

B. Payments may be made in a lump sum in advance (generally applicable to small grants), or in quarterly amounts determined at the time of award. In some cases (large awards or where the nature of the project dictates) the first payment will be made automatically, with subsequent payments made upon request.

C. The semimonthly review of the Office of Grants payment files will insure against delays in check mailing.

D. The grantee is required to report as necessary his expenditures of project funds, including required non-Federal matching. Those grantees to whom payments are made only upon their request, will submit an expenditure report at the time of each request.

E. A periodic progress report is also required. At the end of each award period grantees, where appropriate, may apply for a continuation of the grant.

SELECTION OF INDIVIDUAL GRANTS BY PANELS

Mr. STEVENS. I would like to say we are asked by the act to have expert panels pass on all individuals and groups that are eligible for grants. The Council does not feel they should get into a specialized field, such as writing, painting, sculpture, so we use panels to select recipients. That is a normal procedure. That is the way the act authorizes us to do it.

Senator MCGEE. How do you determine how much of a grant is made in a specific case?

TIME FOR CREATIVE WORK

Mr. STEVENS. It varies. We have off-the-record talks with well-known people in the field. For example, in one of our individual grants program the number of creative people who are artists-in-residence are frequently unable to do the work they want to do, because they get too involved with teaching. It was felt that if a man could have more time off than just the summer, he might be able to do the creative work he feels he could do. We felt we should give him that time. Many of our best artists are associated with universities.

Senator MCGEE. We hope they are still creative.

Mr. STEVENS. Yes, they are. For another type of grant program, this one for composers, we find quite a few foundations want to give grants to composers but no one bothers to make available to them the out-of-pocket copying costs necessary to prepare the work for performance. We feel that is necessary. We are just trying to supply need and not make a record for the discovery of genius. We want to cover what other people are not doing.

Senator MCGEE. I suppose that is where year after year we will get an increasing amount of static from the legislative branch. It is hard to define and measure and then sum up creativity. The man who is appropriating money wants to know how many did we get; how many, how high, and how wide. It is ridiculous; but, nonetheless, those are the facts. It would be nothing new to suggest those days will be dark days, but somehow we have to rise to it.

APPRECIATION OF THE ARTS

Mr. STEVENS. I think we should both watch and try to increase appreciation of the arts by people in the country which would help solve their economic problems, but at the same time we have to help great talent when it is in trouble. For example, Martha Graham has not been able to tour this country for 15 years. She is getting near the end of her active career, and we felt a person like that—who is regarded along with Picasso and Frank Lloyd Wright, as one of the great artists of the century—should be supported. In this instance, there are two benefits. We help great talent, and we spread the benefit out to the grassroots level. As you say, we have to make judgments of this kind. We have a fine group in the Council. You asked about being paid $75 for the days they attend meetings. Many have spent additional weeks voluntarily working on projects.

VOLUNTARY WORK

Gregory Peck, as busy as he is, is making tours all over the country to become acquainted with the regional theaters. William Pereira is doing a great deal of work on our design project. These people are giving a lot to the Government in the way of free service.

Senator MCGEE. The committee has a series of questions here concerning your program. I think it might be more helpful if you just supply the answers for the record rather than our ranging through them in some systematic fashion. It would save everybody's time.

(The questions and answers follow:)

STATUS OF PROJECTS

Question. Your fiscal year 1966 appropriation which became available last October provided $2,500,000 for grants-in-aid to be awarded by the National Council on the Arts. How much of this money has been actually expended or firmly and irretrievably obligated? Please indicate that under the headings which you list on pages 3 through 7 of your justification statement. It may be well for you to list the grantees for the record together with the amount of the grant in each case.

Answer. This is the status of pilot projects for the current fiscal year at this time, as related to the $2.5 million appropriated under section 11(a) to the National Endowment for the Arts.

Grants for teaching artists

Arrangements have now been made with the National Institute of Arts and Letters to act as the panel of experts on this project. Thus the $375,000 has been firmly committed to this project.

Grants to composers and symphony orchestras for the commissioning of new works and defraying costs of copying scores and parts

Arrangements have been made with the American Symphony Orchestra League to assist as the panel on this project. Thus the $150,000 for this project is firmly committed.

Grants to choreographers

These funds—$103,000—have been firmly committed. Award letters have been sent to the choreographers, in accord with recommendations made by a panel of experts and approved by the National Council on the Arts.

Grants to creative writers

A panel is being formed for this project, and it remains under careful consideration. However, these funds—$50,000—have not yet been committed for the current fiscal year.

Graduation awards

This pilot project is being implemented by a panel of deans of fine arts colleges, headed by Dean Clinton Adams, of the University of New Mexico. Other members include:

Norman Rice, Carnegie Institute of Technology.
Joseph McCullough, Cleveland Institute of Art.
William Bergsma, University of Washington.
Thomas Gorton, University of Kansas.
E. W. Doty, University of Texas.

We expect to make these awards in June 1966. Thus these funds are committed, $80,000.

American Film Institute, $100,000

The Stanford Research Institute has been selected by a panel to undertake this study. The award is for $91,000, thus saving $9,000 of the funds previously approved by the Council for this project.

Laboratory theater project for education

These funds—$500,000—have been firmly committed for this project. Approval from the Office of Education for their share in this project is expected within the immediate future.

American Ballet Theater

A matching grant of $100,000 has been made to this nonprofit organization. The remaining $250,000 earmarked by the Council for the national tour will be obligated as soon as assurances are received that the matching amount has been raised. These assurances are expected well before the end of the present fiscal year. At this time, therefore, this entire amount is committed.

National touring exhibition of painting and sculpture, $125,000

A panel has now been organized for this project. It will meet shortly, and again during April, to complete plans for the exhibition. It may be that the exhibition itself may not be held until after the end of the fiscal year. However, it is necessary to commit these funds, so that the project can be implemented as soon as possible, and the artists involved selected and notified.

Artists housing project

Negotiations are in the final stage on this project. This $100,000 is, therefore, committed. The nature of this project requires that funds be committed in advance and be available for as many individual projects in the area involved as possible.

Playwrights Experimental Theater

The panel of experts to assist with this project is proceeding rapidly toward implementation. Applicants are now being selected by the panel. These funds—$175,000—have thus been committed. The panel will make its recommendations for final approval by the Council in the near future.

The Martha Graham Foundation

Funds have now been committed for this project—$141,350. Negotiations for payment are being finalized, and are expected to be concluded within the next 2 to 3 weeks.

The Academy of American Poets

$46,750 has now been committed to this project. Negotiations have been completed.

Technical assistance programs, $130,000

Committed funds at present total:

$33,575 to American Symphony Orchestra League to assist in the field of improved orchestra management and business administration of orchestras.

$7,000 to the American Educational Theater Association to carry out a survey of high school theater resources.

$30,000 to the American National Theater and Academy to aid nonprofit theaters on a geographic basis by helping establish two new regional offices for ANTA: one in San Francisco to assist northern California and Nevada; and one in St. Louis to serve Missouri, Iowa, Nebraska, and Kansas.

Of the $130,000 allocated by the Council, $59,425 is not committed at present from these funds. Several projects, however, are in progress. Expectations are that these funds will be utilized during the current fiscal year.

American exhibit for use at Venice Bienalle, $50,000

Funds for this project have been approved by the Council and committed to the National Collection of Fine Arts of the Smithsonian Institution. (These funds would be used only in connection with the exhibition as it relates to the development of the arts in the United States, and not for funding of the exhibition abroad.)

Indian arts, $23,850

Funds have been committed to the Institute of American Indian Arts for this project. Final negotiations are being completed.

We consider that of our present appropriation, and in accord with the projects now approved by the Council, the following funds have been firmly committed: $2,381,575.

May I respectfully point out, Mr. Chairman, that when I appeared before the House of Representatives, I gave the chairman of the House Subcommittee a figure of $1,126,525 in obligated funds out of this year's appropriation. Actually, we are moving into our program rapidly, and our situation changes almost day by day with regard to the implementation of our initial pilot projects. The figures I have given you are the best available to me today.

The following grants have been committed to date to individuals:

GRANTS TO INDIVIDUAL CHOREOGRAPHERS

With respect to these grants, totaling $103,000 in obligated funds, it is to be noted that less than 2 percent of the total is assigned to the individual choreographer. More than 98 percent of these funds are assigned to pay for dancers' salaries and for related production costs.

Martha Graham

Salaries and fees:	
Dancers' salaries	$4,900
Pianists	1,900
Composer's fee	10,000
Set designer's fee	3,000
Lighting designer's fee	3,000
Other:	
Costumes	6,000
Sets	6,000
Copying and reproduction of scores	5,200
Total	40,000

Jose Limon

Salaries and fees: Dancers' salaries (20 weeks)	$22,100
Other: Studio rental	900
Total	23,000

This does not include the salary of Mr. Limon's assistant, musicians' salaries, and costs of costumes and set construction. It was arranged that Mr. Limon would pay for these charges in relation to his grant.

Anna Sokolow

Salaries and fees:	
Dancers' salaries (4 weeks)	$6,000
Choreographer's fee	2,000
Other:	
Music costs/special tape recordings	1,500
Studio rental	500
Total	10,000

Anthony Tudor

Salaries and fees:	
Dancer's salaries	$5,600
Composer's fee	1,000
Pianist	600
Other:	
Costumes and sets	1,500
Studio rental	500
Scoring	800
Total	10,000

Merce Cunningham

Salaries and fees:	
Dancers' salaries (8 weeks)	$2,400
Composer's fees	1,000
Other:	
Sets and costumes	1,200
Scoring	400
Total	5,000

Alvin Ailey

Salaries and fees:	
Dancers' salaries (6 weeks)	$3,960
Artistic director	900
Pianist	140
Total	5,000

Alwin Nikolais

Salaries and fees:	
Dancers' salaries (8 weeks)	$4,000
Rehearsal assistant	1,000
Total	5,000

Paul Taylor

Salaries and fees:	
Dancers' salaries (15 weeks)	$12,000
Pianist	[1] 800
Composer's commission	[1] 2,000
Set designer's commission	500
Other:	
Sets	1,000
Costumes	5,000
Copying of scores	[1] 1,500
Studio rental	[1] 900
Total	23,700
NEA grant	5,000

[1] Selected items to be paid in part or in whole from grant funds.

Question. It is a matter of arithmetic, I know, but how much of your 1966 appropriation remains unobligated at this moment?

Answer. At this date, unobligated funds total $118,425.

Question. When do you expect to get the laboratory theater project for education underway?

Answer. This project is scheduled for the fall of 1966. The Office of Education is expected to give its approval to its share of this project within the next 10 days. Arts endowment funding will immediately, upon this approval, be utilized, so that the three producing units can be properly assembled and rehearsed in time for the target opening date next fall.

Question. I note that an emergency matching grant of $100,000 was made to the American Ballet Theater. What was the emergency?

Answer. The American Ballet Theater represents a $10 million investment of talent assembled over almost a 30-year span. The theater had long been supported by the philanthropy of one individual. At the time of the grant the theater was on the verge of being disbanded. The Council felt that this major investment in time and talent, and the theater's extensive repertory built up over the years, should not be lost, and therefore decided that the situation required emergency support by the Endowment. The grant was predicated not simply on maintaining intact the excellence of this group, but on making this excellence available to the country at large through a nationwide tour.

Question. Apparently you propose use of $100,000 of your 1966 appropriation for artists' housing projects which will require establishment of a revolving fund. How will this revolving fund operate, that is, what moneys will be available to pay back into the fund to keep it on a revolving basis?

Answer. The following is pertinent to this question:

Under section 221D3 of the Housing Act of 1963, low-income family housing projects may apply for Federal funds. Under this act each area has a determined minimum income per family unit. For example, in New York City, it is figured that a family earning under $8,500 per year can spend up to $125 per month for housing. No qualifying project can exceed this maximum rent charge under FHA regulations.

Under the artists' housing project we have approved a revolving fund of $100,000 to provide for artists' housing. We are working initially with the Community Development Foundation, the president of which is Frederick Richmond, and the Jack Kaplan Foundation to arrange for the housing feasibility studies required. These studies include architects' designs and specifications and are based on the cost of the real-estate project plus the cost of renovation. When the study shows that the:

$$\frac{\text{Building price} + \text{renovation}}{\text{number of living units}} = \frac{\$125 \text{ per family}}{\text{unit per month}}$$

then we are able through these foundations to proceed with the FHA under the Housing Act of 1963.

Under these conditions, FHA would pay 100 percent on the mortgage. And the foundation would be reimbursed for its study costs out of the mortgage (running around $20,000 per project). In other words, the cost of the survey would ultimately be included in the mortgage.

This return of survey money would reimburse endowment funding made available to the private foundations involved for survey use. Thus, a revolving fund is established for other artists' housing projects.

Large numbers of artists have told us that their greatest need is in low-cost housing and working quarters. Studio-living quarter requirements for an artist frequently total 5,000 square feet of space. Large numbers of needy artists cannot fund such space at reasonable costs. Old loft buildings are examples of those existing structures which can be renovated to meet these needs. We believe that this investment can return itself many times over, and that it will act as an incentive to philanthropic organizations to establish similar projects to meet a priority need in the arts.

Question. How does your Laboratory Theater Project for Education in fiscal year 1967 differ, if at all, from the same project in fiscal year 1966?

Answer. The Laboratory Theater Project for Education would be carried out in the same fashion. Our obligation would remain the same since this is planned as a continuing project.

Question. Are grantees eligible for successive grants year after year?

Answer. They are eligible. However, as a matter of policy, the Council will attempt to give new grants each year to individuals and groups because the need is so great, and because we believe that we need to broaden our support to as many new pilot projects as possible.

Question. I observe that you propose establishment of a National Environmental Design Center, and a National Product Design Center, to which you

allocate a total sum of $750,000. Have you selected the institutions which will set up such centers for you?

Answers. The institutions have not been selected, but studies are in progress.

Question. What do you expect from each of the centers?

Answer. With the former, we would expect to substantially affect and improve much of the environment that surrounds our cities' public places. The resource, as an example, could serve in one well-coordinated fashion all governmental bureaus engaged in furnishing equipment used in public places. Almost at once this center could serve the beautification programs of the Great Society under the Department of the Interior and the Department of Housing and Urban Development. There is also a need for industry to design better things for use by the Government. The center would assemble the talents best suited for this task.

Pertinent to this subject is the following statement presented to the Council and approved by it in mid-February.

The statement was drafted by the three Council members most concerned with this important area. They are:

William Pereira, architect.

Minoru Yamasaki, architect.

Albert Bush-Brown, president of the Rhode Island School of Design.

"The Council recognizes its unique opportunity and responsibility with respect to the esthetic values in our environment. It understands that its primary objective is to help provide the climate, wherever possible, to utilize our creative and professional community in the improvement of the urban settings.

"It further understands that it has a role in helping to provide the education of the civic, public, professional, and acedemic communities with regard to their obligations toward the design of our environment as their respective opportunities and interests may appear.

"It believes that it has been charged with the responsibility of building bridges between the Federal, State, and other governmental levels and the community so that high standards of esthetic consideration flow freely and constantly between them and together toward universally high standards of esthetic value.

"It believes that it must help produce concepts of legislation and cooperation in our society that will "build in" rather than "build out" the benefits of artistic merit in our environment wherever possible. In this connection we are encouraged by the Supreme Court's historic decision in the *Berman* v. *Parker* case of 1964. Justice William O. Douglas wrote the opinion and it was one of the Court's unanimous decisions: 'It is within the power of the legislature to determine that the community should be beautiful as well as healthy, spacious as well as clean, and well balanced as well as carefuly patroled. In the present case, the Congress and its authorized agencies have made determination that take into account a wide variety of values. It is not for us to reappraise this. If those who govern the District of Columbia decide that the Nation's Capital should be beautiful as well as sanitary, there is nothing in the fifth amendment that stands in the way * * *.'

"It believes that it must help create a more laudable image of the American scene both in the United States and abroad. It believes that it must help provide the methods whereby our most accomplished architects, planners, and designers are used at all times in the Federal Establishment, and hope, by this example, that such high standards of selection are emulated everywhere else in the American scene.

"Finally, it believes that it has been designated above all as the advocate of high standards of design in our environment."

The proposal was, therefore, made that a Center be created to include the arts of architecture, industrial design, graphic design, painting, sculpture, and master teaching.

The purpose of this Center, it was stated, "shall be to serve as a catalyst on the national scene for the application of the arts of these professions to all appropriate facets of our environment. It shall work with the Federal agencies and may work with the State and local government agencies, the business communities, national and local private organizations, and academic communities toward the end that our national life will benefit to the fullest from the best use of the talents of the design professions."

This Center would make recommendations to enhance the esthetics of our environment, and help the academic communities improve the education of students involved in the design process.

The Product Design Center, as a separate but allied partner to the Center just described, would concentrate on fashion design, which is one of the arts defined

in the legislation, and on industrial design, also defined in the act, as it relates to furniture, interior appliances and the like. We would see great benefits coming from this Center with respect to the products this country makes, often in strenuous competition with countries abroad. The purpose here is to increase—again through one coordinated means—an emphasis on better design. Symposiums and seminars would be included in the Center's activities, so that the best talents in the field could be assembled, to exchange opinions, and so that there would be maximum cooperation between government and industry.

Question. You have programed $200,000 for rural traveling exhibitions of folk, graphic, and craft art, which you say the National Council on the Arts is considering. Is this only a thought, or have you progressed sufficiently far that you can foresee a decision within the near future?

Answer. Folk, graphic and craft arts are among the major art forms defined in the legislation. This project is being studied by the Council as a particularly worthwhile proposal to carry out the spirit of the act in these areas. A special panel of the Council will meet shortly to consider implementation of this proposal, so that a final decision can be made at the next Council meeting in May.

Question. Would you name for the committee examples of the types of special study and research projects for which you program $250,000 for special grants to individuals and groups?

Answer. Experience has shown that new and imaginative projects will constantly be presented to us. In order to bring them before the Council we need to do research and study on these projects. In our first months of operation we have found that these funds would serve a most useful purpose. They would also help us to meet emergency situations in the arts. For example, let us say that a particularly meritorious proposal was made to us in the field of the performing arts outside the range of current activities. We may wish to approve relatively small funds for such a project on a pilot or research basis.

Question. In addition to an estimate for grants-in-aid, you request $2,750,000 for assistance to States. How do you determine that a State is eligible for a grant, and how do you determine how much of a grant shall be made available?

Answer. A set of precise guidelines has been written and thoroughly discussed by all the States at a meeting of Governors' representatives of arts agencies, and these guidelines are currently being used in developing grant applications. Under the act each State wishing to participate must file a detailed plan of projects to be carried out under the provisions of section 5 of the act. These plans must contain, among other requirements, statements of objectives, state the number of communities and persons served by the proposed projects and a detailed budget. Based on the approval of the plan by the chairman of the endowment, our agency will match funds from other State sources of up to $50,000 per State. The amount depends on the comprehensive quality of the program and the availability of the matching funds.

Question. Are you confident that enough States will have been approved for assistance so that the full amount of the budget estimate will have been disbursed by the end of the fiscal year?

Answer. As a result of our recent conference with the States arts representatives, we are confident that all States will have their applications to us before this funding is authorized to begin July 1, 1966, and so that these State plans can be appropriately reviewed by the endowment. On the basis of all the information we have compiled, we firmly believe that the total amount authorized in the act to the States will be disbursed in a very meaningful way by the end of this next fiscal year.

Question: One final question for the National Endowment for the Arts. I have noted the paragraph at the top of page 18 indicating that the projects which you listed as desirable and to which you attached price tags, total more than the $5 million authorized. As a matter of fact, it is over $2 million in excess of the authorization. It would be well for you to prepare for the committee a listing of these projects, with assigned amounts, which total no more than $5 million, and which you would activate if you had that amount of money. You may do this either by deleting some of the projects or by reducing proposed funds for the listed projects.

Answer: We have given a good deal of thought to this subject and how we can best use our funding presented in this justification. Actually, the $7,015,000 in our justification represents total funds available should we receive our total authorization under section 11(a) of the act—that is, $5 million—plus an additional $2 million under provisions of section 11(b) of the act. We have estimated that we can generate $1 million in private gifts to the Arts Endowment during

the next fiscal year. Under the terms of section 11(b) of the act, if these funds are received in unrestricted gifts or bequests, they can be matched by Federal funds. With a million in gifts, a million in matching Federal funds under 11(b) and $5 million under section 11(a), this would total $7 million. We also estimate that we can stimulate gifts this year. Of course, these gifts to the Endowment are at this time not definite, but we are already in contact with foundaions throughout the country asking for their cooperative support.

If we should have a total of $5 million for fiscal year 1967, here is what we would plan to do:

We would cut the following amounts from our projects in this justification:

	Amounts cut
Regional opera companies	$200,000
We would cut this amount of $500,000 to $300,000, by $200,000.	
Artmobiles	350,000
We would cut this amount in half to $350,000.	
Inter-American cultural program	265,000
We would cut this $500,000 allocation to $235,000.	
Product design center	250,000
We would defer action on this center for another year, concentrating on the one for environmental design; $250,000.	
Youth orchestras	500,000
$500,000—the full amount. (Although we believe this is a highly desirable project, if we must cut, we believe we can support it in another year.)	
Arts Councils challenge grants	450,000
Again, this would seem a very worthwhile project and much needed, but we believe in terms of cuts, it can be deferred. The full amount; $450,000.	
Total	2,015,000

NATIONAL ENDOWMENT FOR THE HUMANITIES

STATEMENT OF DR. HENRY ALLEN MOE, CHAIRMAN

1967 BUDGET REQUEST

Senator MCGEE. We will turn now to the request for $5 million for the National Endowment for the Humanities. Since submission of the justification document, we have had a letter from the Chairman of the Endowment with an enclosure indicating how the appropriation may be expended. That letter and attachment will be made a part of the record.

(The letter and attachment follows:)

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES,
Washington, D.C., March 7, 1966.

HON. CARL HAYDEN,
Committee on Appropriations, Chairman, Subcommittee on Department of the Interior and Related Agencies, U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: The first meeting of the National Council on the Humanities ended late last Friday, March 4, after 2 full days of work participated in by 23 members of the Council.

I am pleased to report also that on February 28, 1966, the U.S. Senate confirmed President Johnson's nomination of me to be Chairman of the National Endowment for the Humanities and of its Council. Other members of the Council took their oaths of office on March 3, 1966, at a ceremonial in the White House at which President Johnson charged the Council with respect to their duties in a most memorable address.

Following the Council's meeting, I now am, for the first time, in position to describe approved programs, and to indicate the amount of dollars that reasonably will be needed for these approved programs in the opinion of the Council, for this Endowment's operations in fiscal 1967.

Let me repeat my respectful regret that I was not yet in position to present these data to you earlier. The Council now has done its best to furnish the detailed information which is required. It is submitted here in the earnest hope that our earlier deficiency is now corrected.

Not all of the recommendations I had made in the justification submitted to you were approved by the Council and the Council, after consideration, added other approved programs not suggested by me. These deviations from my justification were both expected and were welcomed by me. The act of September 29, 1965, expressly provides the Chairman shall neither approve nor disapprove an application until he has received the Council's recommendation. It is the obligation of the members of the Council to think for themselves and add their knowledge and judgment to the Chairman's.

As will be self-evident in the information attached, many of the programs proposed by the Council are foundations for long-continuing development. Our function relates directly, and in many different ways, to the educational process. As we have thought of our mission in specific projects, we have tried to remember that the pace of sound education is not always rapid. What we launch this year and next will not carry full sail for several years; but if the course is the right one from the start, we may be confident that the voyage, however long, will reach our goals.

Your favorable consideration of our request for funding the program of the National Endowment for the Humanities for the fiscal year 1967 will be deeply appreciated.

With respect, I am,
Sincerely yours,

HENRY ALLEN MOE, *Chairman.*

Summary

For fellowships:	
100 1-year fellowships for young scholar-teachers	$750,000
200 summer fellowships for scholar-teachers	300,000
For 50 grants to individual (mature) scholars	750,000
For editing and publishing the papers of great Americans:	
The Founding Fathers and other statesmen	300,000
Philosophers and scientists	50,000
For editing and publishing definitive editions of great American authors	350,000
For humanistic archeological-historical excavations	100,000
For assistance toward publication of first-rate humanistic manuscripts	150,000
For humanistically oriented computer research and training programs in data processing techniques for humanistic studies	350,000
For general educational programs in humanistic subjects	750,000
For grants for educational programs for humanistic museums and historical societies	750,000
For studies of educational radio and television	100,000
For "talking books" to be made available for other than blind persons	100,000
For other American historical studies (special projects)	200,000
Total	5,000,000

NATIONAL ENDOWMENT FOR THE HUMANITIES

JUSTIFICATION

Appropriation request for the fiscal year 1967

1. (A) For the development principally of younger American humanistic teacher-scholars and educational-museum personnel, at an average cost of $7,500 a year: 100 such persons, men and women, $750,000.

(B) For approximately 200 stipends to young humanistic scholar-teachers for studies and research during the summer months, $300,000.

If such persons need on an average $1,500 each to free themselves from the necessity of teaching during the summer months, 200 of them may be provided for with $300,000. If they require more than an average of $1,500—only a lesser number may be assisted. Experience will have to teach us what the average needed sum ought to be.

These summer stipends will be granted on the well-known footing that, especially in the small colleges, there are a large number of young scholars who need the summer months to complete manuscripts upon which their futures as scholars and teachers will depend.

This is a category in which the imbalance between support for the scientist and the humanist is most visible and where great impact for the development of humanistic teaching and scholarship can be made with a relatively small amount of money per person.

(NOTE.—The persons in categories (A) and (B) are to be selected on a nationwide basis from all parts of the country, taking particular care that the personnel from the smaller, more obscure institutions shall not be overlooked nor neglected.)

There are 1,524 degree-granting colleges and universities in the United States and it is reasonable to expect that at least one faculty member from each of these institutions will apply for these fellowships.

2. For the assistance of mature persons, American men and women, who in President Johnson's charge to the Humanities Council on March 3, will have "a crucial role to play—not only in enriching scholarship, but in enriching life for all men—scholars and laymen." The Humanities Council was of opinion that 50 such persons will be discovered in fiscal 1967, selected from among at least 1,000 applicants. Allied experience of other foundations provides a sound basis for so estimating the number of applications that will be received.

If the average grant to such men and women be $15,000, which the Council deemed reasonable, and which is in line with stipends granted for comparable projects by other institutions, the program would cost $750,000.

3. (A) For assisting the publication of papers of great Americans—the Founding Fathers and other statesmen, $300,000.

(B) To the above-indicated categories, the Council added, for assistance toward the publication of papers of great American scientists and philosophers, $50,000.

4. For assisting the preparation of definitive editions of great American authors, $350,000.

A great body of significant American literature is not available in accurate and reliable editions and some not at all. Even giants of American letters are poorly represented in collected editions of their works.

(NOTE.—The Humanities Council, in reference to categories 3 and 4 above, approved advisory panels consisting of Council members and other highly qualified persons of national reputation who will ride herd on the proposals received, evaluate the importance of each project, negotiate with printers and publishers, audit costs and report to the Council before any grants are approved.)

5. For assisting humanistic archeological-historical excavations and studies, $100,000.

These would be chosen to elucidate understanding of our origins as a people, and of the American heritage of freedom. They will be chosen, too, not only to gather objects found in the diggings, but also to illumine the ways of life of our ancestors: they would also be tailored to be training grounds for future young American archeologist-historians. In particular, they will not neglect the great civilizations already existing in the Americas when the white men arrived. For example, the Indian civilizations of the Mississippi River and Ohio River valleys are greatly in need of study.

This is a vast field of relatively untouched knowledge, with room for the work of many persons and agencies. For example, we already are in touch with the Smithsonian Institution to the end that there shall be no duplication of their archeological studies.

An advisory panel was approved by the Humanities Council to insure that the programs in this area recommended to the Council will meet President Johnson's test of relevance for the American scholar to "find his destiny in solving men's problems, not merely in cataloging them."

6. For assisting the publication of works of scholarship and other first-rate manuscripts relevant to the purposes of the statute, "that the world leadership which has come to the United States * * * must be solidly founded upon worldwide respect and admiration for the Nation's high qualities as a leader in the realm of ideas and the spirit," $150,000.

Whenever possible, such manuscripts ought to be published as commercial propositions, and most of them are; but there are some which have such difficult and expensive problems of typesetting and so extremely limited sales possibilities, as not to make their publication commercially feasible; yet some of the most important are in this category. An advisory panel was authorized by the Humanities Council to deal with matters of publication; quality of manuscript, reasonableness of sums asked for subventioning, sales distribution, etc. The advisory panel will report to the Council before any manuscripts are approved for subventioning.

7. For assistance of computer-oriented humanistic research, $350,000.

Computers and data processing equipment are relatively new tools which may be used for the service of humanistic scholars. Much must be learned concerning the best way to use them; and the Council was convinced of the potential importance of computer-oriented humanistic research.

Proposals already before the Council in this area include: assistance toward a regional center for computer research in the humanities to train scholars with computer techniques and to assist such scholars in their studies, to establish a journal intended to keep humanistic scholars who are using computer techniques in touch with each other for mutual education, and to carry on language analysis.

Proposals of this kind are pioneering ventures deemed important by humanistic scholars, and, as such, merit support by this pioneering Endowment.

Before proceeding to make grants in the field, the advice of staff members of the National Science Foundation will be obtained; and the Humanities Council authorized the appointment of an advisory panel, consisting both of scientists and humanists to evaluate and make sense out of the proposals received. In accordance with the Endowment's general policies, no grants will be authorized until the Council has evaluated the advisory panel's recommendations.

Studies in any complex field today require the use of computers; and it was the Council's opinion that $350,000 is a minimum sum with which to get started in this important field.

8. Assistance to programs to insure progress and acceleration of progress in humanistic studies, $750,000.

The Council noted that the duty of promoting humanistic studies runs through all parts of the statute. The Council noted also that large sums have been appropriated to the Office of Education for promoting some aspects of such studies. Hence, there has been established a liaison between the Endowment and the Office of Education, whose representative was present at the Council's meeting, to the end that the Endowment and OE should supplement each other and reinforce programs of mutual concern.

There was a long discussion of viable ideas in the many fields of humanistic education, and they were all remanded for further consideration to an advisory panel consisting of 16 members of the Council and Miss Kathryn Bloom of the Office of Education. This advisory panel will hold meetings prior to the next meeting of the Council and will recommend programs to the Council. In view of the importance of these areas of the Endowment's responsibilities, their relevance at the grassroots throughout the Nation, it was the strong opinion of the Council that the sum of $750,000 suggested would be on the slim side for fiscal 1967.

9. For the development of the educational functions of humanistic museums and historical societies, $750,000.

There are approximately 3,700 such institutions all over the United States, in small towns as well as in large; their annual visitors run well over 75 million; their membership is in the hundreds of thousands. They are, therefore, not small change in the total American educational enterprise; and, in developing understanding and appreciation of the United States—our history, our culture, or hopes for the future—they are not surpassed by any other group of educational enterprises.

Some of the smaller of these institutions, in out-of-the-way places, are among the best—in terms of quality of the objects they own and exhibit, in terms of their usefulness in presenting American culture in understandable ways to a large lay public. Many of them do, indeed, illustrate what President Johnson said in his charge to the National Council on the Humanities "* * * every great endeavor depends more on daring than on dollars; more on brainpower than on budgets."

A very large percentage of these institutions, throughout the length and breadth of our land, have only the tiniest budgets. But they have dedication and devotion and many of their staffs serve for a pittance or gratis.

What they need, all along the line, is more knowledge, knowledge of how to conserve their collections, to catalog them, to shape up significant exhibitions and to prepare catalogs for these exhibitions, to increase their scholarly knowledge. Relatively simple, relatively inexpensive programs may be set up to give their devoted personnel the training they need. The Humanities Council hopes for funds to make a start on these training programs and the members agreed that $750,000 would provide for a modest start on what clearly must be a long-term enterprise.

To assist in the planning of such activities a large advisory panel was approved, including both members of the Council and personnel from humanistic museums across the country, east and west, north, and south.

10. Educational radio and television, $100,000.

The sum suggested is, of course, much too small for significant progress in the field of educational radio and television; and it is set up only on the basis of making studies to define the Endowment's best future role and to provide funds possibly for one relatively small pilot program in educational radio-television.

Fortunately, several members of the Council have had experience in and have thought deeply about the possibilities of service in this area of education and they will constitute the nucleus of our advisory panel. Other members of such a panel were suggested by members of the Council and they will be asked.

It is an area in which quick results should not be anticipated. And, importantly, the cooperation of other Federal agencies should be enlisted—for advice, practical help, and for emphasis on public welfare considerations.

11. For extensions of the "talking books" program currently administered by the Library of Congress under title 2 of the United States Code, section 135a, $100,000.

That statute restricts the provisions for talking books to "blind residents of the United States." But there are many persons besides blinded persons who cannot read books. They include many wounded veterans, quadriplegics, and some percentage of persons who are mentally ill—persons whose brains are good, whose aspirations are high; but are, often only for a few months, physically unable to read. We hope to make provisions for their education through making "talking books" available to them.

Studies, in depth, of the possibilities of such a program must be made; but preliminary studies by the Endowment's staff indicate a great humanistic cultural need. Having received the Council's mandate to go ahead, studies in depth will be made and will be reported to the Council for the Council's possible approval in future.

The sum of $100,000 is recommended so that if a good pilot program can be shaped up, the Endowment may proceed to finance it.

12. For progress in American historical studies, both for the scholarly and lay publics, $200,000.

The sum of $200,000 would be much too small in this context were it not for the fact that the thread of concern for American history runs all through the suggested allocations. For example, among the 50 grants suggested in item 2, above, no doubt some will be for studies in American history. The sum of $200,000 in this place reflects the hope and expectation that first-rate scholars and interpreters with first-rate projects concerned with American institutions will turn up and that with moneys within this category it will be possible to finance them.

Total recommended allocations, as above indicated, and requested appropriation, $5 million.

EXCERPTS FROM INAUGURAL ADDRESS OF PRESIDENT JEFFERSON

Senator MCGEE. Would you care to make a statement, Dr. Moe?

Dr. MOE. Yes, thank you, Senator. This is our first appearance before the committee. You have our justification in the record, and now, with your leave, I should like to make a statement with regard to the basic philosophy of the National Council on the Humanities which underlies our justification:

In his second inaugural address of 1806, President Jefferson declared that all areas of learning in the United States should be "placed among the articles of public care * * * all parts of which contribute to the improvement of the country." So said Mr. Jefferson in 1806. There was a steady, but irregular, progression toward Mr. Jefferson's ideal for the next 150 years; and I suggest that it culminated in the passage of the statute which established the National Foundation for the Arts and the Humanities in 1965.

Above, I remarked that the progress has been irregular. This irregularity resulted in certain imbalances among "the areas of learning"—to quote Mr. Jefferson again—and, following the establishment of the National Science Foundation, the imbalance between the sciences and the arts and humanities was evident and glaring. The arts and humanities legislation has made a start in correcting the imbalance.

EXCERPTS FROM SPEECH OF PRESIDENT JOHNSON

President Johnson in his memorable speech to the members of the National Council on the Humanities, at the White House on March 3, 1966, charged us well when he said:

> Science can give us goods—and goods we need. But the humanities—art and literature, poetry and history, law and philosophy—give us our goals. I believe that the National Council on the Humanities has a crucial role to play—not only in enriching scholarship, but in enriching life for all men * * *. Congress was acting on that belief when it established this Council. We have the material power to conquer economic want. Now we need the will to attack the poverty of man's spirit—and you must lead that attack.

So said President Johnson!

Education Should Be Theme

In deciding on the best means to start leading that attack, the National Council on the Humanities recognized that our large theme should be education, our particular portion of it the humanities. Education has always been two things to our people: It has been both the goal and the means to the goal. Our forefathers fought to achieve freedom in all its aspects. One of these aspects surely was freedom to seek full self-realization. Knowledge was the sure way to this. The first things built in frontier lands, as soon as they were secured and cleared, were home, church, and school. Colleges sprang up on every farthest line of our westward expansion. Generation after generation, our people—through local, State, and National legislation—gave increasing recognition and opportunity to the need to learn, to acquire knowledge and understanding. A great piece of national legislation for these high purposes is the Higher Education Act of 1965.

Publication Interest Served and Recognized

The culmination of the national legislative educational purpose is expressed in the national arts and humanities legislation of the same year, 1965. It recognizes and serves the public educational interest at large, rather than only in schools, colleges, and universities.

Schools, colleges, and universities teach what is already known. But what of the always beckoning field of the unknown, or the unidentified, or the misinterpreted in humanity's heritage? It is the scholar-explorers—men and women of the humanities—who by their continuing service to education for its own sake constantly bring into the light new substance for our schools and colleges to teach.

The Humanities Endowment's mission, we strongly feel, is linked equally to assisting the two great acts of education—humanistic discovery and teaching what is discovered.

That these are long-range purposes is evident. The furrows or our proposed beginning programs will extend over the farthest horizon, as they extend backward to the beginnings of human history.

We have submitted a budget justification requesting $5 million for the fiscal year 1967; the Congress already has appropriated to us $2,500,00 for fiscal 1966—a total of $7,500,000.

The imbalance, referred to earlier in this statement, between the scientific endeavors of our Nation and the humanistic endeavors, is so great—at the present time in the United States—that it is abundantly clear that the Humanities Endowment will be able to use, and use well, $7,500,000 in the fiscal years 1966 and 1967.

There is so great a backlog of works of scholarship and of education necessary to be done in the many fields of the humanities specified in the statute that no member of the Humanities Council, at the first meeting last week, doubted that in the fiscal years 1966 and 1967 programs and projects of great merit—to give all our people access to the values inherent in the humanities—will become viable, at least to the extent of $7,500,000 worth. No member of the Council has any doubt about that.

Programs Now Under Study

If your committee should wish a breakdown between the fiscal years 1966 and 1967, it would be quite accurate to say that in fiscal 1966

we shall get going on about half the allocations proposed for fiscal 1967—that is, allocate in 1966 about half the sums of money requested for the programs stated in our justification for fiscal 1967. But it should be added that the Humanities Council at their first meeting last week proposed additional, but rather small programs for fiscal 1966; these are now under study and will be reported on at the Council's next meeting to be held probably in April 1966.

As I said earlier in this statement, programs approved by the National Council on the Humanities at their first meeting are long range. They will apply equally to fiscal 1966 and to 1967 and, I should hope—with variations of detail—to succeeding years.

President Johnson said to the members of the National Council on the Humanities, on March 3, 1966:

> We have looked throughout America and selected you—you members of this Council—to lead the attack on the poverty of man's spirit.

Our beginning strategy for that attack is outlined in our budget justification.

Thank you, sir.

Senator McGEE. Thank you, Dr. Moe.

I have some questions here that are largely statistical and budgetary and I think it might be more helpful if we would submit these to you and let you supply the answers for the record because it is a rather materialistic set of facts that we are grasping for there.

(The questions and answers follow:)

GRANT DETERMINATIONS

Question. Would you please tell the committee what procedure the National Endowment for the Humanities will follow in determining which individuals and groups get a grant?

Answer. My more than 40 years of experience in supervising the making of grants for several private foundations leads me to the conclusion that there is only one right way to go about it. That right procedure consists of, principally, empaneling a group of persons expert in the field of the application and, within feasible limits, following their judgments.

I never have been a philanthropic and educational administrator who makes snap judgments. Indeed, I am inclined to start from the premise that I know nothing about any proposition presented to me, but only know whom to ask; that is, know those who have sound judgments and have what I call "a feel for the future." On such persons we must rely; and our success, or failure, will depend wholly upon the quality of advice we get and accept. This I know out of long experience.

A statement of procedures in the making of decisions on grants, embodying the above-stated basic consideration, will be recommended by me for adoption by the National Council on the Humanities at their next meeting. The National Endowment for the Arts will submit to you a detailed statement of a proposed grant review and approval process in which we have concurrent views.

Question. Also, will you tell the committee whether any one individual or any one group will be eligible for grants in more than 1 year?

Answer. My own opinion is that an individual or group should be eligible for a grant in more than 1 year. For example, an important piece of scholarly research might be proposed either by an individual or a group, which clearly might take several years to complete. A definitive edition of the writings of a great American statesman or scientist, or an archeological investigation of aspects of early American civilizations certainly could not be completed in a year.

Grants for more than a year will be comparatively rare for individuals, I should think, and may be infrequent for groups. It is too early to make a final statement on these heads; and we ought not tie our hands with a statement which, at this date, could only be based on theoretical considerations.

I should much prefer to let such decisions be made by the National Council on the Humanities and be grounded on the realities of each application.

Question. Is there to be a maximum in the amount of a grant which can be awarded to an individual or a group?

Answer. The law sets no fixed maximum limit and the National Council on the Humanities has not yet taken a position on the question. In my own view, policy will insist that no grant preempt too large a part of the Endowment's funds and thus limit their availablity to a proper range of projects within the several humanistic fields specified in the statute.

Question. Last year, $2,500,000 was appropriated for the National Endowment for the Humanities. Has this money been obligated?

Answer. To this date, no money has been obligated by the National Endowment for the Humanities. The reason is that the first meeting of the Humanities was held only at the end of last week; many proposals are under study but none has yet had final approval. I expect, however, that at the Council's next meeting (probably in April) several proposals—but I cannot now say how many nor with what specified sums of money—will be finally approved.

Question. Do you believe that you can firmly obligate $7,500,000 before the end of fiscal year 1967?

Answer. Yes, sir. In my opinion, there's no doubt about it. And, with your permission, I shall quote two paragraphs from my opening statement which you may wish to have in the record at this point:

"The imbalance, referred to earlier in this statement, between the scientific endeavors of our Nation and the humanistic endeavors, is so great—at the present time in the United States—that it is abundantly clear that the Humanities Endowment will be able to use, and use well, $7,500,000 in the fiscal years 1966 and 1967.

"There is so great a backlog of works of scholarship and of education necessary to be done in the many fields of the humanities specified in the statute that no member of the Humanities Council doubted that in the fiscal years 1966 and 1967 programs and projects of great merit—to give all our people access to the values inherent in the humanities—will become viable, at least to the extent of $7,500,000 worth."

INTEREST SHOWN IN FINER THINGS OF LIFE

Senator MCGEE. Let me just say you need not apologize for your request for "Philosophy" here. I think if we get lost anywhere, we get lost in the budget figures. I hope we do not get lost in the philosophical end.

I want to commend you for your statement here and ask if you have anything additional you want to supply for the record.

Dr. MOE. You asked me earlier for information about the membership of the National Council on the Humanities and that will be supplied.

(The information follows:)

MEMBERS OF THE NATIONAL COUNCIL ON THE HUMANITIES

Henry Allen Moe, chairman, appointed by the President and confirmed by the Senate on February 28, 1966, for a term of 4 years.

The members on the Humanities Council appointed by the President for terms expiring in 1968 are:

Gustave O. Arlt: President, Council of Graduate Schools of the United States, Washington, D.C.

Robert F. Goheen: President, Princeton University.

Emil W. Haury: Professor of anthropology, University of Arizona.

Adelaide Cromwell Hill: Research associate, African Studies program; assistant professor of sociology, Boston University.

John W. Letson: Superintendent of public schools, Atlanta, Ga.

Robert M. Lumiansky: Professor of English, University of Pennsylvania.

G. William Miller: President, Textron, Inc., Providence, R.I.

John Courtney Murray, S.J.: Professor of dogmatic and sacred theology, Woodstock College, Woodstock, Md.

Meredith Willson: Music director, conductor, and composer, Los Angeles, Calif.

For terms expiring January 27, 1970.

Germaine Bree: Institute for Research in the Humanities, University of Wisconsin.
John M. Ehle, Jr.: Writer, Winston-Salem, N.C.
Emily Genauer: Art critic, New York Herald Tribune.
Emmette S. Redford: Professor of government, University of Texas.
Barnaby C. Keeney: President, Brown University, Providence, R.I.
David R. Mason: Professor of law, University of Montana.
James Cuff O'Brien: Director, Committee on Older and Retired Workers, United Steelworkers of America, Washington, D.C.
Ieoh Ming Pei: Architect, I. M. Pei & Associates, New York, N.Y.
Robert W. Spike: Professor, Divinity School, University of Chicago.

For terms expiring January 1972:

Edmund F. Ball: Chairman of the board, Ball Bros. Co., Muncie, Ind.
Kenneth B. Clark: Professor of psychology, City College of New York.
Gerald F. Else: Chairman, department of classics, University of Michigan.
Robert T. Bower: Director, Bureau of Social Science Research, Inc., Washington, D.C.
Paul Horgan: Director, Center for Advanced Studies, Wesleyan University, Middletown, Conn.
A. W. Levi: Professor of philosophy, Washington University, St. Louis, Mo.
Soia Mentschikoff: Professor of law, University of Chicago.
Charles E. Odegaard: President, University of Washington.

Emergence of the Arts and Humanities

Senator McGee. Yes. I must say it is interesting to hear the petition in the names of Arts and Humanities. For a long time we had to disguise them in the Pentagon in the national defense before we could get any money. We are getting very brave when we can come out and say we are interested in the finer things of life. It used to be subversive to say that. You are aiding and abetting our cause in this respect and I want to thank you all for what you are doing so unselfishly in this great program.

Dr. Moe. Thank you, sir.

Senator McGee. Unless somebody has another speech—I am looking for more information I can use myself—thank you very much.

Subcommittee Recess

The subcommittee will recess until 10 o'clock at which time the Federal Development and Planning Committee for Alaska and the National Capitol Planning Commission will be heard.

(Whereupon, at 10:30 a.m., Thursday, March 10, 1966, the hearings were recessed to reconvene at 10 a.m. Friday, March 11, 1966.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1967

FRIDAY, MARCH 11, 1966

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10:15 a.m., pursuant to recess, in room 1223, New Senate Office Building, Hon. E. L. Bartlett, presiding.

Present: Senator Bartlett.

FEDERAL DEVELOPMENT PLANNING COMMITTEES FOR ALASKA

STATEMENTS OF JOSEPH H. FITZGERALD, CHAIRMAN, FEDERAL FIELD COMMITTEE FOR DEVELOPMENT PLANNING IN ALASKA; LAWRENCE E. IMHOFF, DEPUTY ASSISTANT SECRETARY FOR ADMINISTRATION; ROYAL E. OLMERT, CHIEF, FISCAL SERVICES DIVISION, OFFICE OF BUDGET AND FINANCE

1967 BUDGET REQUEST

Senator BARTLETT. The committee will be in order.

The first witness this morning will be Mr. Joseph H. FitzGerald, Chairman of the Federal Field Committee for Development Planning in Alaska.

Do you have a statement?

Mr. FITZGERALD. Yes; I do.

Senator BARTLETT. Do you want to read it, or summarize it?

Mr. FITZGERALD. I think it may be helpful if I read it.

Senator BARTLETT. All right.

Mr. FITZGERALD. Mr. Chairman and members of the subcommittee, it is a pleasure for me to appear before the committee today in behalf of the appropriations request for fiscal year 1967 in the amount of $190,000 for the Federal Field Committee and the President's Review Committee for Development Planning in Alaska. I feel we have a rather good story to relate on progress over last year and a good, reasonable program for the coming year.

AUTHORITY FOR COMMITTEES

You will recall these committees were established by Executive Order 11182 in October 1965 and my appointment as Chairman of the Federal Field Committee was confirmed in March of last year.

Authorized staff positions on the Field Committee, consisting of one planning officer, an economist, and two secretaries in Anchorage, as well as the Executive Secretary of the Review Committee and his secretary in Washington, were filled last September.

Broadly speaking, the Federal Field Committee has two separate but related functions—one dealing with the internal coordination of major Federal agency plans and programs which can affect the economic development of the State—the other dealing with joint State-Federal planning for economic and resource development in the State. The object, of course, is to harness public and private forces toward the long-range development of the vast resources of the State which are only now beginning to be developed systematically and extensively.

Functions and Meetings of Field Committee

The first function—coordinating plans for Federal programs—is being done directly within the organizational framework of the Federal Field Committee, as it is composed of representatives of the principal Federal agencies having operating programs in Alaska and has the power to call on other Federal agencies where appropriate.

The second function—joint State-Federal planning and programming—not only involves the coordination of economic plans and programs between the State and Federal Governments, but also requires an effective organization at the day-to-day working level to do the detailed analysis, planning, and report writing.

Although the Field Committee has authority to establish its own subcommittees, these were not considered appropriate to achieve the truly integrated State-Federal planning envisioned by the Executive order. Rather, it appeared that the detailed work should be done by subcommittees composed of both State and Federal personnel.

The first joint meeting of the Federal Field Committee for Development Planning in Alaska and the State of Alaska Reconstruction and Development Planning Commission was held in Juneau, Alaska, on April 13–15, 1965, for the purpose of establishing such a joint development planning organization. At this meeting, agreement was reached on: (1) the principal areas of economic development; (2) the establishment of a joint State-Federal task force for each area of economic development; and (3) the general rules which could cover the organization and procedures of the task forces. Three subsequent meetings were held over the year leading to the completion of the Committee's first report.

Federal Field Committee Report

On December 10, 1965, I submitted to the Secretary of Commerce, the Honorable John T. Connor, Chairman of the President's Review Committee, the first report of the Federal Field Committee. The report covered the Committee's views on the development potential of the State together with commentary and recommendations on Federal policies and programs which can affect the cause of development. Because this was the initial report, the Field Committee chose to deal broadly with all areas having significant economic

growth potential, leaving more detailed studies and planning to be instituted following establishment of broad policy guidelines by the President's Review Committee.

Simultaneous to my submission of the report to Chairman Connor, and as provided for in Executive Order No. 11182, copies of the report were presented to the Honorable William A. Egan, Governor of Alaksa, for his review and comments. We are presently rewriting the report to consider the comments of the President's Review Committee and of the State government.

Program for Current and Budget Year

Additional guidelines from the President's Review Committee will likely be received on a continuing basis now that our initial report on development planning in Alaska has been submitted and appraised. In the meantime, however, we have many tasks to handle that we see as matters of high priority. Perhaps it is helpful to divide my remarks into those programs we will be up to for the remainder of this fiscal year and, more importantly for your purposes, our proposed programs for next year.

Establishment of Task Forces

We have found the arrangement of having joint State-Federal task force machinery to be workable and, following the submission of our report, we have already assigned new tasks to these groups in the areas of transportation, minerals, and forest products. Also, our agriculture task force and fisheries task force are active on "unfinished business" from before the submission of our report.

The power task force is engaged in the Alaska power survey sponsored by the Federal Power Commission and due for publication in early 1967. As might be expected, all these task forces are proceeding with items contained in the initial report. I have recently activated the human resources task force on the general problems of the native population and westward Alaska.

The Federal Field Committee members in Alaska are now translating some of the proposals made in our initial report into specific programs for implementation. Again, some of these will have to await congressional or Cabinet action, but others can be handled within existing authorities and resources. In particular, I have asked the Field Committee members to concentrate the resources of their agencies for an assault on the problems of westward Alaska, for these problems cross all Alaskan agencies and topical areas.

Role of Field Committee

Let me take a moment to explain to you how we see the role of our three-man office itself, for this self-image helps explain our budget request.

With so small a group it is obvious that we cannot and should not be too deeply involved in doing the actual footwork and detail of particular development projects. It is true that we act in a consultative way to Federal, State, and private agencies in Alaska as they come to us for assistance. But primarily we see ourselves as energizers, as seed planters, as generators of activity. In a word, we must

be good idea men, possess a growing understanding of the broad tasks of development in Alaska, and know how to "orchestrate" the development forces that are at work in the private, the quasi-private—university community—and public sides. This is not to suggest that we are casual or cavalier about the creation of a particular cement plant or refrigeration facility but rather that we must bring our best perspective and talents to bear on generating development activity over a broad front.

ECONOMIC DEVELOPMENT

There are times when we find it necessary to take on a specific project analysis ourselves. We are presently studying the problem that the State has of matching funds in dealing with certain Federal programs. In a large sense this involves the whole problem of how the tax vehicle can be used in economic development. We are deeply involved in the economic analysis of the Alaska communications system as regards its proposed disposal. Our interest, as elsewhere, is in how communications relate to sound, healthy economic development in Alaska. The object is to get a modern, reliable system which operates at reasonable costs and reasonable returns. We have in the germination stage a study on the relationship of public utility regulation to economic development in Alaska and a similar one on the banking system. Also, in connection with the university community, we are doing some statistical analyses of common economic indicators in the Alaskan economy, searching for some sort of "prosperity index" or "sensitivity index" which could be used in a predictive way for public policy, especially as it regards public expenditure.

ENCOURAGEMENT OF RESEARCH

Research must be seen as one of the longer term resources for and in Alaska's future. Accordingly, we are doing what we can to encourage the location of private and public research activities and research facilities at the two universities located in the State. So far this has involved the areas of agriculture, mineral, marketing, and business research, and engineering research associated with construction in the Arctic. We have set up a close working relationship with the Interagency Arctic Working Group sponsored by the State Department, as the objectives of that group and of the Field Committee are very similar in the research area. We are encouraging several State agencies (Mines and Minerals and Division of Natural Resources) to establish a dialog with counterpart agencies in British Columbia and the Yukon. This seems to hold special promise in matters of minerals exploration, forest management, transportation, and research generally.

STUDY OF FINANCES

We are considering committing our own research funds in several directions, rather than devoting them entirely to a single project. Prime candidates are: (1) a study of tax exemptions in Alaska and their relation to economic development; (2) a study of the policies and practices of the Alaskan financial community and how they relate to economic development; (3) an appraisal of the usefulness of factor analysis of the Alaskan economy to provide an economic profile of the State for use in policy; and (4) a study of marketing practices in Alaska and how they might be improved in helping make Alaskan

products competitive with other United States and world markets with particular emphasis given to the fisheries industry.

Cost Benefit Analyses

What the Field Committee has for a program of activity in any given year, of course, depends on what stage we see Alaskan development to be in. This year, appraising the economy of Alaska as very much in the extractive primary industry stage, our decision was to provide a definite study of the overall matter of development planning in Alaska with an eye toward identifying those areas—minerals, fisheries, forest products, tourism—where greatest development returns would most likely flow. Here we are working with the State in deciding what priorities should be given to the several directions and projects recommended in our report and make some assessments of costs and returns.

In successive programs we feel that our focus should be more and more definitive, precise, and refined in direction and increasingly toward more specific projects. This makes sense in that the final payoff in economic development comes in the actual specifics of an economic base—expansion of employment, plant and equipment, new industrial, and service and distributive activities. We see that point as a number of years off, however, and our attention now is directed toward a second approximation after last year's program.

This is, of course, no abrupt break in programs for our purpose between one fiscal year and the next; therefore, several of the programs I have already talked to you about will continue into the next fiscal year. Let me now set our particular programs we intend to introduce over the next fiscal year.

Native Problem

The so-called native problem of westward Alaska is one of the most urgent demands that the Field Committee sees being placed on itself. Time seems to be fast running out for us nationally in solving this one. Accordingly, we propose to muster the forces of the Bureau of Indian Affairs, Corps of Engineers, Bureau of Reclamation, the Weather Bureau, Public Health Service, Geologic Survey, counterpart State agencies—in short, all public agencies that can be focused on the development of this impoverished section of the State.

Proposed Establishment of Presidential Commission

Private groups have proposed the creation of a top level Presidential Commission to act on the problems of the native. If such a step is taken, we would anticipate working closely with the Commission. The topics that must be treated include transportation, sanitation, construction, housing, fisheries, education, demography, and economic opportunity.

Fresh and imaginative new ways of solving this old problem must be found, and I feel that while a national policy decision and new legislation are needed, the authorities already held by the agencies concerned are broad enough to go some distance toward the solution. Whether or not a special commission is appointed, the Field Committee will bend its efforts to make a sizable dent in the problem.

ALASKA POWER SURVEY

We will participate heavily in the conclusive stages of the Alaska power survey, which is being made by the Federal Power Commission, especially on matters of load projections and the role of power costs in total industrial costs. We will encourage experimental programs of State and Federal agencies in methods of environmental control, for example, hothouse techniques in agriculture through use of "waste" heat from thermal generators. With the appropriate State and Federal road and park and recreation people we intend to develop a master plan for the handling of traffic flows, tourism, and outdoor recreation in Alaska.

TOURISM

Increasingly there is a strain on the State's tourist facilities and accommodations and it is imperative that we get the interested parties together in formulating a comprehensive rational program to relieve this strain.

MINERAL DEVELOPMENT

In minerals the overriding problem is one of information through basic surveys; a secondary but important obstacle is the matter of State and Federal land laws. Both of these are holding back development, and we will do all we can to break these bottlenecks. In this latter connection the activities of the Public Land Law Review Commission are laudable but we must see that the resulting changes adopted are best.

FISHERY INDUSTRY

In fisheries much needs to be done to make this industry yield the kind of great returns it is capable of, and we will continue to work closely with State, Federal and private people toward that end. There are a number of promising developments here and we intend to capitalize on them. We will participate in the commitment of centennial funds to help assure that they are used so as to best enhance not only the short term, but the longer term development needs of Alaska.

I plan to continue contacts we have made in Ottawa (I was there in January with a State Department representative) at the Deputy Minister level on the possibility of creating perhaps a five-way dialogue between Alaska, British Columbia, the Yukon, and the Department of State and Ministry of Foreign Affairs on matters of mutual interest. This might be done by concentrating first in a modest way on fairly technical matters, e.g., how to perform construction and transportation tasks demanded of Arctic living; how can minerals exploration assistance best be handled, and soon. We would view such an arrangement as a low key but high quality activity.

USE OF STATISTICS

We will work with the State of Alaska in improving its information flow systems in terms of what statistical data might usefully be collected, by whom, and for what economic development purposes. At every opportunity we will make incisions into the price-cost spiral problem that haunts Alaska, giving special concern for the rule that

public expenditure plays in inflationary pressures on the Alaskan economy.

We plan to increase our informal lines of communication with top management of the large industries operating and contemplating operations in Alaska, for example, oil, minerals, and timber industries, in order to be closely apprised of their corporate plans. We will, of course, do the same with local business firms that are particularly significant in the developmental scene.

RESEARCH ACTIVITIES

Our proposal for research assistance is again modest. While, clearly, this is not enough to do any long- or full-scale research, it is enough to fund several short-run studies, the results of which are truly helpful in breaking bottlenecks, or pointing to new directions in development planning. Our decision on exactly where to commit these funds will in part be determined by the returns to this year's activities.

I thank you for the opportunity of appearing before you to explain what we are up to. I am enthusiastic about our task and confident that we will be able to turn in a creditable job.

Thank you.

Senator BARTLETT. Thank you, Mr. Fitzgerald.

1967 BUDGET REQUEST

There will be placed in the record the budget estimate and statement in justification of it for an appropriation of $190,000 for the Federal Development Planning Committees for Alaska during fiscal year 1967. This is a net increase of $16,000 required to employ the full staff for a full 12-month period.

(The justification follows:)

This appropriation request of $190,000 is submitted in order to finance the operation, at the same level in fiscal year 1967 as in 1966, of the Federal Field Committee for Development Planning in Alaska, and the President's Review Committee for Development Planning in Alaska.

Executive Order 11182 of October 2, 1964, was the basis on which the two Committees were established. They superseded the Federal Reconstruction and Development Planning Commission for Alaska, which had been set up to handle the reconstruction necessitated by the March 27, 1964, earthquake. When the reconstruction task was largely over, the Commission Chairman, Senator Anderson, recommended development planning arrangements more suitable for the longer run, and Executive Order 11182 was issued to carry the recommendation out.

The Executive order stipulated that the Federal Field Committee shall consist of a chairman and two public members, each a Presidential appointee, plus field representatives of the following Federal departments and agencies: Departments of Defense; Interior; Agriculture; Commerce; Labor; Health, Education, and Welfare; Housing and Home Finance Agency; Federal Aviation Agency; Small Business Administration; and Federal Power Commission.

Personnel from these departments and agencies were subsequently designated, and the Chairman of the Field Committee was appointed and installed in office. A professional staff was assembled to assist the chairman in discharging the Committee's responsibilities.

The Committee is required by the Executive order to join with Alaska's Development Planning Commission, a State body, in preparing development plans. Accordingly, the Committee and the Development Planning Commission met in Juneau on April 13–15, 1965, to create joint task forces. The task forces bear the following descriptive titles: Commercial and Industrial Projects, Transportation, Power, Mineral Resources, Forest Products, Fisheries, Agriculture, Parks and Recreational Facilities, Human Resources.

In drawing up Alaskan development plans, the Field Committee is to formulate relevant Federal programs. Recommendations for undertaking the programs are to be submitted to the President's Review Committee for comment.

The first set of recommendations have been completed. The recommendations and supporting material were sent to the President's Review Committee in December 1965 in a two-volume report. The report was made available also to other interested bodies and officials.

The recommendations in the report, totaling 34, call for Federal studies, surveys and infrastructure that concern fisheries, forest products, minerals, agriculture, and tourism. The report moreover contains sections and recommendations on power, transportation, and research, and gives special emphasis to westward Alaska. One volume of the report reproduces four studies done by the joint task forces mentioned above.

When the recommendations of the Field Committee have had Review Committee comment, the Field Committee will consider the comment, revise the recommendations as it deems appropriate, and forward them to the President and heads of interested Federal agencies.

It will then continue to formulate additional recommendations for Federal programs that assist development in Alaska, and otherwise proceed with its task of identifying feasible Alaskan development projects, and encouraging project implementation.

These pursuits will involve fostering or conducting studies and surveys that bear on Alaska's resources, markets, labor and other costs, and other aspects of Alaska's economy. In addition, they will involve keeping abreast of such development programs as are engaged in by other Alaskan institutions. The above pursuits will occupy the Committee in the subject fiscal year.

Apart from the responsibilities of the Federal Field Committee that it sets forth, Executive Order 11182 spells out the responsibilities of the President's Review Committee, comprising the heads of the Federal departments and agencies—or their alternates—represented on the Field Committee.

Review Committee functions include commenting on Field Committee recommendations, as previously described. The recommendations submitted in December 1965 were the subject of a Review Committee meeting held in January 1966. The participants reviewed and commented on the recommendations, and the comments are to be firmed up and transmitted to the Field Committee for its consideration.

The second major Review Committee responsibility is to provide the Field Committee with general direction and guidance. A general direction and guidance program has been drafted and is being completed.

In the coming fiscal year the Review Committee will provide such other direction and guidance as seems appropriate. And it will review and comment on such other recommendations as the Field Committee submits.

ANALYSIS OF PROGRAM REQUIREMENTS BY ACTIVITY AND OBJECT OF EXPENDITURE FISCAL YEAR 1966 AND 1967

Program by activity

[Dollar amounts in thousands]

	Fiscal year 1966		Fiscal year 1967		Increase	
	Positions	Amount	Positions	Amount	Positions	Amount
Activity:						
Field committee	5	$132	5	$141	.....	+$9
Review committee	2	42	2	49	.....	+7
Total	7	174	7	190	.....	+16

Program by object of expenditure

[Dollar amounts in thousands]

	Fiscal year 1966		Fiscal year 1967		Increase	
	Positions	Amount	Positions	Amount	Positions	Amount
Object classification:						
Personnel compensation:						
Permanent positions	7	$87	7	$101	----	+$14
Positions other than permanent	----	18	----	18	----	----
Other personnel compensation	----	16	----	18	----	+2
Total personnel compensation	7	121	7	138	----	+17
Personnel benefits	----	7	----	8	----	+1
Travel and transportation of persons	----	21	----	21	----	----
Transportation of things	----	3	----	3	----	----
Rent, communications, and utilities	----	11	----	11	----	----
Printing and reproduction	----	3	----	3	----	----
Services of other agencies	----	4	----	4	----	----
Supplies and materials	----	1	----	1	----	----
Equipment	----	3	----	1	----	−2
Total obligations	7	174	7	190	----	+16

Justification of requirements

Compared to the fiscal year 1966 appropriation of $174,000, the fiscal year 1967 budgetary requirement is estimated at $190,000, a $16,000 increase. The sole purpose of the increase is to maintain the present permanent staff of seven on a full-year basis. The 1966 budget provided for only 6 man-years because of the lag in filling positions.

A detailed explanation of requirements by object classification follows:

[In thousands of dollars]

	1966	1967	Increase (+) or decrease (−)
Personnel compensation: [1]			
Permanent positions	87	101	+14
Consultants and public service members	18	18	----
Cost of living allowances	16	18	+2
Total	121	138	+17
The increase of $17,000 is required to provide full-year financing of the presently authorized staff of 7. Of this amount, $14,000 is needed for salary payments, and $2,000 for increased cost of living allowance, (25 percent of annual salaries) given employees stationed in Alaska. No change is requested for expenses of public members to be assigned to committees, or for other consultants.			
Personnel benefits	7	8	+1
This category of expense includes the Federal Government's share of contributions to the civil service retirement fund, group life insurance, health benefits, social security, etc., which are required by law to be paid from appropriations which are charged with the payments of wages to employees. Employee benefit estimates are based on wage compensation. They approximate 7.3 percent of the cost of the compensation indicated for permanent positions, and 4.25 percent of that for other positions. The $1,000 increase is applicable to permanent positions.			
Travel	21	21	----
An estimated $12,000 is to defray the transportation and per diem expenses of the chairman of the field committee and his professional staff assistants when they travel to Washington, D.C., to consult with the review committee and other Government officials in furtherance of program objectives. It also covers their travel within Alaska to further these objectives. Provision is moreover made for travel of the staff assistant assigned to the review committee ($1,500), and for the expenses of public members and other consultants ($7,600). No increase is requested for fiscal year 1967.			
Transportation of things	3	3	----
The estimate covers the cost of transportation of materials, supplies, equipment, etc., including household effects of Gov-			

[1] Details do not add to total because of rounding.

	1966	1967	Increase (+) or decrease (−)
ernment personnel transferred to Alaska.			
No increase is requested for fiscal year 1967.			
Rent, communications, and utilities	11	11	
The estimates include the cost of various communication facilities such as telephone, teletype, postage, etc., as well as the cost of renting commercial office space in Alaska.			
No increase is requested for fiscal year 1967.			
Printing	3	3	
The estimate covers the expenses of reproducing reports and informational and administrative material required to support program operations.			
No increase is requested for fiscal year 1967.			
Service of other agencies	4	4	
The estimates cover the cost of administrative program support such as accounting, personnel, budgetary services, etc., that will be provided by the Department of Commerce on a reimbursable basis and amounts to approximately 2 percent of the total dollar program level.			
Supplies and materials	1	1	
The estimates provide for miscellaneous expendable office supplies and materials required in the normal course of program operations. The amounts shown are based on an annual expenditure of $150 per employee.			
Equipment	3	1	−2
Provision is made in the estimate for a nominal amount for office equipment and furnishings.			
Fiscal year 1967 reflects a reduction due to the elimination of equipment purchases for new employees covered in the 1966 estimate.			

Analysis of staffing requirements fiscal year 1966 and 1967

Position title and grade	Fiscal year 1966		Fiscal year 1967		Increase	
	Position	Annual salary	Position	Annual salary	Position	Annual salary
Field Committee:						
Chairman, GS–18	1	$25,382	1	$25,382		
Staff assistant, GS–15	2	35,880	2	36,470		+$590
Secretary, GS–7	1	6,476	1	6,683		+207
Secretary, GS–5	1	5,181	1	5,352		+171
Subtotal	5	72,919	5	73,887		+968
Review Committee:						
Staff assistant, GS–15	1	22,365	1	22,365		
Secretary, GS–6	1	6,086	1	6,278		+192
Subtotal	2	28,451	2	28,643		+192
Grand total	7	101,370	7	102,530		+1,160
Less lapses and net savings due to lower pay scale for part of year		14,165		1,157		+13,008
Permanent positions		87,205		101,373		+14,168
Intermittent employment		18,000		18,000		
Post differential		16,070		18,445		+2,375
Total personnel compensation		121,275		137,818		+16,543

ACCOMPLISHMENTS TO DATE

Senator BARTLETT. These two committees were established last year?

Mr. FITZGERALD. Yes, sir.

Senator BARTLETT. Can you pinpoint, if such is possible in this type of arrangement which you head up, Mr. Fitzgerald, the accomplishments made during the period the agency has been in existence, which has been of assistance to Alaska?

Mr. FITZGERALD. First, we have only been in operation for some 9 or 10 months, and we have not been fully staffed except since the period from September 1965, to date.

We obviously have not carried to completion many of the things we are thinking about and working on. One of the major accomplishments, we have, is in the field of organization, where we worked with the State to set up an effective planning, joint State-Federal planning machinery. We think we have done very well on this.

Our organization has produced a great deal of work, a great deal of reports. It is being done with the full cooperation of Federal and State personnel, and I think has pointed a way in which effective State and Federal planning can be done.

We have encouraged and worked with certain activities and can point to progress in many areas.

We do not claim responsibility for the establishment of the hothouse that I spoke to you last year about, when you were supporting our budget, but it was accomplished, and certainly with our enthusiastic support. That is a specific item.

We are extremely hopeful this kind of experiment is going to be very productive. The Alaskan climate is such that if we can produce in hothouses at low cost, using waste heat, we can produce substantial amounts of food required in the State. Local production, of course, enables us to broaden the civilian economy and, in turn, enable it to grow.

ECONOMIC PROBLEM

We have, I think, in our work, also pointed out some of the major problems which we are going to have to work on in order to assist the growth of the civilian economy in Alaska.

We have also, I think, underlined the economic problems which are involved, for example, in the native problem in Alaska.

After giving considerable time to this, we are convinced that although we have only one piece of the problem, that the economic side of the problem must be solved if there is to be any long-range permanent solution to the native problem.

That means we regard this as a matter of the highest priority, and are day by day working with the interested agencies, pulling together material and getting lines of attack on the problem outlined. We think we are laying the basis for starting to do the things that are going to help these people achieve a more satisfactory level of economic well-being in their environment.

FEDERAL EMPLOYMENT OF NATIVES

Some things are already underway. For example, one of the first things, obviously, to me, in many of these areas is actually governmental in nature. If it is governmental in nature, does the native share adequately in the jobs afforded in the area?

Federal and State policy, of course, is not intended to discriminate in any way against the native, and doesn't, but in fact these people have not participated heavily in the allocation of jobs, so we have taken this up with civil service.

We have taken it up with specific agencies, some agencies, such as the Weather Bureau, which now has an active program of working

out how they go about providing more employment for the natives in the areas where they have observation stations. This is the kind of thing we are doing.

My feeling is, while we do not have a series or list of projects on which I can come to you and say, "We have accomplished this this year," I think we have accomplished a great deal in getting the things organized and started in a direction which will produce results.

Senator BARTLETT. Mr. Fitzgerald, has the Review Committee acted on the recommendations submitted to it by the Federal Committee last December?

Mr. FITZGERALD. We submitted this report, Mr. Chairman, and the Review Committee did meet. It has considered all the comments, and I don't believe they are all back from the agencies yet, but this has been a detailed review by the President's Committee of the recommendations made by us.

COORDINATION OF GOVERNMENT AGENCIES

Senator BARTLETT. I should think this would be a tremendous job, to persuade, if persuasion is required, or to accomplish, whichever might be the case, the sort of coordinated action which you definitely have in mind, and which you must have in mind if this is to succeed.

Aren't agencies inclined to perform the functions assigned to them without giving consideration to overall benefits that might be attained through a coordinated program?

Mr. FITZGERALD. The inherent difficulty of the complexity of government is that it does lead to fragmentation of activity, and upon specialization, and concentration on exactly what has been assigned to you. But in setting up the Federal Field Committee and the Review Committee, I believe the President was expressing a thought he has articulated in other areas; that is, that Government has reached such a state of importance in the lives of everyone that there must be joint State-Federal community action and consideration of problems.

We view it that way, and we think that this is being welcomed. Within the State of Alaska we have not found reluctance by Federal or State agencies to participate. There has been an eagerness to come in and participate.

We found one of the first results is that the information and understanding of people is enhanced by this process. They find out the other fellow in the other agency is actually interested in something they are doing, and they didn't know about it before.

I feel at the Washington level we, within the overall direction the Government is moving in, we do get good consideration.

I don't mean to say that the time won't come on specific problems where we won't find a bureaucratic obstacle which we think is a bit blind. I am sure that will happen to us, but our experience to date has been quite good.

ECONOMIC DEVELOPMENT FOR NATIVES

Senator BARTLETT. Your statement was so comprehensive you don't leave me with many questions to ask.

I would like to refer you, though, for a moment or two, to the

matter which you developed dealing with employment of Alaskan natives.

When we say "natives," you and I, we employ the term generally used in Alaska to mean Indians, Aleuts, and Eskimos. Is that correct?

Mr. FITZGERALD. Yes, sir.

Senator BARTLETT. Aside from increased Government employment, do you at this time—as you say you have barely started—see real prospect of economic development that would benefit the villagers in these vast remote areas where 50 may live here, and another 30 only 10 miles away, with no aparent source of income whatsoever?

Mr. FITZGERALD. That is the proper question, Mr. Chairman. I look on it this way, that we will have to select the likely areas of economic development and concentrate on them.

Areas that now have some economic base or some potential for developing them; Bornight, where Kennecott Copper has a development; Kotzebue, the Pribilofs—if we are successful there, these like a magnet will draw people into them.

The small little town of 50 is the carryover from the use of subsistence in the economy of the native before we went there. They had a size of approximately 50 because their fishing area, their hunting area, their trapping area, was about large enough to support 50 people.

However, it is only by accident that this type of activity today, with the kind of economic development we have, has any place in this community.

I believe you do not uproot people. You allow these things to develop gradually. You can give them housing and health, and this kind of thing can be given where they are, but the ultimate economic development requires the growth of communities of substantial size, doing the kind of things we do with oil wells, fishing with commercial fishing boats, this sort of thing.

This is what they will ultimately have to do, and I am sure they will, and will come into their own.

The great bulk of economic development is at Point Barrow, because of research facilities and other facilities at that point. As a result, we find the native communities on each side for quite a distance—the people have just moved into Barrow.

To the extent these people get employment, their problem is solved, and our problem is solved, and I think this process will serve and curve over the remainder of Alaska, if we are successful in generating jobs for people anywhere in the area.

Senator BARTLETT. People will move to the jobs?

Mr. FITZGERALD. Yes, sir.

Senator BARTLETT. This has occurred in Anchorage?

Mr. FITZGERALD. Yes, sir.

NEGRO POPULATION

Senator BARTLETT. Anchorage is the largest city, and contains the largest native population. Barrow is a town of approximately 1,600 people, practically all Eskimos. Anchorage, as I understand, has about 4,000 natives.

Mr. FITZGERALD. Yes, sir

Senator BARTLETT. One final question. Maybe you have not ap-

proached this as yet, because of the overwhelming priority that must be given to solving this native problem.

On a percentage basis, Alaska has a very large Negro population, considerably larger in terms of percentages, as I recall, than the Northern States, the Dakotas and Montana, and so forth. What is their economic lot in Alaska?

Mr. FITZGERALD. By and large, they find economic employment in the community.

I don't pretend to be particularly knowledgeable on the problem, but I believe that they, on the whole, have jobs, have occupations, and are not suffering from any high level of unemployment in the communities where they are located.

TRAINING OF ESKIMOS

Senator BARTLETT. The Negro does not have to do that which the Eskimo has to do. He has to leap literally in a generation from his ancient economy, hunting, trapping, fishing, to the white man's economy, and, I think, considering all things, he has done it marvelously well.

Mr. FITZGERALD. All we say in Alaska is that the Eskimos are one one of the talented people, and that they are capable of very rapid assimilation and training, that they are very mechanically inclined, so it is no problem at all to train them to be aircraft mechanics or diesel mechanics, and so on.

And there does not appear to be, so far as we know, any cultural obstacles to their conversion to our type of economic system.

TAX STRUCTURE

Senator BARTLETT. Another question on an unrelated subject: you say the Committee has given consideration to a study of tax exemption in their economic development.

What do you mean by this?

Mr. FITZGERALD. In encouraging economic development, there is always a problem where there is a tax deficit.

This is quite complex, when you start to study a potentially competitive area.

For instance, the tax structures in Alaska and the State of Washington are quite different. We have corporate taxes; the State of Washington does not. Does this cause a wholesale concern to move its main offices back to Seattle, rather than keeping them in Anchorage?

These are questions we should look at.

We also have in some of our major mineral and oil developments problems, which I think are becoming very acute, the questions of what kind of tax incentives can you give to attract the industry without putting an impossible economic burden on the community into which they move.

In other words, if you bring in a large plant of any kind into a community that draws people, you must have money to provide the schools

and to build the streets, and do all the things a community must do. So you might create a situation where they ride in on the shoulders of the taxpayer, and create an impossible burden.

So these things have to be looked at and measured and an equitable, effective system needs to be devised.

Senator BARTLETT. A few years ago the Alaska Legislature designed the tax laws to give specific exemptions in certain cases for industry. It was thought this inducement would cause them to locate or enlarge.

Will your study, with State cooperation, seek to analyze the results of these laws, whether they have worked, or they haven't?

Mr. FITZGERALD. Yes, sir.

Senator BARTLETT. Thank you.

I have no further questions. Your statement has been most helpful.

59-370—66—pt. 2——34

FRIDAY, MARCH 11, 1966.

NATIONAL CAPITAL PLANNING COMMISSION

SALARIES AND EXPENSES

STATEMENT OF MRS. JAMES H. ROWE, JR., CHAIRMAN; CHARLES H. CONRAD, DIRECTOR; DONALD F. BOZARTH, DEPUTY DIRECTOR; DANIEL H. SHEAR, GENERAL COUNSEL AND SECRETARY; JOHN R. PRITCHARD, ASSISTANT DIRECTOR (ADMINISTRATION); MISS MARY R. SMALL, SPECIAL ASSISTANT TO THE DIRECTOR; WILLIAM J. STEVENS, CHAIRMAN, AND GEORGE H. F. OBERLANDER, DIRECTOR, NATIONAL CAPITAL REGIONAL PLANNING COUNCIL; AND JOHN M. WOODBRIDGE, TEMPORARY COMMISSION ON PENNSYLVANIA AVENUE

INTRODUCTION OF STAFF MEMBERS

Senator BARTLETT. The committee will hear from witnesses appearing in behalf of National Capital Planning Commission.

How are you, Mrs. Rowe?

Mrs. ROWE. I am fine, and very pleased to be here.

Before starting my testimony, I would like to introduce the members of the Planning Commission staff that are here today.

Senator BARTLETT. Please.

Mrs. ROWE. Mr. Charles H. Conrad, Director; Mr. Donald F. Bozarth, Deputy Director; Mr. Daniel H. Shear, General Counsel and Secretary; Mr. John R. Pritchard, Assistant Director (Administration); Miss Mary R. Small, Special Assistant to the Director; Mr. William J. Stevens, Chairman, Regional Planning Council; Mr. George H. F. Oberlander, Director, Regional Planning Council; and Mr. John M. Woodbridge of the staff of the Temporary Commission on Pennsylvania Avenue.

Senator BARTLETT. You are well attended.

Mrs. ROWE. Indeed.

1967 BUDGET REQUEST

Senator BARTLETT. Before we hear from you, Mrs. Rowe, we will place in the record the budget estimate submitted by the National Capital Planning Commission for the fiscal year 1967, in the amount of $1,144,000.

This is $344,000 more than was appropriated in fiscal year 1966, although there is pending a supplemental budget estimate in the amount of $68,000.

(The justifications follow:)

National Capital Planning Commission
National Capital Regional Planning Council
Temporary Commission on Pennsylvania Ave.

	Commission	Council	Pennsylvania Ave.	Total
Salaries and expenses appropriation, fiscal year 1966	$640,000	$110,000	$50,000	$800,000
Pay increase supplemental, Public Law 89-301	14,250	2,500	750	17,500
Other supplemental, fiscal year 1966 (nonrecurring)	50,000			50,000
Deduct nonrecurring items in fiscal year 1966 (see above)	−50,000			−50,000
Adjusted base, fiscal year 1966	654,250	112,500	50,750	817,500
Increases proposed for fiscal year 1967:				
Balance of full-year costs for pay increase, Public Law 89-301	5,250	1,000	250	6,500
New permanent positions:				
Commission (11)	93,754			93,754
Pennsylvania Ave. (4)			30,168	30,168
Personnel benefits for above	7,770		2,382	10,152
Experts and consultants	16,000			16,000
Miscellaneous expenses in connection with above:				
Rental, additional office space	8,250		7,500	15,750
Office equipment and machines	2,000		1,000	3,000
Office supplies	1,805		2,000	3,805
Telephones and communications	1,000		1,080	2,080
Travel and transportation	1,500		7,000	8,500
Landmarks program (1st year of a 2-year nonrecurring increase	50,000			50,000
Capitol Hill study	40,000			40,000
Publication programs	45,000			45,000
Increased telephone service rates by GSA	850			850
Increased mail costs, Post Office Department	600			600
Total increases	273,779	1,000	51,380	326,159
Total budget estimate, salaries and expenses, fiscal year 1967	928,029	113,500	102,130	1,143,659

Land acquisition, National Capital Park, parkway and playground system (no funds appropriated in fiscal year 1966)

George Washington Memorial Parkway:	
Fairfax County, Va	$3,200,000
Prince Georges County, Md	2,900,000
Total, land acquisition	6,100,000

New positions requested

NATIONAL CAPITAL PLANNING COMMISSION

Title and grade	Function	Salary
1. Urban planner, GS-12	District planning	$10,619
2. Program planner, GS-11	Federal planning	8,961
3. Urban planner, GS-11	do	8,961
4. Urban designer, GS-11	Urban renewal planning	8,961
5. Secretary, GS-5	Urban renewal planning	5,181
6. Urban planner, GS-13	Comprehensive planning	12,510
7. Urban designer, GS-11	Technical services	8,961
8. Urban research planner, GS-13	do	12,510
9. Research assistant-planner, GS-7	do	6,269
10. Personnel and records management officer, GS-12	Administrative services	10,619
11. Landmarks planner, GS-12	Special services	10,619
Subtotal		104,171
Less 10 percent reduction for 1st year lapse		−10,417
Net increase, National Capital Planning Commission		93,754

TEMPORARY COMMISSION ON PENNSYLVANIA AVENUE

1. Architect, GS–13		$12,510
2. Administrative assistant, GS–11		8,961
3. Draftsman, GS–8		6,869
4. Secretary, GS–5		5,181
Subtotal		33,521
Less 10-percent reduction for 1st year lapse		−3,353
Net increase, Temporary Commission on Pennsylvania Avenue		30,168
Grand total, new permanent positions		123,922

	Permanent positions—		
	Fiscal year 1966	Increase	Fiscal year 1967
National Capital Planning Commission	48	11	59
National Capital Regional Planning Council	[1] 8		8
Temporary Commission on Pennsylvania Avenue	2	4	6
Total	58	15	73

[1] Excludes attorney position financed from NCRPC funds but which is carried on organization chart under NCPC, Legal Services Division.

Staff organization for planning in the National Capital region, fiscal years 1966–67

NATIONAL CAPITAL PLANNING COMMISSION

1. Director, GS–17
2. Urban planner, GS–14 (chairman's aid)
3. Secretary, GS–6
4. Deputy director, GS–16
5. Secretary (stenographer), GS–7
6. Secretary (stenographer), GS–5
7. Clerk-stenographer, GS–5
8. Assistant director (administration), GS–14
9. Personnel and records management officer, GS–12 [1]
10. Fiscal accounting assistant, GS–7
11. Administrative assistant, GS–6
12. Clerk (typing), GS–5
13. Chauffeur (ungraded)
14. General counsel and secretary, GS–15
15. Attorney-adviser, GS–11
16. Secretary (stenographer), GS–6
17. Chief, District Planning, GS–14
18. Urban planner, GS–12 [1]
19. Cartographic technician, GS–7
20. Assistant Director for Urban Renewal, GS–15
21. Secretary, GS–7 [2]
22. Deputy Assistant Director, GS–14
23. Urban designer, GS–11 [1]
24. Secretary, GS–5 [1]
25. Cartographic technician, GS–6 [2]
26. Planning aid, GS–9
27. Chief, Federal Planning, GS–14
28. Secretary, GS–5
29. Urban planner, GS–12
30. Program planner, GS–11 [1]
31. Urban planner, GS–11 [1]
32. Cartographic technician, GS–6 [2]
33. Landscape architect, GS–12
34. Urban designer, GS–13 [2]
35. Assistant Director for Comprehensive Planning, GS–15
36. Urban planner, GS–14
37. Urban planner, GS–13 [1]
38. Urban planner, GS–12
39. Urban planner, GS–9 [2]
40. Urban planner, GS–9
41. Architect, GS–13 [2]
42. Clerk-stenographer, GS–5
43. Cartographic technician, GS–7
44. Civil engineer, GS–14
45. Urban planner, GS–14
46. Architect (general), GS–13
47. Urban designer, GS–11 [1]
48. Architect (general), GS–7
49. Special assistant to Director, GS–13
50. Landmarks planner, GS–12 [1]
51. Writer-editor, GS–12
52. Secretary, GS–8
53. Designer-illustrator, GS–11
54. Social science analyst, GS–14
55. Urban research planner, GS–13 [1]
56. Social science analyst, GS–9
57. Research assistant-planner, GS–7 [1]
58. Library assistant, GS–5
59. Open space planner, GS–12

Positions budget, fiscal year 1966	48
Increases recommended herein	11
Proposed, 1967	59

NATIONAL CAPITAL REGIONAL PLANNING COUNCIL

1. Director, GS–16
2. Deputy Director, GS–14
3. Urban planner, GS–12
4. Urban planner, GS–12
5. Cartographic technician, GS–7
6. Secretary, GS–6
7. Statistical clerk, GS–5
8. Clerk-stenographer, GS–5

TEMPORARY COMMISSION ON PENNSYLVANIA AVENUE

1. Executive secretary, GS–16
2. Secretary, GS–5
3. Architect, GS–13 [1]
4. Administrative assistant, GS–11 [1]
5. Draftsman, GS–8 [1]
6. Secretary, GS–5 [1]

[1] Proposed 1967 positions.
[2] Grade or title change from 1966.
NOTE.—In addition to the above permanent positions financed from the "Salaries and expenses" appropriation, various other positions totaling from 5 to 10 per year are financed with transfer funds from the District of Columbia Redevelopment Land Agency.

PROGRAM AND PERFORMANCE, FISCAL YEAR 1967 APPROPRIATION ESTIMATES

1. *Planning development of the National Capital.*—The Planning Commission is the official planning agency for the District of Columbia, as well as for the Federal Government in the District and the National Capital region. It plans for "the orderly development and redevelopment of the National Capital and the conservation of the important natural and historic features thereof." At this time of great change in the area, it serves two basic functions: (1) it develops and maintains the long-range comprehensive plan for the District, and (2) it reviews and approves, or reports on, proposed building developments and land acquisitions of District and Federal agencies. At present a comprehensive plan for 1985 is in the final stages of preparation. In carrying out its statutory responsibilities the Commission reviews and reports on several hundred Federal and District of Columbia projects each year.

In its comprehensive plan work and contract studies for the District of Columbia, the Commission is concerned in particular with (1) the needs of the Federal Establishment for adequate operating facilities; (2) the physical needs for such community facilities as schools, parks, libraries, and other local government buildings, particularly for the deprived residential areas; (3) the achievement of a balanced transportation system; (4) the protection and extension of open and green spaces and the esthetic values of the region; (5) the conservation of existing housing sound residential neighborhoods and the renewal of those requiring it; and (6) special programs such as the conservation of historic and architectural landmarks.

The Commission membership meets monthly, serving without pay, and provides policy guidance for and basic coordination between many development programs of District and Federal agencies. It relies on the technical work of its staff and special experts to analyze projects and programs, and to carry out its policies. The Commission inherits a long tradition of efforts to make Washington the fine city it is today, and is vitally concerned about its future as a great National Capital City.

A supplemental appropriation for 1966 is anticipated for separate transmittal.

2. *Coordinating metropolitan area planning.*—The National Capital Regional Planning Council is charged with the development of an overall comprehensive regional plan and coordinates planning of the counties and cities of the metropolitan area with that for the Federal establishment in the suburbs. Its membership is composed of two representatives of the District of Columbia, and eight representatives nominated from the subregional planning agencies in Maryland and Virginia. The Council retains a professional staff, meets monthly and operates through several committees specializing in various regional planning aspects. The Council functions as a regional coordinator and catalyst, serving as a central intelligence organization and clearinghouse on all planning and development matters having regional significance.

3. *Pennsylvania Avenue redevelopment planning.*—The Temporary Commission on Pennsylvania Avenue was established by Executive Order No. 11210 of March 25, 1965. The 13-member Commission includes Cabinet officers and the heads of agencies with specific interests in the avenue. On September 30, 1965, the President approved the designation of Pennsylvania Avenue as a national historic site under the authority of the Historic Sites Act of August 21, 1935. The immediate objective of the Temporary Commission is to continue to develop reliable information upon which planning decisions can be based. Technical data must be available for those agencies, public or private, which must now make decisions relating to the development of Pennsylvania Avenue.

I. Program and Organization of the Planning Commission

A. Introduction

In 1952, the Congress established the Planning Commission to succeed the National Capital Park and Planning Commission.[1] The purpose of the act establishing the Commission is "to secure comprehensive planning for the physical development of the National Capital and its environs—and to establish the agency and procedures requisite to the administration of the functions of the Federal and District of Columbia governments related to such planning." The general objective of the act is "to enable appropriate agencies to plan for the development of the Federal establishment at the seat of Government in a manner consistent with the nature and function of the National Capital." To this end the Commission is directed "to plan the appropriate and orderly development and redevelopment of the National Capital and conservation of the important natural and historic features thereof." Provisions of other laws—especially the zoning enabling act for the District of Columbia and the District of Columbia Redevelopment Act of 1945, as amended, place significant additional responsibilities upon the Commission.

In accordance with the National Capital Planning Act of 1952, the District of Columbia Redevelopment Act of 1945, as amended, and various other acts of Congress,[2] the Planning Commission serves two basic responsibilities. It is "created and designated as the central planning agency for the Federal and District governments," thus it is both a municipal planning agency and the responsible agency for representing the Federal interest in planning for the growth and development of the National Capital region.

B. Commission Program Objectives for Fiscal Year 1967

It is expected that the Commission's workload will continue at a high level in fiscal year 1967, as indicated elsewhere in this document. The work program still will consist of a wide variety of assignments and studies. Nevertheless, a number of the major program objectives are worthy of being singled out for specific attention. Most of these cannot be done adequately, if at all, unless increased funds are made available to the Commission.

The program objectives are given below in two categories: those which stem from the Commission's initiative in carrying out its statutory responsibilities and those which originate from other agencies but result in referral to and review by the Commission.

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[1] The National Capital Park and Planning Commission was established in 1926, to succeed the National Capital Park Commission, which had been established in 1924.

[2] Other legislation containing significant Commission functions:
Act of June 12, 1934 (48 Stat. 931) (public housing plans).
Act of Mar. 2, 1893 (27 Stat. 532), as amended (permanent system of highways plan).
Act of Dec. 15, 1932 (47 Stat. 747) (street and alley closings).
District of Columbia Motor Vehicle Parking Facility Act of 1942 (56 Stat. 90), as amended (public off-street parking facilities).
Act of June 20, 1938 (52 Stat. 802) (zoning regulations).
Act of May 20, 1932 (47 Stat. 161) (transfers of jurisdiction).
Act of Aug. 5, 1939 (53 Stat. 1211) (surplus public property in the District of Columbia).
Act of May 29, 1930 (46 Stat. 482), as amended (National Capital park, parkway, and playground system).

1. Initiative under statutory responsibilities

(*a*) Extension of comprehensive plan studies into community and neighborhood areas, in consultation with citizen groups, and detailing of public system improvements in coordination with government agencies concerned (i.e. for schools, libraries, fire and police stations, etc.). In addition to providing the basis for precise public works plans, such studies will attempt to translate comprehensive plan proposals into specific private investment opportunities.

(*b*) Establish a continuing program of identifying a 5-year span of planning and development objectives for the District. At the same time, establish the process of projecting both the 20 and the 40 year plans forward so as to update these at the end of each 5-year cycle. This combination is necessary in order to establish an effective, continuing planning program.

(*c*) Undertake the first year of a 2-year study to develop and initiate a program to preserve suitable landmarks within the District.

(*d*) Provide staff support for initial work required to get urban renewal projects underway—especially anticipated work on Pennsylvania Avenue, downtown, and such other projects as may be recommended by the community renewal program.

(*e*) Develop a series of systems for preparing and analyzing capital budget programing for the District of Columbia. These systems will be applied to intervals of 1, 20, and 40 years, as is consistent with the basic planning time periods.

(*f*) Initiate necessary planning studies to provide the necessary framework for decisions on the subway-rapid rail system pertaining to exact route and station locations, and station entrances and exits. These studies also will analyze the potential impact of the stations on development of their immediate environs.

(*g*) Coordinate with the regional continuous cooperative comprehensive transportation planning process to insure that its initial studies are undertaken within the framework of planning objectives for the District of Columbia and Federal Government objectives for the National Capital region.

(*h*) Complete additional studies of Federal land holdings in the District and region and make recommendations as to their ultimate use and development. Initiate preliminary study of possible overall strategies for the acquisition of new Federal land holdings, development of underutilized sites, and the disposal of excess lands in the region so as to accommodate future requirements.

(*i*) Undertake a vigorous program of land acquisition along selected portions of the Potomac River waterfront to provide for extensions of the George Washington Memorial Parkway. Assist other agencies in developing programs to participate in Federal aid programs for urban open space land and water conservation, and urban and highway beautification.

(*j*) Develop an informational program for public agencies and private organizations on the recommendations of the 1985 comprehensive plan, with emphasis on steps being taken or proposed for early action to carry out, its recommendations.

(*k*) Establish basic research analysis and data systems on growth and development changes to inform and guide public and private decisionmaking.

(*l*) Assist in the District's war on poverty and juvenile delinquency, with particular respect to the location and development of needed physical facilities and mutual understanding of the economic and social issues involved in physical upgrading of the District.

(*m*) Undertake the development of additional special street plans, such as prepared for Virginia Avenue, to guide their improvement and beautification.

2. Referral to and review by Commission:

(*a*) Undertake a more systematic and detailed analysis of District of Columbia department proposals for capital improvements under the 1- and 6-year programs.

(*b*) Participate in initial site selection and boundary studies for public works projects of the District of Columbia.

(*c*) Engage in closer review and study of District of Columbia zoning appeals and actions as they relate to new development patterns and pressures.

(*d*) Continue close coordination with the installations of the Department of Defense as they complete this master planning for efficient and attractive development of their bases, under recent directives requiring submission to the Commission.

C. ORGANIZATION AND ROLE OF COMMISSION

The Commission is composed of five eminent citizens appointed by the President; six ex officio members from executive agencies (the Chief of Engineers of the Army, the Engineer Commissioner of the District of Columbia, the Director of the National Park Service, the Commissioner of Public Buildings, the Federal Highway Administrator, and the Administrator of the National Capital Transportation Agency), and the chairman of the Committees on the District of Columbia of the Senate and the House of Representatives. The six ex officio members of executive agencies are often represented by one or more alternates each, with whom contact is maintained constantly on Commission affairs.

The Commission is an active policymaking body. It meets in 11 formal sessions throughout the year. There are six regular committees which meet regularly prior to Commission meetings. An executive committee meets occasionally. These meetings average more than 20 hours during the first week of each month. The committees review technical studies, receive recommendations of the staff, and prepare committee recommendations to the Commission.

The current program of the Commission includes a major effort to prepare an up-to-date comprehensive plan for the District; participation in the formulation of the District of Columbia community renewal program; many activities concerned with the Federal interest in the District and the National Capital Region, including the site selection and planning of Federal buildings and study of the utilization of Federal reservations in the region; planning for urban renewal projects; participation in planning for the development of a balanced system of transportation facilities, and special activities such as the landmarks program, District of Columbia beautification program, etc.

D. PROFESSIONAL STAFF

As an agency primarily involved in establishing desirable policy objectives and providing technical and professional services, the Commisson's efforts rely heavily upon the personnel and technical resources made available to it.

The Commission employs a highly trained professional staff to perform technical studies and prepare recommendations for and maintain records of its meetings, carry out 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 wth numerous official agencies and conducts an active community relations program in order to effectuate the Commission's program.

Special experts are retained on occasion to use their competence on particularly important problems. Many planning services are furnished in response to requests by the Executive Office of the President and the Congress. Studies in urban renewal are carried out in part with funds received from District agencies.

An official NCPC Coordinating Committee meets twice monthly to bring together representatives of many District, Federal, and neighboring jurisdiction agencies to coordinate the review, study, and comment on major building and development projects within the District of Columbia, as well as routine review actions required by legal statutes. This is the basic coordinating machinery between development programs of the District and Federal Governments, which are served for many years. It also is used to test new projects in relation to the comprehensive plan and desirable planning practices.

II. Professional Program Activities

The professional program activities of the Commission are classified into seven areas for administrative and budgeting purposes. Permanent personnel are assigned to the Office of the Director, Legal and Administrative Services, Planning Divisions (four), Technical Services, and Community Relations and Staff Library. Specialized services and experts are obtained when necessary for special studies. Plans and recommendations of the Commission are published when necessary.

A. OFFICE OF THE DIRECTOR

1. General

The staff activities of the Commission are directed by professional urban planners. A Director and Deputy Director constitute the supervisory personnel

of the Director's office. The 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 program; and supervises, coordinates, and reviews the work of the staff. The office provides staff leadership and direction to insure that the professional program offers appropriate leadership to the community in urban planning and urban design.

Through the membership of the Commission itself, basic coordination is achieved with six Federal and District agencies having development programs in the District and the National Capital Region. These agencies are the District of Columbia Engineer Commissioner's Office, National Capital Transporation Agency, Public Buildings Service of the General Services Administration, National Park Service, Bureau of Public Roads, and Corps of Engineers of the U.S. Army. Other staff liaison and coordination is carried on through the official NCPC Coordinating Committee, the Commissioner's Committee on Community Renewal, the Urban Renewal Operations Committee, the Transportation Planning Board (on which the Director serves as one of three representatives of the District of Columbia), and many other specially constituted coordinating committee and special representations.

Special projects are undertaken by this office as they are assigned to the agency or liaison and assistance is requested. It is anticipated that these will increase in number as long as the present tempo of change and rebuilding continues in the District.

B. LEGAL AND ADMINISTRATIVE SERVICES

The Commission functions as an independent Federal agency and provides its own administrative and legal services.

1. Legal services, Commission secretariat

The Office of the General Counsel and Secretary performs seven basic activities for the Commission:

(*a*) Serves as official secretarist for the Commission and its several committees at their monthly meetings, preparing meeting notices, agendas, and forms of resolutions and other actions, and maintaining official meeting records.

(*b*) Provides legal services on matters of agency administrations, such as general administration, personnel, and procurement.

(*c*) Provides legal advice in the interpretation of the role and functions of the Commission and the Regional Planning Council under the several statutes extending authority and responsibility to these independent agencies.

(*d*) Provides legal advise to the Commission and staff on substantive questions involved in urban planning, urban renewal, etc., including advising on appropriate measures that may be developed to assist in the effectuation of comprehensive plans.

(*e*) Serves as legislative counsel in participating in review of proposed and pending legislation coming under the Commission's purview, in the preparation of congressional testimony, and in statutory drafting, including aiding upon request in special projects of the Executive Office of the President. During fiscal year 1965 the Office of the General Counsel, in conjunction with other specialists, prepared reports to congressional committees and the Bureau of the Budget, prepared testimony presented by the Chairman of the Commission, and drafted legislation involving 24 pending and proposed bills and joint resolutions.

(*f*) Provides legal and related services for the land acquisition programs of the Commission, including the procuring of title evidence, appraisals, and conveyancing and the preparation of materials for submission to the Department of Justice in condemnation proceedings. Acquisition programs include lands for the George Washington Memorial Parkway in Maryland and Virginia, the National Capital park, parkway, and playground system, and the John F. Kennedy Center for the Performing Arts, and Federal aid for stream valley parks in Maryland and Virginia.

(*g*) Provides legal advice on specialized matters pertaining to planning, to an increasing extent, at the request of the Executive Office of the President and several of the other executive branch agencies.

2. Administration

Since the Commission exists as an independent agency, all duties and functions required of a Federal agency are carried out by its own staff. Personnel is required to administer financial management, budget preparation and control, personnel, payroll, records and space management, property records and accountability, and general administrative routine. Most procurement is handled within the agency, with assistance from General Services Administration on major contracts. Messenger service and chauffeuring of the Chairman is also provided.

Consideration has been given to possible economies that would be obtained by contracting for administrative services with other agencies. It is presently believed that the agency is able to perform most of its functions more efficiently by having its own staff immediately available to process needed actions and subject to direct supervision. However, it was recognized that the art of maintaining payrolls by automatic data processing on a centralized basis has developed to the point where it is more economical and efficient to have this service performed by General Service Administration on a reimbursable basis. Accordingly, commencing July 1, 1965, General Services Administration is performing this service at a cost of $2,000 per year. We estimate that this is saving about one-third the man-hours of a clerk previously assigned to this detail and makes it possible to assign her to other essential functions of an administrative nature. Time and leave work records continue to be maintained by the Commission staff as is customary in this type of operation.

The staff of the Commission consists primarily of professionals in urban planning and related fields, without specific administrative background, and generally without background knowledge of Federal Government procedures, rules, and regulations. In order to insure maximum utilization of their special talents and time, all possible administrative activities are centralized.

In addition to the program and personnel authorized in the regular salary and expenses appropriation, administrative services are provided to special projects such as land acquisition programs, urban renewal project contract studies, the Pennsylvania Avenue Advisory Council and its special staff, and others that are assigned from time to time. At the beginning of fiscal year 1966, 67 permanent and temporary employees were on the staffs of the Commission, Regional Council, and Temporary Commission on Pennsylvania Avenue, with a high turnover customary of this type of agency expected during the year. For instances, during fiscal year 1965, 67 personnel actions were processed, exclusive of automatic periodic step increases. This amounted to a ratio of one personnel action for each person on the payroll. The authorized permanent staff for fiscal year 1966 is 67 including transfer funds employees, and approximately 15 temporaries.

The Assistant Director (Administration) is required to be an authority on and is assigned responsibility to carry out such Federal responsibilities as administrative officer, budget officer, finance officer, authorized certifying officer, personnel officer, procurement officer, property and supply officer, retirement officer, insurance officer, health benefits officer, and is designated as Agency Incentive Awards Administrator and Secretary of the Incentive Awards Committee. This responsibility includes keeping familiar with all of the changes of administrative regulations which affect independent agencies.

Additional staff is needed to insure proper personnel functioning within regulations and procedures, as represented by the new Federal Personnel Manual and because the agency employs personnel in a very specialized field, with characteristic rapid turnover in a shortage profession.

C. PLANNING DIVISIONS

1. Comprehensive Planning Division

The workload for this Division is divided between two main elements: (*a*) the Commission's responsibility for developing and maintaining the comprehensive plan for the National Capital, and (*b*) application of general plan concepts to current projects through the continuing referral process. During fiscal years 1964–66, priority has been given to the formulation of a 20-year plan as the current version of the comprehensive plan for the city. The final development and adoption, of the 1985 comprehensive plan for the National Capital, for which work was initiated in fiscal year 1962, is scheduled for June 1966.

(a) *Development of the comprehensive plan.*—The comprehensive plan is being formulated upon significant findings of a series of studies of subareas of the District and is responding to the potentials unique to each section of the District. During fiscal year 1963, special study emphasis was given to the older areas which have a high potential for improvement in character of development during the next two decades. This change is expected to result from private investment and intensive renewal by both public and private actions. These areas include the downtown business district and the older in-town residential sections immediately to the north and east of the downtown area. During fiscal year 1964, comprehensive analyses were made of the needs of the more outlying, and more stable, residential sections within the District. More recently, special surveys have been started of the capacity of the housing industry, and of industrial and commercial area needs and their future development consistent with planning principles and objectives.

An intensive program of study of neighborhood and community areas is continuing. Needs in facilities and services in such "systems" as schools, play spaces, libraries, fire and police stations, utilities, etc., are being determined. A major effort will be made to present problems that have been identified, and for which solutions are proposed, to neighborhood groups and districtwide civic organizations. A review process of plan proposals also will be followed with all District and Federal agencies concerned with physical development. This will be done at such a time as to permit review and analysis of suggestions received for possible incorporation into Commission-adopted plans.

Culmination of this process of formulating land-use objectives will take place in the form of a plan for recommended use of the land within the District, to be achieved by the year 1985. This will represent a major element of the comprehensive plan. As a statement of objectives to be achieved by the District by 1985, the plan will be an application and testing of the basic development policies proposed for the District and metrocenter in the year 2000 plan.

The 1985 comprehensive plan also will propose a 20-year development and improvement program for the District. The program will consist of proposals for basic renewal strategy (public and private), standards established for systems of public facilities throughout the city, and presentation of financial priorities to permit carrying out of the plan.

One of the key roles of this development program will be to serve as the basis for the orderly coordination of public works to be scheduled for the District of Columbia during the next two decades. As such, it will be initiating a process of long-range programing which will be continually subject to review and updating. Formulation of the initial 20-year development program objectives as they are to be incorporated in the plan also is scheduled for completion within 1965.

The process of comprehensive planning will not cease with the publication of this plan. It is intended at present to review and reformulate the comprehensive plan and development program every 5 years. This is the only way to reflect and gain advantage from the rapid changes that occur in our culture in such areas as technology, productivity, standards of living, and physical design.

By the end of fiscal year 1966, the current 20-year plan effort (with the 1985 plan for Washington as the principal end product) will have been a major objective for staff and Commission attention for a period of nearly 5 years. The process through which long-range objectives are formulated for the community should be a continuing one. It is the Commission's intent to up-date its 20-year plan for Washington every 5 years. Accordingly, a major assignment of the Comprehensive Planning Division during the 5-year period beginning with fiscal year 1967 will be that of contributing to the preparation of the 1990 plan for Washington as the next version scheduled. During the same period, the Division will also have the further assignment of translating 20-year plan objectives as necessary to serve as more immediate guides to the development of the city, for example as sets of objectives for the next 5 years, and even as a program to be achieved year by year.

Toward meeting these ends, two types of studies are to be given special emphasis during this 5-year period:

1. A series of area studies which, with the active collaboration of representative community groups, will be designed to produce relatively explicit 20- and 5-year plans in turn for each of Washington's subsections as designated for planning purposes.

2. A series of studies into long-term economic, demographic, and technological trends which will represent a reappraisal of the 40-year outlook for Washington in its metropolitan area context, and which should in fact serve as a contribution to an up-dated year 2000 plan—or plan for the year 2010.

These two series of studies should contribute also to any revision of the zoning ordinance for Washington which might be desirable during the next 5 years.

(*b*) *Application of the comprehensive plan.*—During fiscal year 1967, there will be an improved opportunity for applying general plan concepts to specific project proposals. However, the process of plan refinement and reformulation also will be established as a continuing activity.

(1) Initial application efforts foreseen at this time, following the adoption of the plan, during fiscal year 1967, will include:

(i) Preparation of a series of special-purpose reports on the plan, amplifying the objectives for the principal systems of public facilities and for other key-plan elements.

Among supporting systems and component studies, the highest priority should be given to the outlook for housing and basic transportation systems.

(ii) Continuing liaison with public agencies and with community organizations (A) to further the process of communicating plan objectives, and (B) to identify circumstances requiring the reconsideration of plan objectives during the process of plan refinement and reformulation. Considerable staff time during fiscal year 1967 will be required to achieve satisfactory results.

(iii) Major involvement in review of District and Federal agencies' capital improvement programs, and in the referral process generally, to assure that proposed improvements conform with comprehensive plan objectives as adopted, to a maximum extent.

(2) Continuing application efforts will relate the above work to a continuing process of updating official plans, in two directions particularly:

(i) Comprehensive plan concepts will be extended to a more refined detail: for example, toward the detailing of neighborhood plans, working with citizen groups, in order to translate plan objectives to the point of identifying specific private investment opportunities, important urban design opportunities, and needed replacement of public facilities and services area by area within the city. Special design studies should be started, with highest priority given to the following areas: (A) Capitol Hill, (B) the South Capital-Buzzard Point-Naval Weapons Plant area, and (C) Anacostia Park.

(ii) Toward renewed study of 40-year development prospects for the District and National Capital region as a continuation of work begun by the year 2000 policies plan.

2. District Planning Division

This Division carries out a major part of the Planning Commission's role as the planning agency for the District government, as set forth in the National Capital Planning Act of 1952. The District Division's major responsibilities and workloads are as follows:

(*a*) *One- and six-year public works programs.*—Section 7 of the Planning Act states that "the Commission shall recommend a six-year program of public works projects which it shall review annually with the agencies concerned. To this end each Federal agency and the Board of Commissioners of the District of Columbia shall submit to the Commission in the first quarter of each fiscal year a copy of its advance program of capital improvements within the National Capital and its environs." In the past this Division has only reviewed the program proposed by the Board of Commissioners. Preparation for the review by the Commission, of the public works program for the District of Columbia, requires the coordination of meetings between staffs of the District government and Planning Commission, preparation of illustrative maps, charts, and reports as well as review of past actions by the Commission. Meetings of the technical staff are held in order to compare the studies of the other divisions of the Commission with the public works program. Subsequently, a staff report with recommendations is made to the Commission, whose recommendations on the program then are forwarded to the Bureau of the Budget and the Commissioners of the District of Columbia for their consideration. In order that the Planning Commission reports may be of use to the District Commissioners in making up their budget, the Commission has for the past 2 years divided the program into two

parts. A review of the first-year of the program is made and recommendations sent to the District Commissioners prior to their submitting to the Bureau of the Budget a budget for the District of Columbia. A report and recommendations on the last 5 years of the program are made within a month or two and sent on to the District Commissioners and the Bureau of the Budget. In the review of the 1966–71 6-year public works program, for the District of Columbia, the Planning Commission reported and made recommendations on projects having a total value of $320,830,700. The report on the 1966 portion of the program involved projects having a total value of $73,897,100 of which $51,800,800 was finally approved by Congress in the 1966 appropriation.

During the past several years, the amount of time that has been required for an adequate review of this program has increased. With the completion of the 1985 comprehensive plan during fiscal year 1966, the Commission's role in public works programing will increase even more. Since the 1985 comprehensive plan will propose a 20-year development program for the District, the Commission will be in a position of being able to recommend and review annually the 6-year program of public works for the District. Carrying out this function of recommending and reviewing a program involving hundreds of projects, amounting to $60 million (average yearly program cost) will further the Commission's ability to serve, and discharge its responsibility, as the planning agency for the District.

(*b*) *Zoning and subdivision functions.*—(1) Section 8 of the Planning Act sets forth the functions of the Commission with respect to zoning and subdivision regulations in the District. Section 8(a) provides: "The Commission may make a report and recommendation to the Zoning Commission of the District of Columbia on proposed amendments of the zoning regulations and maps as to the relation or conformity of such amendments with the comprehensive plan of the District of Columbia. The Commission may also submit to the said Zoning Commission proposed amendments or general revisions to the zoning regulations or the zoning map for said District."

At the present time the Chief of the District Division is a member of a committee working on the revision of the subdivision regulations, this committee has met 10 times during the past 6 months and will be reporting its recommendation soon.

Section 8(b) provides: "When requested by a properly authorized representative of the Commission, the Zoning Commission may at its discretion recess for a reasonable period of time any public hearing held by it to consider a proposed amendment to the zoning regulations or map, in order that the Commission or its representative may have an opportunity to present to the Zoning Commission a further report on the proposed amendent."

Section 8 provides: "The functions vested in the Commission pursuant to this section may, to such extent as the Commission shall determine, and subject to conformation by the Commission when requested by the Zoning Commission of the District of Columbia, be performed by a committee of the Commission which shall be known as the Zoning Committee of the National Capital Planning Commission and shall consist of not less than three members of the Commission for the purpose. The number of members serving on the Zoning Committee may be varied from time to time."

It is through the District Division that the above responsibilities of the Commission are carried out. The Commission reports and recommends on all zoning matters referred to it, either as may be required by the zoning regulations for the District or at the request of the Zoning Commission.

During this past year the Commission has reported on 27 separate zoning items, 10 of these were required to be submitted to the Commission, 8 were requests from the Zoning Commission that the Planning Commission report to them its views prior to their taking action on map changes or amendments to the regulations, 3 of the 8 referrals this past year involved amendments to the regulations. One amendment to the District's Building Code was reported on at the request of the District Commissioners.

There are a number of items in the zoning regulations which require a report from the Planning Commission, either to the Zoning Commission or the Board of Zoning Adjustment, prior to action being taken. One of the most important referrals is under section 7501 of the zoning regulations pertaining to large-scale planned developments. This section of the regulations was initiated by the Planning Commission for the purpose of permitting and encouraging, with Zoning Commission approval and Planning Commission review, the building of well-planned, large-scale developments. These include residential, institutional, or

commercial uses, or combinations of these. They offer variety of building types or more attractive and efficient overall planning and design. The Commission staff must review carefully projects submitted under this section of the regulations. A recommendation that the Planning Commission give the project a favorable report may result in deviations from the use, height, density, area, and bulk provisions of the general zoning regulations. It is required to be stated that the plan is in keeping with the comprehensive plan and will not adversely affect the use of neighboring property. Under this regulation many fine developments have been planned and built in the District which otherwise would not have been possible.

Other examples of new zoning regulations which were originated by the Planning Commission and now have been adopted pertain to "arcades" and "exceptions to building lot control." Recently recommendations also have been made to the Zoning Commission pertaining to "heights of buildings" and "colleges and universities" in order to modernize these sections of the regulations to meet new problems.

With the completion of the 1985 comprehensive plan it is anticipated that many additional such recommendations will be made since zoning is the principal land development control available to assist in realizing the land-use proposals of the plan.

Each study requires meetings with those interested in the matter including architects, university representatives, builders, attorneys, citizens' organizations, and representatives of the District government. It requires writing or aiding in the writing of new regulations, reporting to the Planning Commission, and presenting the Commission's recommendations at public hearings.

(2) Other duties of the Commission in regard to zoning are set forth in the Zoning Enabling Act for the District of Columbia (act of June 20, 1938, 52 Stat. 797, District of Columbia Code, 1961 ed., secs. 5–413 to 5–428).

Section 5 of this act creates a Zoning Advisory Council, one member of which shall be a representative of the Planning Commission. The act states that "no amendment of any zoning regulation or map shall be adopted by the Zoning Commission unless and until such amendment be first submitted to said Zoning Advisory Council and the opinion or report of such Council thereon shall have been received by the Commission.

As a member of this Council representing the Commission, the Chief of the District Division participated in the review of 139 proposed amendments to the zoning maps and regulations. Each case requires an inspection visit to the site, writing, with other Council members, a report to the Zoning Commission, and attendance at the public hearing and at the executive meeting of the Zoning Commission, this year 14 executive sessions and 11 public hearings were held.

Section 8 of the act creates a Board of Zoning Adjustment, one member of which shall be a member of the Planning Commission or its staff, designated by the Commission and appointed by the Commissioners of the District of Columbia. The Chief of this Division represents the Commission on the Board. The Board holds hearings once a month on exceptions and variances to the zoning regulations. The Board over the past several years has heard on the average 45 to 50 appeals a month. During this past year the Board heard 476 appeals, at 13 public hearings. This number was an increase from the 462 appeals of the previous year. Appeals often require an inspection visit to the site. Every appeal involves a check against other programs of the Commission, attendance at public hearing, review of briefs submitted by applicants, and aiding in the writing of orders granting or denying each case.

The Division also represents the Commission on the District of Columbia-Maryland Zoning Advisory Committee, which reviews and reports on zoning changes in Maryland and the District of Columbia adjacent to the District line.

(c) *Additional functions of the Division.*—

(1) Street and alley closings: Section 1 of the act of December 15, 1932 (47 Stat. 747, District of Columbia Code, 1961 ed., sec. 7–401), provides that the Commission make recommendations to the District Commissioners on proposed street and alley closings. There were 34 such closing actions investigated and acted upon in fiscal year 1965.

(2) Changes in the District of Columbia highway plan: The act of March 2, 1893 (27 Stat. 532), as amended by the act of June 30, 1926 (44 Stat. 374), (District of Columbia Code, 1961 ed., sec. 7–109) requires Planning Commission approval of all changes in the "Permanent System of Highways Plan." Two such changes were processed in fiscal year 1965.

(3) Transfers of jurisdiction: In accordance with section 1 of the Act of

May 20, 1932 (47 Stat. 161, District of Columbia Code, 1961 ed., sec. 8–115), the Planning Commission approves all transfers of jurisdiction over properties within the District of Columbia owned by the United States among and between Federal and District authorities. There were 19 such transfers investigated and acted upon in fiscal year 1965.

(4) Sale of surplus land: Section 1 of the act of August 5, 1939 (53 Stat. 1211, District of Columbia Code, 1961 ed., sec. 9–301), requires Commission approval of all sales of District owned land which the District Commissioners and the National Capital Planning Commission find to be no longer required for public purposes.

(5) Coordinating committee: Section 2(d) of the Planning Act permits the establishment of a Coordinating Committee made up of representatives of a number of agencies of the Federal and District Governments. Such a committee has been established and it is through this committee, meeting twice monthly, that the District Division, as one of its duties, processes the above items listed as additional functions c.(1), (2), (3), and (4), prior to presenting them to the Planning Commission. This Division is also responsible for preparing the agenda, writing the minutes, and acting as Secretary to the Committee.

(6) The Division also serves as a specialist in advising the other planning divisions on matters of public works and zoning:

(*a*) It consults with the Federal Planning Division on in-lieu-of-zoning review of Federal public buildings, which are exempt from the zoning regulations of the District, but are made subject to the approval of the Commission as to location, height, bulk, number of stories, and size, and the provision for open space in and around such buildings, pursuant to section 16 of the act of June 20, 1938 (District of Columbia Code, 1961 ed., sec. 5–428).

(*b*) It provides information on location, size, cost, and year programed of public works to the Urban Renewal Division and the Community Renewal Program Section.

(7) An example of the type of special project that this Division undertakes is the recent study of a community shelter program for the District of Columbia. In this study the Commission was responsible for technical direction and coordination of the project. The Division Chief acted as study coordinator for the 6-month period that the work was being done, working with the consultants and the District of Columbia Civil Defense Office, and aiding in the preparation of the final plan.

The work of this Division is of a continuing nature, with the exception of special assignments, and can be expected to be similar in scope to the above. However, each year the number of applications to both the Board of Zoning Adjustments and the Zoning Commission requiring Planning Commission review have increased, as well as the number of special studies relating to zoning matters.

The increased number of requests from the Zoning Commission for reports on items not required to be submitted to the Planning Commission has made the attorneys and developers more aware of the Commission's role in these matters and has brought about many requests for meetings with the staff prior to amendments or map changes to be filed with the Zoning Commission.

There has also been an increase in the number of requests for information regarding planning in the District of Columbia which have been handled by this Division.

With the completion of the 1985 comprehensive plan, the work of programing and reviewing annually the 6-year public works program will demand a greater amount of continuing contact with an expanded number of District agencies on a day-to-day basis. At the present time the workload has increased because of the Commission's role in helping to select the sites of many District facilities, during this past year this Division made its final report to the Planning Commission on the recommended site for incinerator No. 5, after receiving 14 possible locations. At the present time review of sites for four projects are being made: (1) Northwest garage, (2) operating center for snow and ice control and open air storage for equipment, (3) police training facilities, and (4) Northwest Community Health Center. The completion of this plan will also increase the need for extensive review of the zoning maps and regulations in order to implement the plan.

Thus, it is anticipated that the workload of this Division will increase greatly as more effective planning is undertaken for the District.

3. Urban Renewal Planning Division

The principal activities of the Division in the past year (fiscal year 1965), and the projected activities in fiscal year 1966 and 1967 fall into four major categories: (*a*) activities of a project planning nature involving the preparation of urban renewal plans for officially designated urban renewal areas in the District of Columbia, supervised by the regular staff and carried out with separate staffs funded by special contracts; (*b*) activities involved in the review and study (and/or initiation and development) of proposals and recommendations for future possible urban renewal areas; (*c*) activities relating to the Commission's responsibilities under the District of Columbia Alley Dwelling Act of 1934 for the review and approval of the general location and boundaries and site plans of proposed low-rent public housing developments of the National Capital Housing Authority; and (*d*) activities in connection with proposed modifications to previously approved urban renewal plans.

(*a*) *Preparation of urban renewal plans.*—The Commission, in cooperation with the District of Columbia Redevelopment Land Agency, prepares urban renewal plans for the approval of the Board of Commissioners of the District of Columbia government and for execution by the Redevelopment Land Agency. The preparation of these plans is usually done by special staff personnel recruited by the Commission for this purpose with funds provided by RLA under the provisions of the District of Columbia Redevelopment Act of 1945, as amended, and title I of the Housing Act of 1949, as amended. This work is carried out under the direction and supervision of the Urban Renewal Planning Division.

Anacostia-Bolling: The Commission began detailed planning studies for this project under contract with the Redevelopment Land Agency during fiscal year 1965. The work is being undertaken by a special project planning staff, assisted by consultants on major technical problems. The planning budget calls for an estimated $120,000 to be expended during fiscal years 1966 and 1967. The funds will be provided by the Agency from a planning advance obtained from the Housing and Home Finance Agency. However, general supervision, and technical and administrative services, will be furnished by the permanent staff of the Commission from appropriated funds.

It is anticipated that an urban renewal plan for the development of those portions of the area which are excess to the needs of the Department of Defense will be adopted during fiscal year 1967. During project planning, the staff of the Division is required to work closely with the staff of the Federal planning divisions, the Comprehensive Planning Division, and planners for the Department of Defense who are responsible for the preparation of a master plan for the Bolling-Anacostia cantonment area. The Planning Commission gave preliminary approval to the master plan for the cantonment area in fiscal year 1965, and it is anticipated that the final plan will be approved during fiscal year 1966.

(*b*) *Proposed urban renewal activities.*—The regular staff of the Division is also responsible for reviewing proposals for possible future urban renewal projects, for undertaking urban renewal feasibility studies and, within the framework of the 1985 comprehensive plan and community renewal program studies, initiating and recommending specific urban renewal proposals for consideration by the Commission and the District Commissioners. Studies of this nature in the past have been initiated by the Commission or have been undertaken in response to requests by the Office of Urban Renewal of the District of Columbia, the Redevelopment Land Agency, or other groups or institutions.

The activities of the Division's staff in regard to future urban renewal activities or programs in the District of Columbia fall into two categories—the broader citywide study of renewal needs under the community renewal program study and several potential urban renewal project proposals that are under study at this time.

(1) Community renewal program: During fiscal year 1965, the Commission staff that is preparing portions of the community renewal program with funds supplied under an agreement with the District of Columbia government completed major portions of preliminary staff studies. These studies include the following: (*a*) identification and measurement of the scope and character of the need for renewal; (*b*) identification of appropriate renewal activities contemplated to meet the need for renewal; (*c*) determination of program requirements (fiscal and relocation) needed and available to renew such areas; and (*d*) scheduling the priorities of urban renewal action. These studies are continuing and are expected to be completed during fiscal year 1966. The Commission has contracted to receive a total of $160,000 for this work under the provisions of the agreement with the District government.

This work is being carried out in close coordination with the 1985 comprehensive plan studies of the Comprehensive Planning Division. It also is being coordinated with related CRP activities and studies of various District agencies, the Redevelopment Land Agency, the National Capital Housing Authority and private consultants especially in the areas of social planning, economic feasibility, and marketability—under the direction of the District's Office of Urban Renewal.

Supervision and technical direction of this activity is provided by the permanent staff. The work of the Commission staff will constitute a major technical contribution to the final recommendations to the District of Columbia government on a community renewal program for the Nation's Capital. Completion of these special studies is anticipated during fiscal year 1966. During the early part of fiscal year 1966 the Commission staff will assist in revisions and modifications of the CRP as a result of review by the Housing and Home Finance Agency and the District of Columbia government. Staff members also serve on a number of working committees of the community renewal program. After completion of the initial community renewal program, the permanent staff of the Urban Renewal Planning Division will participate with other agencies and the District of Columbia government in the annual review and revision of the CRP, as new data become available and implementation of its proposals proceeds, so that a current long-range program can be maintained in the future. This will constitute an addition to the workload of the Division, and will necessitate additional staff in fiscal year 1967.

(2) Special area studies: The Division staff has continuing responsibility for preliminary planning or eligibility studies in potential urban renewal areas in various parts of the District. Areas studied during fiscal year 1965, or for which such studies are anticipated during fiscal year 1966 or 1967, are as follows:

(*a*) *Howard University and near north area.*—The community renewal program has identified the near north area of the city, bounded generally by M Street, Florida Avenue, North Capital Street, and 16th Street, as an area of high priority for future urban renewal. This area contains a large percentage of the remaining substandard housing in the District of Columbia, and is seriously deficient in public facilities. Many of the needed public facilities have already been scheduled in the District's 6-year public works program, and would constitute noncash grants-in-aid toward the District's share of project expenditures for urban renewal. A similar opportunity exists in the Howard University area, where land already acquired or proposed to be acquired for university use would constitute noncash grants in aid under section 112 of the Housing Act of 1949, as amended. Initiation of project planning in this general area during fiscal year 1966 is contemplated, and would constitute a major staff responsibility during fiscal year 1967. A special staff, funded by the Redevelopment Land Agency from a planning advance provided by the Housing and Home Finance Agency, would be required. General supervision and coordination would be provided by the permanent staff of the Division.

(*b*) *Downtown renewal.*—With passage of the enabling legislation for downtown renewal early in fiscal year 1966, intensive planning was enabled to proceed. The staff has worked with the District government, the Redevelopment Land Agency, and the National Capital Downtown Committee (Downtown Progress) in a review of the "action plan" proposals of Downtown Progress and in preparing the documentation for an application for planning funds to be submitted to the Housing and Home Finance Agency by the Redevelopment Land Agency. It is anticipated that such application will be made in fiscal year 1966, and that planning studies to be conducted thereunder will constitute a major staff activity during fiscal year 1967. An especially important element of staff responsibility will be coordination of planning for downtown with the recommendations of the Temporary Commission on Pennsylvania Avenue, whose plans were developed subsequent to the proposals in the "action plan" prepared by Downtown Progress. It will also be necessary to provide in the downtown renewal plan for the additional Federal space needs projected by the 1985 comprehensive plan in a manner which integrates Federal uses with private activities and does not disrupt the functional linkages which are essential to a vigorous central commercial area. It is anticipated that a special staff will be required for the preparation of an urban renewal plan, funded by the Redevelopment Land Agency. General supervision and coordination will be provided by the permanent staff.

(*c*) *Low-rent public housing site development.*—In fiscal year 1965, the Division staff continued to work with the staff of the National Capital Housing

Authority and the District Office of Urban Renewal in the review of potential sites for low-rent public housing projects and in the preparation of development plans for approved sites. Development plans for 5 projects to contain 607 dwelling units were reviewed and approved. In addition, five individual dwellings at scattered locations in the Cardoza and Northeast code enforcement areas, to be rehabilitated by NCHA as part of an experimental program to utilize existing housing, were approved for acquisition. Three new projects proposals were reviewed, resulting in the approval of boundaries for one project, and referral back to NCHA for additional study of the extent of acquisition for the other two. Readily available sites for public housing in the District of Columbia have now been virtually exhausted. Program authorization exists for approximately 1,000 units of housing for which appropriate sites have not yet been selected, and further increments will be required to accommodate anticipated displacement from public works and urban renewal. The shortage of undeveloped land and the high cost of developed land even in presently deteriorated areas make it likely that future projects will be greater in number though smaller in scope than previous projects. The difficulty of site selection, the probability of an increase in the number of projects, and the care required to assure the successful physical integration of projects into the existing structure of the city, all indicate an expansion of the Division's workload in fiscal year 1967 and beyond.

(*d*) *Activities in connection with current urban renewal projects.*—The Division staff has a continuing responsibility and workload resulting from the consideration, review and study (and/or the development of) proposed modifications in previously adopted and approved urban renewal plans. Official urban renewal plans exist for each of the following areas of the District of Columbia: (*a*) Southwest B; (*b*) Southwest C; (*c*) Southwest C–1; (*d*) Northeast No. 1; (*e*) Northwest No. 1; and (*f*) Columbia Plaza.

Frequent proposals for plan modifications originate from the Redevelopment Land Agency, property owners in the area involved, potential redevelopers, the District of Columbia government, or from the Commission staff. Staff studies are involved in each case prior to presentation for the Commission's consideration of each such proposed modification.

(1) Southwest B, C, and C–1: During fiscal year 1965, the staff of the Division prepared a further modification to the urban renewal plan for Southwest Project C to revise the specifications for the Town Center shopping area and to provide an opportunity for the development of chanceries in certain specified areas of Southwest.

Revision of the Town Center specifications was occasioned by the selection of a new redeveloper to succeed the Webb & Knapp Corp., which had disposed of its interest in the area. The staff worked closely with the architect selected by the new redeveloper in developing the modifications, which will permit more intensive utilization of the land and enhance the appearance of the development through the provision of extensive underground parking facilities.

Further modification of the plan for Southwest Project C in fiscal year 1966 will be required to effect street adjustments in the vicinity of Federal Office Building No. 5, and to reflect the revised design of the center leg of the Inner Loop Freeway. In addition, the staff has undertaken an intensive review of the remaining undeveloped and uncommitted sites in Southwest to determine the feasibility of constructing additional Federal office buildings in the area.

Negotiations with the District of Columbia government and the District's decision not to expand the site of the Bowen School in Southwest Project C–1 have been concluded with a decision to submit a modified urban renewal plan to the Commission in fiscal year 1966, calling for park use of the area formerly designated for school expansion. This will necessitate acquisition of the land by the Planning Commission under the Capper-Cramton program.

(2) Northeast No. 1: At the request of the Redevelopment Land Agency, the staff prepared and recommended to the Commission in fiscal year 1965 a modification of the urban renewal plan for the Northeast Project No. 1 to make available additional sites for small redevelopers. The Commission elected to retain the existing plan, pending receipt of further justification for the changes, and directed the staff to undertake a reexamination of the development potential of the area in cooperation with the Redevelopment Land Agency. Additional study will be required as land disposition proceeds to determine whether the existing plan is adequately responsive to the present market for commercial and industrial land, or will require modification to permit optimum development within the controls intended to assure appropriate visual amenity in the vicinity of the Capitol.

(3) Northwest No. 1: Continuing staff study of the urban renewal plan for Northwest Project No. 1 in cooperation with the Redevelopment Land Agency and the District of Columbia government has identified a need for minor modifications relating to the development of specific parcels, and an amended plan will be submitted to the Commission in fiscal year 1966.

In addition, the proposed relocation of the Government Printing Office, instead of its expansion within the project as previously proposed, will necessitate a reexamination of the area around the present Government Printing Office to determine what, if any, modifications in the plan may be desirable or necessary. As land disposition proceeds, and proposals from redevelopers are received, it is anticipated that the need for additional modifications of the plan will become apparent during fiscal year 1967.

(4) Columbia Plaza: Development is underway on the 8.4 acre residential portion of the project, and highway construction on the remaining 5.6 acres is well advanced.

(5) Adams-Morgan: Following analysis of the resurvey of building conditions in the Adams-Morgan project area, the District Commissioners on December 16, 1964, referred the urban renewal plan adopted on January 10, 1963, back to the Planning Commission with recommendations for changes in the boundaries and other provisions. During fiscal year 1965, the staff engaged in an intensive restudy of the area in cooperation with the District of Columbia Government, the Redevelopment Land Agency and the regional office staff of the Urban Renewal Administration, in an effort to resolve the objections which had been raised to the previous plan. In February 1965, the Planning Commission voted to terminate further project planning in the Adams-Morgan area. Subsequently, at the direction of the Commission, the staff undertook a variey of studies to explore ways of improving housing conditions and public facilities in the area without urban renewal. As a result of these studies, the Commission allocated funds in June 1965 for the expansion of the Happy Hollow Playground as previously proposed in the urban renewal plan.

4. Federal Planning Division

This division carries out a major portion of the Commission's responsibilities in regard to projects and developments of the various executive departments and independent agencies in the National Capital region under the National Capital Planning Act of 1952.

The Division is responsible for (*a*) the review and approval of land acquisition proposals and development plans and programs by the various Federal agencies within the National Capital region; (*b*) review and recommendations on fiscal year and 5-year program proposals by the various Federal agencies under the Bureau of the Budget Circular A–11; (*c*) the initiation and completion of an inventory and recommendations for use of Federal installations and facilities in the National Capital region; (*d*) review and approval of overall master plans for Federal facilities in the region where there is a complex of buildings and other improvements that comprise a single or shared facility; (*e*) the review of sites for memorials and monuments; (*f*) review and recommendations on proposed extensions to the National Capital park, parkway, and playground system; (*g*) review and recommendations on the Stream Valley Park program in Maryland and Virginia within the National Capital region; and (h) participation with the Comprehensive Planning Division in the development of the 1985 comprehensive plan.

The major portion of the Commission's responsibility for maintaining a close liaison relationship with a number of Federal agencies is carried out by the staff of the Federal Planning Division. A great deal of staff time is spent as advisers and consultants at meetings with each of these agencies. In the past few years, this activity has grown steadily, as more and more agencies comply with the requirements of the National Capital Planning Act of 1952 and Bureau of the Budget Circular No. A–11, "Instructions for the Preparation and Submission of Annual Budget Estimates."

The Planning Act also requires each Federal agency, prior to the preparation of construction plans for proposed projects or commitments for the acquisition of land, to advise and consult with the Commission in preliminary and successive stages of their planning in order to assure the orderly development of the National Capital. The amount of activity in this sector has grown steadily and is expected to increase with the strengthening of the planning process and the necessary adjustments and expansions of the Federal Government's physical plant in the region.

(a) *Current Federal Land Acquisition Development Plans and Programs.*—The Commission reviews fiscal year budget proposals, general location proposals for Federal buildings and facilities, preliminary and final site and building plans, monuments and memorials, National Capital park, parkway, and playground plans, and Stream Valley Park plans and programs.

(1) Review of fiscal year construction program proposals: Section 7 of the Bureau of the Budget Circular No. A–11, "Instructions for the Preparation and Submission of Annual Budget Estimates," requires that "estimates for construction of public works in the National Capital area will be submitted (to the Bureau of the Budget) only after the agency has consulted with the National Capital Planning Commission in the preparation of plans and programs."

The Division is responsible for the staff review of the annual fiscal year budget proposals for Federal capital improvements within the National Capital region. In carrying out this work, liaison is necessary with each Federal agency, as well as with the Bureau of the Budget, to which the Commission reports on these matters. Master plans of each agency's installation are reviewed as a basis for the Commission's recommendations thereon.

(2) Review of the general location of proposed Federal buildings and facilities: The Division is responsible for reviewing proposals for the location of Federal buildings and facilities and making recommendations thereon to the Commission. This involves a considerable amount of liaison with the particular Federal agency or department seeking an appropriate site in addition to the time required for the necessary site and location studies. Recent illustrations of this function are the site studies for the Labor Department's headquarter's building, the International Center, and the Government Printing Office. The Commission is currently involved in studies seeking an appropriate site for an agency requiring over 1 million square feet of total floor area.

(3) Review of preliminary and final site building plans.

(4) Review of monuments and memorials: The Division also is responsible for reviewing proposals for the location and design of new memorials and monuments in the National Capital region and making recommendations thereon to the Commission.

(5) Review of the National Capital park, parkway, and playground system: The act of May 29, 1930 (43 Stat. 482), as amended (the "Capper-Cramton Act"), authorizes the appropriation of funds to the Commission for the acquisition of lands in Maryland and Virginia for the George Washington Memorial Parkway and in the District of Columbia for parks, parkways, and playgrounds.

The Division, in cooperation with the Office of the General Counsel, is responsible for planning and related activities for these programs. This work is done in coordination with the National Park Service, the District of Columbia Recreation Board, and planning agencies and local governing bodies in Maryland and Virginia.

(6) Review of stream valley park plans and programs: Under the Capper-Cramton Act, the Commission administers a program of matching grants to the suburban jurisdictions within the National Capital region for the acquisition by these jurisdictions of stream valley park lands.

The division, in conjunction with the Office of the Great Counsel, is responsible for planning and related activities for this program. This work is done in done in coordination with the park authorities and governing bodies of the local jurisdictions.

(*b*) *Long-range Federal land acquisition and development plans and programs.*—The Commission reviews 5-year construction programs and master plans for the various Federal facilities and installations in the National Capital region. It also undertakes, as resources permit, to survey and evaluate the long-range plans and programs of individual agencies and departments for the various federally-owned sites in the National Capital region.

(1) Review of 5-year Federal public improvement programs: Under the provision of section 7 of the National Capital Planning Act of 1952, as amended, each Federal agency "shall submit to the Commission in the first quarter of each fiscal year a copy of its advance program of capital improvements within the National Capital and its environs."

In fiscal year 1965, no 5-year public works programs were submitted for the review and approval of the Commission. However, it is anticipated that a number of 5-year military construction programs will be submitted to the Commission in fiscal year 1966 under the provisions of Department of Defense instructions, No. 5030.32, dated February 10, 1965. It is hoped that—with the cooperation of the Bureau of the Budget—all of the appropriate Federal civilian agencies and departments within the executive branch of the Government will also sub-

mit 5-year programs for Commission review and approval under section 7 of the National Capital Planning Act of 1952.

In its review of proposed 5-year programs, the Commission relates each one to the particular Federal installation affected and the master plan for that particular site. This is to insure the consistency of the programs that are intended to implement the overall master plan for that installation.

Section 7 of the National Capital Planning Act also provides that "The Commission shall recommend a 6-year program of public works projects which it shall review annually with the agencies concerned." The Commission has, to date, been unable to implement this provision of the act due to the fact that 5-year programing is not an established process in all of the agencies affected by this act. However, it remains an objective which the Commission intends to move forward as soon as possible.

(2) Review of master plans: For Federal installations having a complex of individual buildings, the Commission's review of proposed individual building projects under section 4 of the National Capital Planning Act of 1952 is made within the framework of an overall master plan for each particular facility. This is done in order to insure the conformance and compatibility of individual projects with existing and proposed developments in the facility as a whole.

(*a*) Number of Federal installations in National Capital region: There are a total of 50 major Federal employment sites in the National Capital region—exclusive of individual Federal office buildings in the Mall area. Of these, 28 sites (and part of 3 others) are under military jurisdiction. The remaining 19 sites (and part of 3 others) are civilian installations.

(*b*) Current status of master planning: As of the end of fiscal year 1965, the Commission has approved 16 master plans. In addition, master plans for 16 other sites were being prepared for submission to the National Capital Planning Commission in either fiscal year 1966 or 1967 by the several responsible Federal agencies. A total of 18 Federal installations in the National Capital region did not, as yet, have master plans that were approved by the Commission.

(*c*) Department of Defense instructions on master plans: On February 10, 1965, the Department of Defense issued instruction 5030.32, "Planning Procedures for Construction Projects in the National Capital Region." Of special significance is the fact that, among other things, these indicated that "over the next 2 years from the date of this instruction, master plans will be completed and furnished to the National Capital Planning Commission for review and comments, and will be modified to the extent practicable to meet NCPC recommendations."

There are 28 military installations and facilities and parts of 3 other sites that are subject to these instructions within the region. Of this total, 8 have master plans that have been approved. Eleven are now being prepared for submission to the Commission. Master plans for nine sites and parts of three others have yet to be submitted to the Commission for review and approval. By February 1967, the Commission therefore can expect to receive approximately 23 separate master plans for review and approval under the instructions.

(*d*) Master plan objectives: It is the Commission's objective to have an approved master plan for each Federal facility and installation within the National Capital region as soon as possible. The recent action by the Department of Defense will do much to make this goal a reality.

No such incentive now exists to insure the submission of master plans to the Commission by the several civilian agencies and departments within the executive branch. This is a situation which the Commission wishes to rectify as soon as personnel resources permit.

(*e*) Fiscal year 1967 activities of the Commission: The Commission reviews proposed general development concepts (which serve to guide agencies in their master planning), preliminary master plans and final master plans.

(3) Inventory and recommendations for use of Federal installations and facilities: In response to a request from the Bureau of the Budget and, as a part of the Commission's continuing master planning studies, the Division is reviewing existing Federal land holdings in the District of Columbia and in Virginia and Maryland within the National Capital region.

a. Federal inventory study.—The purpose of these studies is to analyse and evaluate the current use of these sites as well as their potential future use and/or reuse for Federal needs. These studies relate to the current long-range 1985 Comprehensive Plan studies of the Commission and the development of such a plan for the Federal Establishment within the National Capital region. The Federal inventory study is to be undertaken in two phases. Phase I, the

actual "inventory" phase, involves the assembly of all available data and information on the existing characteristics and conditions at each site. Phase II, the "evaluation," involves: (1) a review and analysis of the current plans and programs for the future use and development of each individual facility or installation by the agency having jurisdiction of the site; (2) an evaluation of such plans to overall plans for the Federal Establishment in the National Capital region; (3) recommendations on the continued Federal use, expansion or abandonment of all or a portion of an individual site; and (4) recommendations on the employment ceiling and/or development standards that should be established to insure the proper future utilization of the site by the Federal Government.

The findings and conclusions resulting from the Federal inventory study will be used by the National Capital Planning Commission and the Bureau of the Budget in the future review of land acquisition and public improvement program proposals by the various agencies and departments of the executive branch of the Federal Government. More specifically, the Federal inventory survey will be used as background information by the Commission in its subsequent review of: (1) master plans and proposed modifications thereto; (2) individual site and building plans; (3) 5-year public improvement program proposals and fiscal year budget proposals.

The Federal inventory study will permit the Commission to more effectively carry out its duties and responsibilities under the National Capital Planning Act of 1952, as amended, and Bureau of the Budget Circular No. A–11.

In contrast with the master plan which shows the ultimate stage of development on a given federally owned site, the inventory study will have the following characteristics: (1) it will describe and evaluate existing land uses, buildings and facilities on the site (phase I), (2) it will change from year to year as fiscal year development plans and programs are carried out, (3) it will indicate the past growth and development of the site (number of employees, etc.) in relationship to both the current status and to projected totals in the master plan, (4) it will provide a basis for the further review and evaluation of the current use of the site and/or the appropriateness and effectiveness of current master plans (phase II).

(*b*) *Current status of Federal inventory study.*—Inventory studies (phase 8 only) have been initiated at 20 separate Federal installations within the National Capital region by the Commission since 1959. There are a total of 50 Federal employment sites in the region that come under the Commission's responsibilities under the National Capital Planning Act of 1952, as amended. As indicated below, five additional studies were initiated by the Commission in fiscal year 1965. Studies on the remaining 25 installations have yet to be initiated by the Commission.

(*c*) *Schedule for completion of initial Federal study.*—The Federal inventory studies have, to date, been conducted by the Commission staff as resources permitted—using regular staff whenever possible, but largely depending on summer interns to carry out much of the data collection and descriptive work.

A major effort by the Commission is required to be responsive to the Bureau's request and to meet its own needs in order to provide the basis for a long-range plan and program for the Federal Establishment in the National Capital region. The studies initiated to date on 25 sites need to be completed and the study needs to be initiated and completed on the other 25 sites.

The Commission proposes to complete the inventory studies on all 50 federally-owned sites in the National Capital region within 2 years—fiscal year 1967 and 1968. This program would include the completion of all data collection and analysis, as well as staff evaluation and recommendations on the long-range Federal interest and use of each site.

Based upon recent experience, it is anticipated that it would take an additional staff of three full-time and one to two half-time persons to undertake and complete these studies—at an average of 2 reports per month. This would require a minimum of $36,000 over the fiscal year 1967–68 period.

(*d*) *Activities of the Commission in fiscal year 1965.*—The Commission initiated five inventory studies during fiscal year 1965, as follows:

(*a*) Fort Myer (Arlington, Va.), Department of the Army;

(*b*) Goddard Space Flight Center (Greenbelt, Md.), National Aeronautics and Space Administration;

(*c*) National Institutes of Health (Bethesda, Md.), Department of Health, Education, and Welfare;

(*d*) Naval Security Station (Washington, D.C.), Department of the Navy; and

(*e*) The Suitland Federal Employment Center (General Services Administration, Department of the Army, and the Smithsonian Institution).

(*e*) *Special studies of selected federally owned sites.*—As a part of its Federal inventory studies, the Commission, in cooperation with the General Services Administration (Public Buildings Service), has initiated a series of staff studies of five key federally owned sites in the National Capital region where significant changes in the current use of these sites is anticipated in the near future.

These studies by the Federal Planning Division are being carried out in conjunction with the technical services group. The overall objective of those studies is to develop, in conjunction with the Bureau of the Budget and the General Services Administration, a land-use policy, an illustrative master plan and sepcific development standards for each site studied.

The current status of these studies are as follows:

(1) Old Bureau of Standards site (Connecticut Avenue and Van Ness Street NW.): The Commission initiated planning studies on this in fiscal year 1964 and continued them in fiscal year 1965. Several preliminary alternative reuse studies were developed as a basis for discussion. Recently the Commission and the General Services Administration have agreed to jointly finance a more detailed planning and design study to be undertaken by a private consultant. It is anticipated that a master plan for the future use of this site will be completed for Commission review and approval by the end of fiscal year 1966.

(2) Old Mount Alto Hospital site (Wisconsin Avenue and Calvert Street NW.): In fiscal year 1965, the Commission initiated a study of this site. The Veterans' Administration abandoned this site during the summer when the hospital moved to its new building near the Washington Hospital Center. Several preliminary alternative reuse studies were undertaken as a basis for evaluating the most appropriate future reuse of this site.

On June 10, 1965, the Commission approved a motion recommending that the site should be: (1) retained in public ownership; (2) studied for eventual future use for either park or recreation uses or an appropriate moderate-intensity Federal use; and (3) subject the site to certain specific development standards.

The necessary more detailed planning and design studies of this site have not as yet been initiated by the Commission due to the increasing workload in the Division caused by other Federal planning projects submitted to the Commission.

(3) National Training School for Boys site (New York and South Dakota Avenues NE.): In fiscal year 1965, the Commission undertook preliminary planning and design studies to assist in evaluating the reuse potential of this site once it has been abandoned by the Department of Justice. In June of 1965, the Commission approved the proposed location of the new Government Printing Office on the easterly portion of this site. This site was more specifically delineated in August as 85 acres abutting New York Avenue. In August 1965, the Commission also adopted a policy recommendation that the remainder of this site be used for residential and supporting facilities.

Further planning and design studies are required to determine the most appropriate plans for the proposed use on this site and the methods for implementing these plans.

(4) Old Naval Weapons Plant (M Street between 1st and 11th Streets SE.): A preliminary plan for this entire area was completed by the Commission in fiscal year 1964. It has been the basis for subsequent discussions about the future use of this area between the Commission, the General Services Administration (who has jurisdiction west of Isaac Hull Avenue) and the Department of the Navy (who has jurisdiction over the area east of Isaac Hull Avenue—an area now known as the Washington Navy Yard).

With the objective of preparing more definitive plans and programs for the future use of the entire area, both the General Services Administration and the Department of the Navy have—under separate contracts—employed the same consultant to aid them in the preparation of a master plan for both areas. It is anticipated that these studies will be completed and Commission review and approval will be scheduled by early fiscal year 1967.

A total Federal employment potential of 30,000 to 35,000 is anticipated in this area.

(5) Suitland Employment Center (Suitland, Md.): In November 1964, the Commission approved certain "General development concepts" as a guide to the staff in the preparation of a preliminary development plan for this site. The

Commission was unable to continue these studies and complete them in fiscal year 1965, as scheduled, due to the increasing workload of other Federal projects submitted to the Commission during this period.

(*h*) *Participation in the preparation of the 1985 comprehensive plan.*—The Division, in conjunction with the Comprehensive Planning Division, is in the process of developing long-range proposals for the Federal Establishment in the National Capital region—within the concepts of the "Year 2000 policies plan" as a part of the Commission's 1985 comprehensive plan for the National Capital.

D. TECHNICAL SERVICE GROUP

1. General concept

Technical services of a small variety of special skills are provided to supplement basic urban planning skills on the professional staff. Personnel in this group are highly qualified in their own fields.

These additional skills are required because of the fast pace of change in our present urban culture and the corresponding development of specialization in the study and analysis of urban problems. Three such areas of skill are included at the present time: traffic engineering, urban design, and analysis of economic and social problems.

Four basic functions are carried out by this personnel: (1) They advise the Director with respect to new developments in their own fields and recommend programs and approaches toward carrying out the Commission's responsibility; (2) they consult with the four planning divisions as appropriate to the latters' programs, in the role of staff consultants; (3) they undertake or direct special studies within their own areas of special competence; and (4) they maintain liaison between the Commission and related activities of other agencies and private organizations in the subject area of their specialities.

2. Traffic engineering and transportation planning

The Traffic Engineer is responsible for advising on the transportation system proposals of the comprehensive plan and works closely with the Comprehensive Planning Division in its development. Responsibility for review of transportation aspects of all Federal, District of Columbia, and urban renewal projects ise carried out for those respective divisions. Continuing representation and liaison on behalf of the Commission is maintained with District and regional transportation agencies and with transportation demonstration projects currently underway. Research and development of transportation in other localities are observed for possible inclusion in planning for the Washington metropolitan area.

In fiscal year 1965, the preliminary transportation plan and proposals were completed for the 1985 comprehensive plan for the District of Columbia. Included were proposals or arterial and freeway highway systems, parking policies, and local and rapid transit systems. Review and analysis was performed for project proposals of the District of Columbia Department of Highways and Traffic highway program and the National Capital Transportation Agency transit development program, 1965. Highway projects reviewed and approved included the center leg of the Inner Loop, replacement of the old 14th Street Bridge, Interchange C of the Inner Loop and Pennsylvania Avenue SE., special street study. Access studies of Federal installations continued to be an important function with special studies being made for the National Institutes of Health, Government Printing Office and the Anacostia-Bolling complex.

In fiscal year 1966, the transportation plan and thoroughfare plan for the District of Columbia are scheduled to be completed. Development of plans for specific alignments for major portions of the District freeway system should be substantially completed and ready for review and action by the Commission.

Of particular importance will be coordination with the National Capital Transportation Agency and the urban design section of the authorized transit development program which will be undergoing detailed design during fiscal year 1966 and the years following.

The comprehensive regional transportation planning process for the metropolitan area required by the 1962 Federal Aid Highway Act has been officially organized and the Traffic Engineer will be called upon to render technical assistance and guidance as the operation gets underway.

Technical review of transportation aspects of all master plans for Federal installations submitted for Commission action will continue as these plans are studied by the Federal Planning Division.

Liaison will be maintained and statistical material drawn from the District of Columbia Department of Highways and Traffic, National Capital Transpor-

tation Agency, Washington Metropolitan Area Transit Commission, Bureau of Public Roads, State and local highway departments and the continuing cooperative transportation planning process as it becomes operative.

In fiscal year 1967, work will progress on refinement of the District's thoroughfare plan through special street and capital improvement programs. Special emphasis will be given to parking programs, especially residential neighborhood parking problems and development of alternatives through fringe parking and the rapid transit system. Coordination of design of the rapid transit system with other transportation systems will move into a high level of activity as will technical work of the transportation planning process. Traffic access studies of Federal employment centers will continue as needed by the Federal Planning Division.

Review of highway project designs and liaison with local and regional transportation agencies will continue at a high level of activity.

3. Urban design

The urban designers and architects work in conjunction with all divisions to develop the functional and three-dimensional aspects of all plans and proposals. In this capacity, they are responsible for clarifying esthetic objectives and principles for the National Capital as planning proposals evolve. Such objectives and principles are expressed in verbal and graphic terms and further developed in preliminary design studies for urban renewal areas, Federal and District projects, parks, streets, and other public facilities which come under the aegis of the Commission.

This special staff also makes recommendations on comprehensive planning, feasibility studies, and other projects which come before the Commission in its referral and review process. They are specifically charged with certain projects where design considerations are predominant. The most important current projects are the comprehensive design studies for the 1985 comprehensive plan; skyline studies, area site-design studies in connection with general plans, such as the downtown progress proposals; study of esthetic considerations involved in development of freeways and special streets; and prototype feasibility studies for the landmark preservation program. The Pennsylvania Avenue Advisory Council recommendations also require further analysis to insure that major elements conform to the comprehensive plan.

The workload for this personnel has increased considerably in the past year and is expected to continue to expand. This is brought about by the exceptionally high volume of building activity, public and private, that is taking place in the District of Columbia; the significance attached to visual and esthetic elements of the National Capital City; and increased awareness of the general public of the importance of the appearance of cities.

In recent years, special contributions have been made to the design and layout of such additional projects as the John F. Kennedy Center for the Performing Arts, Air and Space Museum, FOB No. 5, HHFA Office Building, and other buildings included in current GSA programs, Federal employment sites and master plans (i.e., Naval Weapons Plant), military installation plans, and urban renewal and public housing projects, and article 7501 referrals of the zoning regulations.

Special streets studies have been completed for Virginia Avenue NW., the treatment of the streetcar ramps on Connecticut Avenue on either side of Dupont Circle, and Pennsylvania Avenue SE. (from the Capitol to the Anacostia River).

In fiscal year 1966, work continues on application of 1985 plan proposals to specific projects, such as special streets and other physical elements of the transportation system; skyline and urban design plans; coordination of the landmarks program with other visual elements of the city; and analysis of major projects referred to the Commission for review.

In addition to the above work, design studies that need to be undertaken fall into two general classifications:

(*a*) *Analytical design.*—These studies are undertaken to develop data, define relationships, isolate problems, describe design potentials, and extend our general knowledge of the city. These studies, mainly citywide in scope, are not meant to produce design solutions per se, but the results most surely will stimulate "generative" or "initiative" studies and can be immediately applied in the "problem solving" opportunities discussed below. The work currently under contract with Wallace-McHarg Associates concerning the "Comprehensive landscape plan for Washington" is an example of an analytical study.

(*b*) *Generative design.*—These studies assume the initiative in seeking new design opportunities and solutions. They may derive from other work of the

Commission (such as the International Center concept which grew out of the chancery location question), develop in response to problems only vaguely identifiable at the outset (Tuckerman Hous landmark study), or occur solely as a test of an idea (perhaps Gruen's Anacostia uptown center study is an example). Still other efforts should be made simply because the design process and its products are necessary and desirable techniques for handling major elements of the city. A good example of this is the Commission's special streets idea. New urban renewal projects also fall within this category.

Appropriate generative study products should be launched into the community for comment and suggestion. These should be evaluated, the solution reworked and resubmitted to the community for a second review and then appropriate action taken by the Commission.

This staff also is responsible for design direction of exhibits and publications to communicate the work of the Planning Commission to other official agencies and the public. If the recommendations and work of the Commission are to be considered seriously, a much more ambitious effort at such communication is required.

4. Economic and social analysis

This unit contributes to a broad range of activities of the Commission. It is a matter of particular concern that proposals originating from the Commission, or subject to review by it, are tested to ascertain their probable economic and social implications and effects. Also there is need to adapt new techniques of data collection and analysis to the requirements of the Commission's programs.

Initial concentration has been placed on indentifying the economic and social data required for the 1985 comprehensive plan and assisting in the programing for and coordination of the research studies of the community renewal program. Also initial coordination is being developed with the United Planning Organization's general program and the war on poverty program in the District. A review of a study of social problems that would be involved in a proposal for relocation for a major freeway development has been completed.

The following activities are necessary in order to develop economic and social data and insights which will assist in improving program recommendations and decisions.

(*a*) Continuous population estimation and analysis, both for physical planning and on related population needs and problems on a District-wide, planning district, and smaller area basis to meet needs of school, recreation, and special facility programing in particular.

(*b*) Continuous housing market analysis with particular reference to needs of special population groups, i.e., aging, low income, minority, etc.

(*c*) Continuous analysis of private market for nonresidential land uses (e.g., office, commercial, industrial, etc.).

(*d*) Special studies on economic and social impact of planning proposals. A particular example is a study of the influence of land values on changing land use and its restraint on public development decisions, as well as its influence on private market operations affecting, among other things, the displacements of low-income families and provision of middle-income housing. The advent of the subway system and its resultant effects on land values and development is another important example.

(*e*) Coordination of and liaison with special studies undertaken by contract by the Commission or other cooperating agencies, when specialized skills and experience are needed.

(*f*) Maintenance of a research file on the District of Columbia to capture, screen, and make available materials developed by a variety of other sources but transitory in character.

(*g*) Development of basic data on existing land use, structural conditions, assesed value, etc., in form for planning analyses. Collection and review of other data (i.e., building construction activity, retail and wholesale activity, tourism, etc.).

(*h*) Coordination with and use of data from research activities and studies of other public agencies as well as private organizations working in urban research.

When resources are available, it is intended to develop a reporting system on economic and social conditions and changes in the District as they affect the carrying out of the comprehensive plan, and Federal interests in the region. This data also will be provided to other Government agencies and interested

parties in the community as a service function, and will provide the basis for a continuing feedback of information to the Commission on the impact of its comprehensive plan proposals.

Due to staff limitations only a small beginning has been made in developing an adequate research program in these areas. Nevertheless, initial investigation has been undertaken as indicated by the following significant studies:

1. Staff study of housing needs and the housing market.
2. Staff study to develop a population and housing data matrix.
3. Staff study for "Bibliographic Report No. 1 Bibliography of Planning and Related Studies in the Social Sciences for District of Columbia and Its Larger Contiguous Regions."
4. Staff study on data trends for "Indices of Current Growth and Change, Data Report No. 3."
5. Prestudy and staff work for DC–OCD consultant's contract to update selected 1960 census of population data for District of Columbia.
6. Prestudy and staff work for DC–OCD consultant's contract to obtain tourist and visitor data for District of Columbia.
7. Prestudy and staff work for DC–OCD consultant's contract to make employment estimates for District of Columbia.
8. Prestudy and staff work for DC–OCD consultant's contracts to obtain and process land-use data from the District of Columbia data bank.
9. Prestudy and staff work for DC–OCD consultant's project to analyze land use characteristics of CD shelter properties.
10. Staff work for DC–OCD main shelter plan study.
11. Staff work for NCPC consultant's contract to develop a mathematical housing model for District of Columbia.
12. Staff work for NCPC consultant's contract for a study of commercial and office uses in District of Columbia.
13. Staff study to abstract, graph, and compare population and economic forecasts previously made for the Washington area.
14. Staff work for NCPC consultant's contract to study the social impact of the north leg of the inner loop expressway.
15. Prestudy and staff work for NCPC consultant's contract to evaluate commercial land uses in the preliminary 1985 comprehensive plan.
16. Prestudy and staff work for NCPC consultant's contract to study commercial land use relocation problems of small firms.
17. Prestudy for NCPC consultant's contract to study economic feasibility and prospective economic impacts of the Pennsylvania Avenue plan.
18. Prestudy for NCPC consultant's study of economic aspects of the eastern food market.

It obviously will be impossible to do a satisfactory job on the desired program without a substantial increase of staff available. With the additional personnel requested major emphasis will be given to two broad investigations:

(*a*) Housing program research, related to housing supply, changing population characteristics, and land and housing costs, with emphasis on contributing directly to current programs for dealing with the serious housing situation in the District.

(*b*) Development of a system of fiscal analyses of capital outlays of both the District and Federal Governments within the city, to support the review function of the Commission. This activity is very timely because of the very large public expenditures anticipated in future years to provide community facilities and other public works.

E. COMMUNITY RELATIONS AND STAFF LIBRARY

1. Community relations and reports

Replies to requests for information about the work of the Commission from the news media, neighborhood and citywide civic groups, interested citizens, visiting foreigners interested in city growth and planning, and in response to written requests from citizens of the region and across the country are coordinated by the special assistant for community relations. Numerous presentations and speeches are arranged for members of the Commission and the staff to describe the planning problems and proposals of the agency. Assistance in developing background material and contacting knowledgeable persons is given to writers and producers representing significant national news media seeking information about Washington. Informational and educational programs interpreting all aspects of the planning program at all levels of interest in the community through publications, exhibits, tours, etc.

The Commission is responsible for communicating its plans, recommendations, and program to the public and the community. This requires that there be effective writing and editing of planning reports and documents. There is sufficient demand for this work to indicate savings in having a qualified staff person available full time. Such activity also would contribute to the work of the planning divisions and would be coordinated with community relations work.

Writing talent will be needed particularly for interpretive writing about the comprehensive plan for the year 1985, preparation of supporting documents, development of reports of planning progress within the District and the National Capital region, and to assist with special projects.

2. Professional staff library

A small and selective library is maintained to obtain new planning texts, plans issued for other cities and regions, and periodicals of the planning and urban development field. It enables staff professionals to have available immediately reference materials on an efficient and economical basis, and to obtain data required for solving problems with a minimum loss of time. Care is exercised to control accessions to those appropriate for a small, highly specialized agency collection.

F. SPECIAL PROGRAMS AND USE OF EXPERTS

The nature of urban growth and change, the rapidity with which change is occurring in Washington, and indeed the whole National Capital region, and the need to cope with special problems by special efforts leads to the need for selected special programs from time to time and the need to utilize specialized insights and experiences in these programs. The Commission utilizes the services of experts on a daily basis or through contract studies when this is to the economy and convenience of the Government. A provision to continue such work in fiscal year 1966 is included in the budget request.

1. Landmarks program

Much concern has been expressed in the past over the loss of many of Washington's most famous and cherished landmarks—buildings and areas. Many of these were important as historic references to the beginning of our country while others represented great achievements in esthetics and architecture. Many people and organizations have lamented the change in the appearances and charm of sections in Washington that have been transformed by not-so-significant new construction.

It is recognized that growth in the National Capital and needed changes, will continue to threaten old landmarks, and in some cases claim them. However, it also is apparent that, (*a*) plans for public and private development should take into consideration the existence of landmarks and make every effort to avoid or spare them, (*b*) it is important to have an authenticated, official list of those structures and spaces which are significant as landmarks for the information of all concerned, (*c*) oftentimes efforts at preservation of landmarks are thwarted only because neither owner nor developer was aware of the significance of the structure, nor were other interested parties informed in sufficient time to attempt necessary steps to avoid destruction, and (*d*) insufficient attention has been given to adapting new construction programs to accommodate and preserve landmarks on the site.

In fiscal year 1964, the Commission and the Commission of Fine Arts established a joint committee composed of architects, historians, and other experts in this field. This committee, which serves without compensation, has undertaken an initial study of the landmarks problem and developed a preliminary list of notable buildings and sites which are deemed worthy of further study. Also a series of studies aimed at developing a preservation program is underway. The committee also is cooperating with the American Landmarks Celebration, sponsored by the National Trust for Historic Preservation and the Department of the Interior, in conjunction with the international program of UNESCO. They are organizing a National Capital Landmarks Week for Washington with a photographic exhibit and publication of the interim list of landmarks. Consideration also is being given to holding a symposium on that subject in Washington later in the year.

Prototype case studies will be undertaken in this year to analyze the design and legal possibilities of permitting new development to occur on a portion of a specific site, while providing for the retention of the landmark. Tentatively

being considered for such studies are buildings and streets which are threatened with early demolition, including one building whose destruction has already been announced, but which represents a particularly good example of this possible treatment. These sites are the Tuckerman and Gray-Payne houses on the opposite sides of I Street, on the west corner of 16th Street; the National Presbyterian Church at Connecticut Avenue, 18th and N Streets; and Tudor Place. The study of the Tuckerman house has proceeded as a test of the case study methods being considered and has already shown that the technique is feasible.

It is deemed very important that this program be advanced at all possible speed during the next 2 years. Therefore, a special nonrecurring program is proposed for fiscal years 1967 and 1968.

Budgetary needs for the program in fiscal year 1967 have been set at $50,000.—The fiscal year 1967 program would include the following:

(*a*) Authentication of buildings and sites on the interim list as meeting adequate standards of significance as historic, architectural, or esthetic landmarks, including further screening of other sites proposed.

(*b*) Continuation of special case studies, including steps to insure that outstanding landmarks, such as the Union Station, are being included in a preservation program, utilizing the experience from the prototype studies.

(*c*) Initial work toward publication of the final report of the program as the authenticated, official list.

2. Beautification program

The staff of the Commission provided numerous services and prepared an exhibit and publications, etc., for the White House Conference on Natural Beauty, and has cooperated in the administration's followup programs. Through the Commission and the staff, our efforts have been coordinated with those at the First Lady's Committee on Beautification of the Nation's Capital.

3. Federal interests in the region

The interest of the Federal Government in the development of the National Capital region is apparent. It was stated by the 86th Congress in the Washington Metropolitan Region Development Act (74 Stat. 224). It also was the subject of a memorandum by President John F. Kennedy on November 27, 1962, to the executive agencies setting forth a number of development policies as guidelines for those agencies.

There is a need to further identify and define more precisely the nature of this interest. While it pertains to the basic character of the District and region which is the seat of the National Government, it also must be spelled out in terms of efficiency and conduct of each of the units of the Government and their requirements for physical facilities and an appropriate environment.

During fiscal year 1966, the Director's Office, the traffic engineer, and an open space planner will be pursuing this work in the areas of transportation planning and open space programing. The open space program, in particular, will be seeking further action programs and steps that may be undertaken in conjunction with the surrounding local jurisdictions to preserve open spaces required for the future.

In fiscal year 1967, this activity will be intensified with an additional position created to develop a program with the executive agencies having major interests in the region. This activity will be carried out in close relationship with the Bureau of the Budget.

4. Use of experts

Expert services will be required to carry out special studies in two categories:

(*a*) Studies of special elements of comprehensive planning requiring detailed pursuit and outside expertise; i.e., relationship of surrounding area to the Capitol Grounds and its needs (in cooperation with the Architect of the Capitol), waterfront development program, and other special design studies.

(*b*) Studies relating to continuing comprehensive planning program needs in data and analysis and effectuation techniques for the 1985 comprehensive plan.

The funds proposed for fiscal year 1967 are for nonrecurring activities.

G. PUBLICATIONS

Funds will be required for the publication of a series of reports following up the 1985 comprehensive plan, and to carry out the work described under the Comprehensive Planning Division.

A periodic statement of planning accomplishment also is sought to report to the many organizations interested in the work of the Commission and to make the recommendations of the Commission more effective. This also will be used to report achievements of proposals contained in the 1985 comprehensive plan.

Two recent Commission publications "Virginia Avenue" and "Indices of Growth and Change in the District of Columbia" are the initial reports in two series—special streets and data reports. The subjects of these two publications series serve to illustrate the broad range of the Commission's responsibility. Two forthcoming publications emphasize the key role which the Commission has played in two important projects of the Great Society—the George Washington Memorial Parkway and the J. F. Kennedy Center for the Performing Arts.

III. URBAN RENEWAL CONTRACTING

The Commission expects to continue to serve as a contractor for specific urban renewal studies for the District of Columbia and the Redevelopment Land Agency.

It is apparent that these services are provided at a cost which represents a saving to the urban renewal program because they are performed on a nonprofit basis. Supervision is provided by the Commission staff, and close coordination is achieved with other planning programs.

In fiscal year 1966, contract work is proceeding with the District of Columbia Office of Urban Renewal for the community renewal program study. Under a contract with the Redevelopment Land Agency an urban renewal study of the Anacostia-Bolling area is underway. The beginning stages of a downtown urban renewal study are being organized and work is expected to start late in fiscal year 1966.

JUSTIFICATION FOR INCREASE, NATIONAL CAPITAL PLANNING COMMISSION

INTRODUCTION

The Commission believes that a considerable increase in the financial resources available to it is necessary in order to enable satisfactory performance of its duties. The present rate of growth and development in the District and the National Capital region continues to exceed all precedent. Therefore work in comprehensive planning and related research and urban design needs to be augmented. At the same time, coordination of District and Federal Government's public projects must be improved.

As described in section I.A., Commission program objectives for fiscal year 1967, many tasks lay ahead of the Commission in addition to the need for keeping abreast of day to day activities.

A significant increase in the level of funding of the Commission's operation is sought to permit the acquisition of staff personnel commensurate with the Commission's duties and current workload, and to enable use of specialized expert services in specific studies.

1. Personnel

A total of 11 new positions are requested for fiscal year 1967, providing a total of 59 positions for the Commission's operation. Eight of the new positions requested are for professionally qualified persons ranging from GS–11 through GS–13, trained or experienced in specific fields of urban planning or other urban specialties. One GS–12 also is provided for administrative services. These positions are spread over a number of the work areas of the Commission, including District planning, Federal planning, urban renewal planning, comprehensive planning, urban design, urban research, and landmarks program. No more than two professional positions are requested for any one of these areas.

Provision also is made for developing a cadre of less experienced persons to assist each of the work areas and to provide a hierarchy of personnel familiar with planning for the National Capital. This will allow for replacement of higher grade personnel in the future from existing staff resources and lessen the impact now felt when critically short personnel leave the agency. It also will allow for more effective recruitment at the entering professional level within this personnel shortage profession.

(*a*) *Planning for the District of Columbia.*—One additional professional planner is required to carry out the statutory duties of the Commission in planning for the District of Columbia. It is particularly timely and important to add this position to follow through and apply proposals of the 1985 comprehensive plan.

This work area will emphasize use of the D.C. Capital improvement program to carry out plan proposals, develop recommendations on detailed location and design of public facilities, and propose application of land use control powers—particularly zoning regulations—to achieve objectives of the plan.

(*b*) *Planning for the Federal Government.*—Two professional planners are required to achieve better performance on planning for the requirements of the Federal Government within the District and the National Capital region. In response to a request made by the Bureau of the Budget in 1963, and as a part of the continuing long-range planning studies, a review has been initiated of existing Federal land holdings in the region.

The purpose of these studies is to analyze and evaluate the current use of these sites, as well as their potential future use or reuse for anticipated Federal needs.

Inventory studies have been initiated at 25 separate Federal installations within the National Capital region since 1959. These studies have been conducted by the Commission staff as resources permitted—using regular staff whenever possible, but largely depending on summer interns to carry out much of the data collection and descriptive work.

A major effort by the Commission is required to be responsive to the Bureau's request and to its own needs as the basis for a detailed long-range plan and program for the Federal establishment in the National Capital region. The 25 studies initiated to date need to be completed and the study needs to be initiated and completed on the other 25 sites.

The objective of this particular fiscal year 1967 proposal is to complete the inventory studies on all 50 federally owned sites in the National Capital region as soon as possible. This program would include the completion of all data collection and analysis, as well as staff evaluation and recommendations on the long-range Federal interest and use of each site.

Based upon recent experience, it is anticipated that it would take 2 years for the following projected staff to undertake and complete these studies (an average of two reports per month) :

Once completed, it is anticipated that each Federal agency would be required to update the data contained in the inventory report each time a modification in the master plan or development program for a particular installation was proposed to NCPC. Under such circumstances, an urban planner with the services of a cartographic aid should be able to keep the Federal inventory records current and up to date.

This request further recognizes the increased importance attached to long-range comprehensive planning of military installations in the region. A considerable workload has developed in connection with consultation with and review of plan proposals for these large scale areas and operations.

(*c*) *Urban renewal planning.*—One professional planner and one secretary is required in urban renewal activity to discharge increased responsibilities of the Commission in this area.

The initial community renewal program studies are to be completed in fiscal year 1966. It is intended (both within the District and the concept of these studies as identified by URA) that these should lead to ongoing and continuous study, projection, and coordination of long-term urban renewal needs. The Commission needs at least one full-time professional to carry out its responsibilities toward this program as well as assist in preproject planning studies in order to insure an orderly development and flow of urban renewal and public housing projects. This position also will assist in expediting Commission review and comment (or action) on pending public housing projects and urban renewal amendments.

(*d*) *Comprehensive planning.*—One professional planner is required to implement comprehensive planning functions.

This position is needed to renew work on 40-year developments and prospects for the District, as was initiated during the year 2000 policies plan studies. Of special need and importance this position will provide liaison not now possible with metropolitan planning efforts and long-range planning work underway in neighboring political jurisdictions.

In addition, assistance also will be provided in applying general plan concepts to the review of capital improvement programs and providing continuous assistance in the development of long-range budget programs.

(*e*) *Technical services-urban design.*—One professional urban designer is required to sustain the work of the Commission in this area.

The situation is similar here in that the workload on project review has increased so substantially that little time can be found for innovative design work,

It is proposed to initiate exploratory design studies without daily commitment to current projects. These studies would include such subjects as the monumental core, Washington skyline, urbanized (uptown) centers and their relationship to surrounding areas, and new subway stops, major precincts within which large Federal buildings are expected (i.e., the Labor Department-Tax Court precinct).

As has been pointed out in connection with the ready acceptance of the concept proposed for the National Air and Space Museum, an understanding of the design principles and relationships involved in major developments can simplify and quicken the review and approval process before public bodies. This can represent a significant cost saving in specific work of the designers as well as time of the public review bodies.

(*f*) *Technical services-urban research.*—One additional professional position and one supporting position are required to develop an urban research activity. This activity is of critical importance at this time to develop understanding of the nature of the rapid economic and social changes taking place within the District of Columbia. Specialized talent is needed on a full-time basis in the substantive area of demography and housing.

The supporting position will allow development and collection of data necessary to support analyses in these areas.

(*g*) *Administrative services.*—One additional high-level administrative person is required to enable effective administrative and internal operation of the Commission. This position is considered to be necessary even with the present size of staff and present activity. The Personnel and Records Management officer is needed to relieve a heavy overload on the present administrative officer.

(h) *Landmarks program.*—This position is required to provide staff continuity in pursuing and coordinating the landmarks program presented below.

The provision of this position is urgently sought because of the rapidity of new developments in the District. If significant elements in the city of historical value are to be preserved, as called for in the Planning Act of 1952, great steps forward in this program are necessary on an immediate basis.

2. Experts and consultants

Special funds are required to provide for studies and activities that cannot be carried out by agency personnel. They will be used when the circumstances dictate that this approach is more efficient and economic for the Government because of the specialized nature of the project, or the activity requires a significant concentration of effort in a short period of time.

The sum of $16,000 is requested for this purpose.

3. Design study of Capitol Hill

A joint study with the Architect of the Capitol of the development of the Capitol Grounds is contemplated. The Commission is concerned particularly with the joint determination of the amount of land that should be provided within the boundaries of the Capitol Grounds for future expansion (legislative, judicial, Library, etc.) and the interrelationship between Capitol development and the surrounding areas to the east and south. This sum of $40,000 includes the prospective share of the Commission in this study.

4. Landmarks program

Provision of $50,000 as the first phase of a 2-year landmarks program is requested. This program is timely particularly because of the rate of new construction within the District, which is causing many landmarks to be destroyed needlessly, and as a major part of the new interest in a city beautification program.

This program will develop methods and procedures for conserving historic and architectural landmarks in the District of Columbia during this era of great change and development. During the first year, the program will consist of case studies of particularly significant landmarks leading to specific proposals for their preservation. These studies will assess legal, planning, architectural, and financial aspects of this protection for individual structures and sites. Also necessary research will be conducted into the origins and history of use of the structures and site to establish their authenticity for consideration for inclusion in an official landmarks listing.

5. Publications

Provision of $45,000 for a continuing publication program is urgently requested. It has become increasingly clear that the Commission's program is hampered and its responsibilities discharged because of lack of effective communication

about its proposals and recommendations. As the central planning agency of the District of Columbia government, more complete and effective reporting to the agencies and residents must be undertaken.

During fiscal year 1967, there will be two main publication series developed. One will include 15 of a contemplated 20 report series on specific proposals of the comprehensive plan, as they are detailed further by planning district and city-wide systems. These will be circulated to community and interested groups in order to stimulate comment, advice, and interest. The second series will be composed of a number of consultant and staff studies which will have been made.

6. Overhead and administration

A request for $16,005 for overhead to support the above increases is included. Minimum provision is made for office space, equipment, supplies, and transportation costs.

These costs are calculated as:

Additional office space rental of 1,650 square feet (at current figure of $5 per square feet)	$8,250
Office equipment and machines	2,000
Office supplies	1,805
Telephone and communication	1,000
Travel and transportation	1,500
Increased telephone service rates by GSA	850
Increased mail costs for franking privilege	600
Total	16,005

NATIONAL CAPITAL REGIONAL PLANNING COUNCIL PROGRAM AND PERFORMANCE, FISCAL YEAR 1967 BUDGET ESTIMATE

ORGANIZATION OF THE REGIONAL PLANNING COUNCIL

Established by the National Capital Planning Act of 1952 (Public Law 592), the National Capital Regional Planning Council consists of 10 representatives of planning agencies and local governing bodies in the National Capital region as defined in that act: 2 from the District of Columbia; 4 from Maryland counties of Montgomery and Prince Georges; and 4 from the Virginia counties of Arlington, Fairfax, Loudoun, and Prince William, as well as the cities of Alexandria, Fairfax, and Falls Church. The region comprises almost 2,400 square miles and has a present population of more than 2.3 million.

Under the law, the Regional Planning Council's primary responsibilities are to assemble and maintain a general plan for the development of the region and to reconcile the land-use requirements of the Federal installations beyond the District boundaries with the land-use requirements of each locality. Therefore, the Regional Planning Council's function is primarily that of a coordinator and catalyst serving as a central intelligence operation and clearinghouse on all planning and development matters having regional significance.

COORDINATION—RELATIONSHIP WITH OTHER AGENCIES IN THE REGION

To accomplish its purposes, the Regional Planning Council works primarily with and through the National Capital Planning Commission, the Maryland-National Capital Park and Planning Commission, the Northern Virginia Regional Planning and Economic Development Commission, and the various other local planning agencies in the National Capital region, as well as various special operating agencies, elected bodies, or study groups that have regionwide interests and responsibilities. To date, the latter have included the Metropolitan Washington Council of Governments, the National Capital Transportation Agency, the Washington Metropolitan Area Transportation Study, the Health and Welfare Council of the National Capital Area, the Washington Center for Metropolitan Studies, and the newly created Transportation Planning Board, as well as various ad hoc study groups established by Congress, by Federal agencies, or at the State or local level. It also works in close liaison with the various local governing bodies of the region.

RPC RESPONSIBILITIES

The enabling act provides that the National Capital Planning Commission shall provide such technical and clerical assistance and such other services and facilities as may be necessary for the performance of the Regional Planning Council's functions. The Regional Planning Council may also accept such assistance as may be made available by any State or local governmental authority having jurisdiction in the National Capital region. To date, this has been confined to staff assistance—no cash has been made available to RPC from any non-Federal source.

The statutory responsibilities of the Council fall into three general categories:

1. The preparation and maintenance of a general development plan for the region.
2. The initial review of proposed Federal installations which are to be located outside the District of Columbia's boundaries; and
3. The coordination of the planning efforts and proposals of the official local and subregional planning agencies, and the various special purpose agencies, to insure the relationship conformance of all to the general development plan.

THE REGION TODAY

The Washington metropolitan area finds itself to be the fastest growing large metropolitan area in the United States. Additional employment opportunities mean more people who require new houses, schools, transportation systems, utilities, commercial establishments, cultural facilities, etc. All must be appropriately anticipated—planned for—or congestion and confusion will result. While the Regional Planning Council's responsibilities do not include the finite and detailed input required by the local jurisdiction's planning effort, its work and scope is, nevertheless, increasing with each year. However, the budget and staff resources at its disposal remain among the smallest of any overall metropolitan program in the country serving areas of comparable size.

REGIONAL PLANNING EXPENDITURES

The table below summarized recent expenditures (1962) for regional planning for the large metropolitan areas of the country. The table also indicates the Federal share in such expenditures. Budget figures and/or appropriations for 1965 have been added for comparison purposes.

TABLE I

Region and agency name	1960 population (and 1970 estimate)	Land area (square miles)	Revenue (1962)	
			Total (Thousands)	Federal share
Atlanta, Ga.: Atlanta Region Metropolitan Planning Commission	1,017,688 (1,361,700)	1,724	[1] $328.6 460.1	147.5
Baltimore, Md.: Baltimore Regional Planning Council	1,803,745 (2,200,000)	2,362	[1] 317.6 45.0	25.0
Boston, Mass.: Boston regional planning project	3,400,000 [2]	2,200	[2]	3,682.0
Chicago, Ill.: Northeastern Illinois Metropolitan Area Planning Commission	6,220,913 (7,023,000)	3,714	[1] 422.0 350.2	135.9
Detroit, Mich.: Detroit Metropolitan Area Regional Planning Commission	4,035,920 (4,748,000)	3,250	[1] 149.2 118.8	22.1
Los Angeles-Long Beach, Calif.: Los Angeles regional transportation study	7,750,000 (12,000,000)	9,000	[1] 1,263.9 385.5	307.6
Milwaukee, Wis.: Southeastern Wisconsin Regional Planning Commission	1,573,614 (1,741,300)	2,628	[1] 772.1 142.3	37.7
Minneapolis-St. Paul, Minn.: Twin Cities Metropolitan Planning Commission	1,525,297 (1,956,000)	2,813	[1] 583.7 215.8	97.9
New York, N.Y.: Tristate transportation committee	17,000,000 (19,400,000)	7,750	[1] 4,100.0 2,732.0	1,639.0
Philadelphia, Pa.-New Jersey: Penn Jersey transportation study	4,610,000 (5,363,000)	3,783	[1] 933.0 760.0	570.0
Pittsburgh, Pa.: Southwestern Pennsylvania Regional Planning Commission	2,599,598 (2,806,000)	4,501	[1] 253.7 43.5	0
St. Louis, Mo.-Illinois: Bistate development agency	2,000,000 (2,647,000)	3,567	[1] 88.1 40.0	0
San Francisco-Oakland, Calif. (San Jose): Association of Bay Area Governments	3,638,939 (4,288,800)	6,990	[1] 278.5 [2]	[2]
Seattle, Wash. (Tacoma): Puget Sound governmental conference	1,500,000 (2,250,000)	6,313	[1] 76.7 63.0	0
Washington, D.C., Maryland, Virginia: National Capital Regional Planning Council	2,064,090 (2,700,000)	2,360	[1] 108.0 88.3	88.3

[1] Budgeted or appropriated 1965.
[2] Not available.

For comparative purposes it is noteworthy that a February 1964 survey by the American Society of Planning Officials reveals that planning agencies serving regions having a population of 1 million and over, average 26.3 cents per capita; the Regional Planning Council is currently operating on approximately 4 cents per capita.

In the early years of the Regional Planning Council's existence, only a limited staff could be supported by the budget of the National Capital Planning Commission. However, considering the vast scale of metropolitan growth problems in this region, this staff was expanded during the preparation of the 1959 mass transportation study and the year 2000 policies plan. Since then staff budgets have again been very limited.

In 1964 the Council approved an internal staff reorganization, which would include the following functional planning sections:

(*a*) *Advance comprehensive planning section.*—Prepare updated comprehensive plan on basis of year 2000 policies plan and subregional programs.

(*b*) *Current planning section.*—Develop regional coordination via review and liaison with Federal, District of Columbia, and local jurisdictions and their official planning agencies; maintain Federal sites file; aid development of regional goals and conduct miscellaneous studies.

(*c*) *Regional transportation planning section.*—Work toward, and assist other agencies in the development of an overall integrated highway and transit system,

acceptable by the various political bodies, and assist in the establishment and maintenance of a continuing comprehensive regional transportation process as prescribed in the Federal Aid Highway Act of 1962.

(*d*) *Regional research section.*—Assemble and maintain up-to-date information statistics, and related projections on land use, economics, housing, population, etc., and disseminate same.

The approved 1965–66 fiscal year budget did not permit this type of functional division and the Council staff therefore is organized into current planning and advance planning sections.

COMPREHENSIVE PLAN—WORK PERFORMED

During the past 2 years the Council has worked to develop the background studies necessary for the creation and adoption of an up-to-date general development plan. These included the demographic and economic analyses of the region; the updating of a master transportation system as expressed in the 1959 mass transportation study; the evaluation of the jurisdictions' financial capabilities singularly and collectively; the exchange of information and planning data through the publication of a semimonthly bulletin; the personal liaison with local governments and their various agencies; the liaison with various regional and/or interstate agencies and groups; the continued review of local plans and those of special purpose agencies; and the review of new Federal facilities—all in the light of, and relation to, the year 2000 policies plan and the 1956 general development plan. During fiscal year 1966, the Council adopted a plan review process and the staff has been working on the initial input in this process which includes:

(*a*) Staff philosophy for the plan.
(*b*) Basic assumptions.
(*c*) Mechanics of carrying out the plan.
(*d*) Plan content.
(*e*) The format for publication of the plan.
(*f*) First draft of a preliminary sketch of the plan for the year 2000.

In addition to the official planning activities, other day-to-day administration requirements amplify the responsibilties of the Council staff.

LONG-RANGE PROGRAM OBJECTIVES

The long-range program objectives have not changed over the past several years. They are summarized as follows:

1. To adopt and maintain a series of development policies for the National Capital region, based on the response of the several local governments to the year 2000 policies plan, and recognized as the regional development policies of all public agencies operating in the region.

2. To identify sound regional development goals which are acceptable to the Federal, District, and local governments and their planning agencies, and, so far as is possible, to keep the general public informed on the rationale used in making regional decisions.

3. To publish, adopt, and maintain the regional plan for 2000, embracing the current plans of all of the constituent jurisdictions for those fields in which the closest coordination of physical planning is necessary, including at least the following:

(*a*) Projected growth of total population in the region, with a breakdown of the estimates by age, sex, race, income, and number employed.
(*b*) General land-use plan for the entire region.
(*c*) The regional system of transportation arteries, primarily freeways and rapid transit lines.
(d) The trunk systems of the public utilities in the region, with initial emphasis on the sewer system.

4. To develop, adopt, publish, and promote regional action programs for those operations in which initiative by the regional planning agency is particularly needed in order to realize the year 2000 development policies, including, but not limited to, the following:

(*a*) Reservation of sites for future Federal employment centers—maintain file on potential future sites available throughout the entire region.
(*b*) Reservation of open spaces for the benefit of the residents of the region.

(*c*) Recommendations aimed at the alleviation of housing shortages for various segments of the metropolitan population.

(*d*) Alleviation of financial bottlenecks that might restrict the important capital investments in the regional plan.

(*e*) Promotion of the original development of a prototype suburban community in conformance to the corridor scheme of the year 2000 policies plan.

Program for Fiscal 1967

I. Comprehensive regional development plan

In keeping with the long-range program objective of publishing, adopting, and maintaining the National Capital regional plan for the year 2000, it is necessary that staff work be undertaken to further refine the composite general development plan through:

A. Establishing the design and evaluation of regional plan alternatives.

1. Alternative plan proposals for possible regional development patterns built on existing conditions which give physical and social expression to various policy approaches.

2. Citizen participation through full discussions and reaction of members of the Metropolitan Washington Council of Governments, organized citizens and professional groups such as United Planning Organization, and citizens at large.

B. Further relating and if need be updating policies as expressed in year 2000 plan statement. (Year 2000 plan prepared 1960–61.)

C. Identifying regional growth opportunities and problems and establishing meaningful recommendations for their coordinated development.

D. Phasing in social planning as an integral part of the resultant physical design.

E. Creating a positive public image of regional planning and its process which will be actively supported by the general public, business and civic groups, and a variety of other special interest groups.

II. Open Space Program

A. Work will continue on an action program for the selection and acquisition of open space within the National Capital region. Following the recent adoption by both the National Capital Planning Commission and the Regional Planning Council of a "General Procedure for the Selection of Sites for New Federal Facilities in the National Capital Region," the staff of the Regional Planning Council has established a current inventory of available sites. The staff of the Council will, furthermore, maintain sufficient information on the planned highway and transit routes and construction programs, the growth of other Federal facilities planned in the area, and the pattern of growth of residential areas within the region to allow the intelligent comparison and selection of sites to be made.

B. It is proposed that an advisory committee of experts be created who could review and suggest guidance to the program. This group would be composed of administrators, academicians, and technicians from the Washington area.

C. The Council also will try to promote additional open space research and education. Working with such groups as the Washington Center for Metropolitan Studies and the Conservation Foundation, research projects on the benefit per cost problem of obtaining and maintaining the large low-density wedges and knowledge of the future recreation needs and demands should be initiated.

D. Easement program: The Council proposes to undertake an educational program on the advantages and possibilities of open space preservation by the use of easements and demonstrate this in selected geographic areas. This educational program logically precedes an easement acquisition or donation program. The Council would promote through its subregional agencies efforts to locate and purchase critical areas where development pressures may threaten needed open spaces deemed important to local, subregional, and regional programs. Such a program would utilize the inventory of available sites and the priority designation information already completed in fiscal year 1966.

E. Open space conference. A great deal of interest is being generated during fiscal 1966 in preservation of open space by such agencies as the Interior Department (Potomac effort) and the beautification work stimulated by the administration. It is proposed, therefore, that in early fall 1966 a Washington Area Citizens' Conference on Open Space Action be held. This conference

would have as its theme the role the citizen has in preserving and protecting open spaces in the region. The Citizens Commitee for the ORRRC report, now absorbed in the Conservation Foundation, would be very helpful in such an undertaking.

III. Regional Plan Implementation Through Effective Coordination

Planning is meaningless without proper and effective implementation. Recognizing the extreme importance of relating plan preparation to plan implementation, it is suggested that a wide range of public and private policymakers be brought into the plan—refinement and adoption process by the Regional Planning Council through close liaison and association with the Council of Governments and through:

A. Improved methods for citizen participation.

B. More effective means of plan presentation and followup.

C. A mechanism for assurance that agreed-upon goals, projects, and programs actually are executed in a coordinated manner through local plans and day-to-day operations.

In anticipation of an intergovernmental cooperation act it will be necessary and appropriate to facilitate the coordination of intergovernmental relationships and activities in the region on a continuing basis.

It is suggested that the Regional Planning Council is in a most favorable position to provide a more effective exchange of information among the jurisdictions concerned at the earliest possible stage of planning as well as throughout the entire planning and development process. Metropolitan areawide development coordination is one of the chief responsibilities of the Regional Planning Council.

IV. FEDERAL FINANCIAL AID IN REGION

An effective regional planning agency should strive to provide its local planning agencies and local governmental and nongovernmental organizations advice and assistance—such as technical information, research data, and organizational help. In this way the regional agency serves as a clearinghouse of information on plans, projects, proposals, and policies of other governmental agencies which have a direct relation to the region.

It is proposed that the Regional Planning Council undertake a study and analysis of all the existing social, economic, development, and conservation needs within the region for which Federal financial aid is currently available. This would include Federal aid for:

A. Park and recreational facilities at water resource development areas.

B. Hospital and medical facilities.

C. Outdoor recreation.

D. Water resources.

E. Economic opportunity.

F. Community facilities.

G. Housing.

H. Urban renewal.

The purpose of such a study would be to point out the regional needs within these specific areas and make appropriate recommendations to the local jurisdiction in line with the comprehensive regional plan.

The staff work required for this study would be related closely to the activities of the Council of Governments in these areas. Where there are voids such as in the area of housing, urban renewal, and recreation, work would be related primarily to establish the specific needs and relate them to subregional or local planning agencies.

It is hoped that through such a study and analysis regional guidelines can be established in the various subject areas. This process should provide a body of regional development and conservation data and information for the use of local agencies in formulating and designing their own programs within a regional framework.

Temporary Commission on Pennsylvania Avenue

1. Introduction

President Kennedy appointed a Council on Pennsylvania Avenue in June of 1962 to prepare a plan for the revitalization of the avenue. The plan was pre-

pared and submitted to the President in April 1964. That concept has been endorsed and approved by all interested agencies.

The report of the Council on Pennsylvania Avenue, recommending a plan for development of the area of Pennsylvania Avenue between the Capitol and the White House, has received a great deal of enthusiastic support from many sources.

On October 23, 1964, President Lyndon B. Johnson stated that the details may require modification and that the plan must remain flexible but that "I believe that it should be accepted as a worthy and challenging goal for our Nation's most important street, our Nation's ceremonial drive." He said further, "I was particularly impressed by the approval of the National Capital Planning Commission, which really has the major responsibility for the development of the city; by the Commission of Fine Arts; and by the District of Columbia Board of Commissioners. I have likewise been heartened by the enthusiastic response to the plan from so many national and local organizations concerned with the development of our Nation's Capital."

With respect to advancing the proposals of the plan, he stated, "Congress must, of course, be consulted, and must approve the concept of the plan. Meanwhile, however, I believe that we should undertake an immediate study of the best arrangements for implementing the plan and making whatever adjustments and modifications may be necessary."

President Johnson established the Temporary Commission on Pennsylvania Avenue by Executive Order No. 11210 of March 25, 1965. The President appointed a 13-member Commission including Cabinet Officers and the heads of agencies with specific interests in the avenue. Congress appropriated a small amount to the National Capital Planning Commission to carry out the work of this Temporary Commission during fiscal year 1966.

The Commission has met and started work. A staff of four (two from Commission funds and two from funds contributed by other Government agencies) has been employed and is working on the assignments contained in the above Executive order.

At the recommendation of the Temporary Commission, the avenue between the Capitol and the White House and certain areas adjacent to it have been declared a historic site under the Historic Sites Act of August 21, 1935. Further, upon recommendation of the Commission the President has recommended legislation to establish a Pennsylvania Avenue Commission. Joint resolutions have been introduced in both Houses of Congress for this purpose.

Early acceptance of the concepts of the plan has caused the redesign of two major buildings to fit into the plan, the FBI Office Building and the Raleigh Hotel replacement. Other current private and public decisions and actions about projects in the area await guidance from detailed plans and engineering controls which must be formulated.

2. Program objectives

The immediate objective of the Temporary Commission is to continue to develop reliable information upon which decisions can be based. Technical data must be available for those agencies, public or private, which must now make decisions relating to the development of Pennsylvania Avenue.

The Commission must retain a staff of broad experience and flexibility to assure accomplishment of tasks encountered in a complex program of this nature.

Consultation with and coordination of the activities of all interests in the avenue improvements are constantly necessary. These are required to assure integration of all plans, programs, and activities with the Pennsylvania Avenue plan and with the comprehensive plans for the National Capital developed by the National Capital Planning Commission.

3. Work program

The continuing work program of the Temporary Commission will include such activities as the following:

A. ECONOMIC AND ENGINEERING FEASIBILITY STUDIES

Work has been completed by consultants on preliminary economic and engineering studies as they could be afforded. While these are favorable it is necessary to continue and increase study in these areas to assure availability of data for projects affecting the plan which are now being undertaken. The data developed by these studies are vital to the general traffic plan for the downtown area and

facilities affecting it. They are necessary to proper consideration of developments in adjoining areas.

B. COST STUDIES

The Pennsylvania Avenue plan implies certain land uses in adjoining areas. These uses are not necessarily those that would be determined in the marketplace at a given time. To determine specifically uses and sites that are compatible, exhaustive studies must be continued.

Estimates of cost for public facilities need to be available of sufficient accuracy to permit development of phased programs and presentation of these for consideration and action by the Congress. Consultants can be more effectively and economically used for these studies than a large permanent staff.

C. PROGRAM STUDIES

A program of this nature and magnitude must not be looked on as a rigid plan but more as a process being undertaken within defined objectives and concepts. Continuous study is necessary. Every new situation must be tested against the plan and revision made when necessary to improve or make less burdensome its realization. These continuing studies will lead to guidelines within which the rejuvenation of the area can proceed.

D. IMPACT CONSIDERATIONS

The execution of a project of the magnitude of the planned improvements to the avenue has important economic and social impacts on the immediate area and those surrounding it. Some insight into these considerations has been gained from studies already made.

The economic impact is subject to careful comprehensive planning to avoid conflicts of development. This planning is based on analysis in depth of markets and demands public and private. Every effort is being made to make the uses in the Pennsylvania Avenue area economically viable and esthetically pleasing without negatively affecting private or public developments planned for other areas.

E. DEVELOPMENT OF PROPOSED LEGISLATION

Staff work must continue on legislation both for authorization and appropriation as required.

F. COORDINATION

There are at present about 15 Federal and local agencies having responsibility in the development of Pennsylvania Avenue. However well intentioned, these interests can only be brought to bear as an orderly force by coordination within the guidelines of an accepted plan. The Temporary Commission on Pennsylvania Avenue through its members and staff continue coordination of its plans and activities.

This coordination derives from carefully developed details based on studies, data, and designs by the best qualified professionals available. Constant coordination is vital to the realization of Pennsylvania Avenue as the grand ceremonial axis of the Nation. Such coordination is also necessary to assist consideration of the views of owners and occupants of private property whose interests may be affected.

G. PUBLIC RELATIONS

Pennsylvania Avenue is of national importance and interest. To inform Americans of the plans for their ceremonial boulevard and the progress being made, a comprehensive and continuing program of publicity is important. Specifically, the Commission envisions slide and movie presentations, periodic press pamphlets and press releases, exhibits, models, and lectures.

4. Budget request

Funds are requested to continue the operation of the Temporary Commission on Pennsylvania Avenue until the Congress can consider and act on legislation providing the means for achieving the ultimate improvements to the avenue. Present activities are necessary on a continuing basis to protect Pennsylvania Avenue from incompatible developments, some of which is imminent.

Provision is made in the budget only for the minimum necessary on an interim basis for personnel, and contractors, printing of reports, travel expenses of the members of the Commission and staff, rental of office space, and office supplies.

TEMPORARY COMMISSION ON PENNSYLVANIA AVENUE

JUSTIFICATION FOR INCREASES

Introduction

The Temporary Commission must act during the coming year until such time as a permanent Commission is set up as the guiding agency for an ever-increasing amount of private and public development in the area covered by the plan of the President's Advisory Council on Pennsylvania Avenue. As interpreter and refiner of this plan, the Commission must constantly work to adopt to changing conditions and to promote orderly development consistent with the intent of the plan. Proposals already made for developmen indicate that the Commission staff will have to more than double its activity in the coming year if the promising start to cooperative renewal of the avenue by private and public interests is not to be lost.

The Commission has been able to operate on its $50,000 appropriation for fiscal 1966 only by a series of very temporary expedients. The two higher grades of the new positions requested have been working this year on temporary appointments, the GS–13's salary donated by two other agencies. Office rent is presently absorbed by the National Capital Planning Commission, as are many incidental operating expenses. The Chairman, who lives on the west coast, may not be able to bill all of his necessary travel this year, and is presently contributing the services of the Acting Staff Director in order to free budgeted funds for needed consultant contracts. In other words, the Commission would have spent $100,000 this year if it had actually been carrying its full operating expenses.

Personnel

The architect, GS–13, is an experienced urban designer architect who does pilot designs for all public and private projects with the plan area, adapting the original plan to new conditions and showing developers how their projects can fit into the overall framework of the plan. Considerable work remains to be done in details of design for the avenue itself and related public open spaces and constant consultation is necessary with other agencies involved in design of the area, such as the National Capital Planning Commission, General Services Administration, National Park Service and District Department of Highways and Traffic.

A draftsman, GS–8, is urgently needed even in the present year to assist the architect in meeting his present workload. With the increase already in view, this position becomes essential.

An administrative assistant, GS–11, working closely with both the Chairman and staff director in administration and liaison with other agencies, has been required in this past year, not only in the day to day administration of the Commission's work but in coordinating with the many other agencies concerned with the Pennsylvania Avenue area, and in informing the Congress and the public as to the purposes and possibilities of the Pennsylvania Avenue plan. The coming year will see increased activity in these areas, justifying making this a permanent position.

An additional secretary, GS–5, will be necessary to keep abreast of the increasing clerical load of the Commission.

OVERHEAD AND ADMINISTRATION

Rental and many office expenses are now absorbed by the Planning Commission. The cost of about 1,500 square feet at $5 a square foot and all incidental office expenses will have to be borne by the Pennsylvania Avenue Commission in the coming year. Travel, estimated at 15 trips for the Chairman from the west coast and 15 for the Vice Chairman from the New York area, is also an important expense.

PREPARED STATEMENT

Senator BARTLETT. Do you care to read your statement?

Mrs. ROWE. It is not very long, if you wouldn't mind.

Knowing how busy you are, I will not burden you with a long introductory statement. A summary explanation of the Commission's statutory responsibilities and the role it plays in the city and the region can be found on pages 5 and 6 of the budget justification.

There are, however, several important points I should like to bring to the committee's attention.

As you know, the Commission functions as the planning arm of the District of Columbia government, which means that we assist in planning all municipal facilities; schools, playgrounds, transportation—roads and mass transit—libraries, police and fire stations, and public markets, among others.

We also advise the city's zoning authorities on important zoning changes, which means that we are concerned with private as well as public buildings. A look at the changing face of the city—the holes where buildings used to be, the tall cranes where new building is in progress—will give you an idea of how busy we must be.

The projects which must be reviewed and which account for a great portion of the Planning Commission's time are Federal buildings and other Federal facilities in the city and surrounding counties. Here, in the city, we play a major role in site selection, in determining the height and bulk of buildings and in site development. In the past few years Washington has attracted talented architects and planners from all over the Nation. Probably never, since the time of George Washington and Thomas Jefferson, has there been as much interest in the looks of our city, in the quality of its architecture, and in the enhancement of its natural beauty. Mrs. Johnson's Beautification Committee and the Pennsylvania Avenue plan are but two examples of this interest. All these plans and programs mean more work for the Commission—not that we don't welcome it.

Increase in Volume of Work

Each year since I became Chairman in 1961 the volume of work resulting from new projects, new plans, and new programs has increased tremendously. At the same time the staff has been hard at work preparing a new comprehensive plan for the city. Preliminary plan proposals were published in the fall and circulated to official agencies and community organizations for comment. We have been inundated with letters of comments and suggestions. The draft plan is now in preparation, looking forward to an early summer publication date with final plan adoption by the end of the year. The months ahead are crucial ones.

Low-Cost Housing

We want to draw a model plan for a model city—to point the way to the solution of some of the city's most pressing problems. This means a plan and program to meet Washington's critical need for low-cost housing. More than 37 percent of the city's residents are eligible for, or need, public assistance in housing; only 5.8 percent are now receiving it. This also means finding an acceptable balance between highways and mass transit that will provide efficient transportation for the city and its suburbs with the least disruption of the homes and businesses of the people of Washington and a minimum impact of the beauty of the Nation's Capital.

To continue the review and recommendations on Federal and District projects, to continue work on the comprehensive plan and its supporting documents, requires additional staff and more money for publications. The Commission believes the budget before you is a

minimum budget—that we cannot perform our important duties without more staff and more funds for publishing our reports.

LAND ACQUISITION FUNDS

May I add a word about our request for land acquisition funds for the George Washington Memorial Parkway in Prince Georges County, Md., and Fairfax County, Va.

We do intend to ask for new authorizing legislation in order to complete the land acquisition along the Potomac River in Fairfax County, but at the same time we would like to proceed with land acquisition in Prince Georges County within the existing $7,500,000 authorization under the Capper-Cramton Act. There is, as you know, an unappropriated balance of $3,624,636 remaining in the authorization. The current request for Prince Georges County is $2,900,000 which would be matched by the county.

We have the endorsement of the Prince Georges County Commissioners who feel this is the last clear chance for preserving the banks of the Potomac in Prince Georges. They have promised to hold up any building permits and rezoning applications for the present, but obviously they cannot do this indefinitely. State Senator Wineland, who represents the area affected, has introduced legislation in the Maryland General Assembly to authorize the bond issue necessary to match the Federal funds.

The Commission is not in the roadbuilding business. The money requested would be used for land purchase only. Our interest is in the preservation of the banks of the Potomac, the acquisition of parkland, and the carrying out of the Capper-Cramton Act, which has done so much to make the Nation's Capital the handsome place it now is.

Any postponement of the acquisition will, we believe, result in increased cost to President Johnson's plans for the Potomac.

Thank you for listening to my plea.

We are ready to answer any questions, now.

Senator BARTLETT. Some are on the way, as you know.

Mrs. ROWE. Yes.

REQUEST FOR ADDITIONAL PERSONNEL

Senator BARTLETT. You are proposing an addition of 15 personnel, 11 for the National Capital Planning Commission, and 4 for the Pennsylvania Avenue Commission. Would you please describe briefly the grades and duties of these 15 personnel, and explain why they are necessary?

Mrs. ROWE. Mr. Conrad can answer that, or Mr. Pritchard.

Mr. CONRAD. I would be glad to start off.

We are asking for 11 new positions for fiscal 1967 to provide a total of 59 positions for the National Capital Planning Commission's operation.

Eight of the new positions will be professionals, people professionally qualified, and the grade range will be from grade 11 to grade 13.

There are three that are supporting functions.

One of these additional professional planners would be in the District Planning Division, which takes care of the functions and

responsibilities of the Planning Commission for the District of Columbia, as the District of Columbia's Planning Commission.

At the present time there is one position, the Chief. He is responsible for zoning amendments, zoning appeals, reviews zoning appeals for the Commission. He is also responsible for review of the District of Columbia annual and 6-year public works programs. We are requesting one additional person in this Division. This man would be a professional planner.

Senator BARTLETT. May I ask a question relating to that?

Mr. CONRAD. Yes, sir.

Senator BARTLETT. You would have another man in there without additional stenographic help? Where would that come from?

Mr. CONRAD. We are sharing the stenographic help for this Division.

For instance, we have the District Planning Division and our traffic planning engineer sharing one secretary. We intend to keep this the same. We believe that by pooling the resource on secretaries we can still supply the stenographic needs of this additional personnel.

Senator BARTLETT. How can she do it?

Mr. CONRAD. We believe she can do it.

Senator BARTLETT. What does she say?

CAPITAL IMPROVEMENT PROGRAM

Mr. CONRAD. There are complaints along the line, I can assure you, but the major need is to work on the capital improvement program, so we will be following through with the District on the comprehensive plan for the city, such as the schools, fire stations, police stations, and helping the District find locations for these facilities.

Mrs. ROWE. I might just say, Mr. Chairman, because of the nature of the Planning Commission's work, there is a smaller percentage of stenographic and secretarial assistance needed than there is in most administrative offices of the Federal Government.

Mr. CONRAD. We are requesting two professional planners for the Federal Projects Division, which is the arm of the Planning Commission which has the responsibility to provide for the Federal needs of the city.

The needs for these two are centered around the Federal inventory that we are making of the 50-some Federal establishments in the metropolitan area. We were requested a few years ago by the Bureau of the Budget to make this study. We have been unable to proceed with it as we would like because of the many projects that come into this Division.

We are asking for additional help to proceed on the Federal inventory.

Senator BARTLETT. What grades would they be?

DIFFICULTY IN HIRING PLANNERS

Mr. CONRAD. These would be grade 11.

What we are trying to do is keep the grades as low as possible and still get competent planners. We would like, within the office, to give the opportunity to our professional people to advance. If we start at the higher grades, the advance would be limited, and we are a small organization.

Senator BARTLETT. How much money does grade 11 starting bring?

Mr. PRITCHARD. $8,961.

Senator BARTLETT. Do you have difficulty getting planners at that salary?

Mr. CONRAD. We have difficulty getting planners at any salary. It is a tight profession, and planners are at a premium. However, at the present time we have only one vacancy on our staff. They are difficult to obtain.

Senator BARTLETT. I don't suppose there are too many in the world.

Mr. CONRAD. No; there are not.

In the Urban Renewal Division, we are requesting one professional planner. At the present time there is a chief and two draftsmen.

COMMUNITY RENEWAL PROGRAM

This is to follow through on the community renewal program which we are developing with the Commissioners of the District of Columbia. Within the community renewal program there will be priorities set up for improvement activities in various sections of the city.

We need this individual to work in setting up these various areas on a priority basis in accordance with the renewal program.

In the Comprehensive Planning Division there is a chief plus five professional planners and one draftsman. We need one additional planner.

This is in conjunction with a fiscal program for the Comprehensive Planning Division. If planning is to be of aid to the District and Federal agencies, it will have to program projects over a 5-, 10-, or 20-year period. A fiscal planner is needed in this Division.

At the present time, we do not have an individual with this special kind of talent.

We are requesting a professional planner for urban design. We have two at present working on projects, and they never seem to be able to get beyond projects and do overall planning from the urban design standpoint for the city. We are requesting one professional designer to do more broad designing for the city, such as special streets and to aid in Mrs. Johnson's beautification program.

Also within the Technical Services, is the Research Branch. At the present time there are two professionals in this Branch, and all the other divisions depend on this section to provide basic population data, housing data, and economic analysis of our city. We need one additional professional to aid in this Branch.

Also within the Administrative Branch, of which Mr. Pritchard is the head, we are requesting one additional person who will aid him, particularly along the lines of personnel recruitment. Then when Mr. Pritchard is on leave, there will be somebody who can follow through on the administrative items for the Commission.

This has been a hardship for the Commission, because Mr. Pritchard is the only one who can run the administrative section. When he leaves, things fall apart.

Senator BARTLETT. You mean when he disappears from the office for an hour, a day, or a week?

Mr. CONRAD. He tries to take annual leave.

I believe that summarizes the 11 additional personnel the Planning Commission is requesting.

There is one other new position for landmarks. We have a request for $100,000 for 2 years (fiscal year 1967 and fiscal year 1968) to come up with a program for landmarks for the District of Columbia. To accomplish this, we are establishing an additional position to work on National Capital landmarks.

Senator BARTLETT. Mr. Woodbridge?

TEMPORARY COMMISSION ON PENNSYLVANIA AVENUE

STAFF MEMBERS

Mr. WOODBRIDGE. The staff request for the Pennsylvania Avenue Commission is based on our operating experience of this year.

I think perhaps I should explain briefly how we are attempting to operate this. It is rather strange.

My salary is being donated by the Chairman, and consequently is not charged on our current $50,000 appropriation at all.

The next ranking employee, the architect, GS–13—his salary is being donated jointly by two other agencies.

This is something we are not planning to continue. We went on bended knee to beg to continue his position, and managed to find a way of doing that.

He and I are the only two architects on the staff, and we have been wishing we could draw with both hands and talk at the same time, because there is so much work to be done.

Therefore, we have requested one architect, GS–13, to be added as a formal staff member of the Commission, and that a GS–8 be added to the staff to help us get out the needed drawings.

We have an administrative assistant working this year on a temporary appointment. This appears as a new personnel position because we requested it be made permanent.

Then we requested one additional secretarial person to carry the workload that we can see coming within the year.

Briefly, I have put in the record a progress report of what we have been up to this year, and everything points to a much busier year in the coming year, and we feel that this staff must have these to keep abreast.

Senator BARTLETT. Don't you have a secretary?

Mr. WOODBRIDGE. We have one.

Senator BARTLETT. From what I learned here, that ought to be enough for you, no matter how big you go.

Mr. WOODBRIDGE. I wish we could operate as economically with secretaries as the Planning Commission, but we feel we will have to have two, because in fact the one is also doubling as a public information person, and as a special assistant to me.

She is a girl of considerable abilities in other areas, and we try to use her as broadly as we can.

Mr. CONRAD. To support Mr. Woodbridge, we are also requesting one secretarial position.

Senator BARTLETT. Why?

Mr. CONRAD. This requested position is in the Urban Renewal Division. It is difficult in this division to keep up with the correspondence.

Mrs. Rowe mentioned that one of the reasons we are able to get through with so few secretries is we don't answer our mail. I don't agree with this, but it is difficult to answer our mail.

We feel the major need is for professional planners, because of our tremendous workload.

Functions of Temporary Commission

Senator Bartlett. Mr. Woodbridge, with regard to the Temporary Commission on Pennsylvania Avenue, will you please describe its functions, and indicate what it has accomplished with the small amount of funds made available to it last year?

Mr. Woodbridge. I would like to turn first to the Executive order establishing the Temporary Commission.

It is a 13-member Commission, including Cabinet officers and heads of agencies, with specific interest in the avenue.

With the appropriation we had this year, we have had a staff of up to four. Presently we have a staff of three. We have an acting staff of four, one of whom, myself, is not presently a Government employee.

The immediate objective of the Commission is to continue to develop reliable information on which decisions can be based. Technical data must be available for such agencies as the Planning Commission and for private individuals who must now make decisions affecting the development of Pennsylvania Avenue.

In the coming year, until such time as a permanent Commission may be set up by Congress, the Temporary Commission has to act as a guiding agency for an ever-increasing amount of private and public development in the area covered by the plan.

As interpreter and definer of this plan, the Commission must work constantly to adapt plans and work for the promotion of the plan.

Proposals indicate the Commission will have to more than double its staff in the coming year.

In the past, I have put in the record a progress report, which may be of interest in this respect, which we have been able to do with the cooperation of the Congress, the District, in fact, a list of people almost too numerous to mention, for the construction of a major element of the plan, the terminus at the Capitol end and a great reflecting pool at the base of Capitol Hill before the Grant Memorial.

This affects and involves the construction of the tunnel for the center leg of the Inner Loop Freeway underneath the Mall, and by enabling the design of the tunnel to be modified, the pool would be built as part of the construction project, and we have budgeted the amount in the construction for the tunnel.

We have also developed master plans for the Mall, that Secretary Udall has commissioned.

We have worked with the Fine Arts Commission and the General Services Administration on the proposed design for the building.

We have worked with the same agencies on the FBI Building, which has just been approved by the Planning Commission and is now prepared to go ahead for final design and construction drawings.

Way Smoothed for Future Developers

We have had a long, and we hope very helpful to future development, project with private developer Jerry Wolman, for a building

on the Raleigh Hotel site, which he developed and designed in conformance with the Pennsylvania Avenue plan. A number of existing building codes and Planning Commission policy had to be modified in order to enable this to go ahead.

We have done that, and with the building going ahead, we feel we have vastly smoothed the way for future developers. We feel many developers, once convinced the building on the Raleigh site is underway and cleared, will be coming to us.

Senator BARTLETT. Is that to be an office building?

Mr. WOODBRIDGE. Yes; it is.

We are anxious to develop as strong a variety as we can. The land cost in the area prohibits private developers from developing other types, because office buildings generally develop the highest returns.

When the Planning Commission gave original endorsement to the Pennsylvania Avenue plan, it requested further studies of specific areas, the proposed National Square being the chief one, the other being the height of buildings on the north side, which we have been working on, as I just described, with the Wolman building.

We are getting a firm policy on this. As to the National Square, we have been refining the design with the Fine Arts Commission and the temporary Commission itself. At the Planning Commission meeting next month, we will be presenting alternative schemes for this area, and hope to have a final report and recommendation on this area in the near future.

STUDIES DEALING WITH TRAFFIC AND HIGHWAY PROGRAM

Other studies and progress have to do with the coordination of the plan area with the citywide traffic and highway program which, I am sure you know, has been a matter of great concern to everyone in the District. We think that through cooperation with all the agencies, and considerable design work on our own part, we have been able to come up with the scheme that fits in with the total planning of the District, and will, in fact, prove to be a catalytic agent for getting a number of very desirable improvements in the traffic laws in the downtown area.

We are also developing detailed landscape and paving designs for the avenue, so that at such time as we can get the funds to actually undertake the improvements of the public lands under the plan, we will be ready to go.

The historic site designation by Secretary Udall in September was something the temporary Commission worked with the Department of the Interior on very closely, in research on the site itself, consideration of the boundaries, and as to how this might be administered.

The result of the concern for administration has been Senate Resolution 116 and House bill 78, that are now up here, and being considered by the Interior Committees, and we hope will result in the formation of a permanent Commission.

I would also add that any funds appropriated to the temporary Commission would automatically be turned over to the permanent Commission.

We are trying to get as much done as we can, to be ready for the time the permanent Commission is launched.

NEED FOR PERMANENT COMMISSION

Senator BARTLETT. You foresee the need for the permanent commission?

Mr. WOODBRIDGE. We do. First of all, we think it is essential that Congress express its concern for Pennsylvania Avenue, that the commission should be a congressional commission, and that its activities should be considered by Congress.

We think that the problems of administering the area really now defined by the historic site, of which Pennsylvania Avenue is the central spine, are complex enough and specialized enough—and I personally speak from some 3 years' experience in working on the original Pennsylvania Avenue plan, and on the Commission work since then—these problems are of a very specialized nature.

It is the nature of a plan like this that unless it keeps moving in a very active way, the day is likely to be lost. It is very hard to control both the Government and private sector in a coordinated way, and the burdens on existing agencies are great. While we all hesitate to recommend the formation of another commission to do something, I think in this area this need is clear.

PENNSYLVANIA AVENUE HISTORIC SITE

Senator BARTLETT. Have the boundaries of the Pennsylvania Avenue Historic Site been firmly decided upon?

Mr. WOODBRIDGE. They have. I have a small map here, and I am sure we can get more copies.

Mr. SHEAR. The boundaries of the historic site are set forth in the order.

Mr. WOODBRIDGE. There is a legal description attached to the order designating the historic site, which I can also present.

Senator BARTLETT. Can you supply that?

Mr. WOODBRIDGE. Yes, sir.

(The legal description follows:)

Now, therefore, with the concurrence of Lyndon B. Johnson, President of the United States, I, Stewart L. Udall, Secretary of the Interior, by virtue of and pursuant to the authority vested in me under the act of Congress approved August 21, 1935, do hereby designate the following described lands to be a National Historic Site having the name "The Pennsylvania Avenue National Historic Site":

"Beginning at a point on the southwest corner of the intersection of 15th Street and Constitution Avenue (NW), easterly along the south side of Constitution Avenue, to the southwest corner of the intersection of Constitution Avenue and Pennsylvania Avenue; then easterly along the south side of Pennsylvania Avenue to and including the outer circumference of First Street (NW) which forms an arc around Peace Monument; then westerly along the north side of Pennsylvania Avenue to the northeast corner of the intersection of 3d Street and Pennsylvania Avenue (NW); then northerly along the east side of 3d Street to the northeast corner of the intersection of 3d Street and E Street (NW); then westerly along the north side of E Street to the northeast corner of the intersection of E Street and 4th Street (NW); then northerly along the east side of 4th Street to the northeast corner of the intersection of 4th Street and G Street (NW); then westerly along the north side of G Street (NW) to the northwest corner of the intersection of G Street and 5th Street (NW); then southerly along the west side of 5th Street to the northwest corner of the intersection of 5th Street and E Street (NW); then westerly along the north side of E Street to the northeast corner of the intersection of E Street and 7th Street (NW); then northerly along the east side of 7th Street to the point on 7th Street being the intersection of the north side of G Street with

the east side of 7th Street (NW); then westerly from that point along the north side of G Street to the point being the intersection of the north side of G Street with the west side of 9th Street (NW); then southerly from that point along the west side of 9th Street (NW) to the northwest corner of the intersection of 9th Street and F Street (NW); then westerly along the north side of F Street to the northeast corner of the intersection of F Street and 11th Street (NW); then southerly along the east side of 11th Street to the northeast corner of the intersection of 11th Street and E Street (NW); then westerly along the north side of E Street to a point approximating what would be the northeast corner of E Street and 13½ Street if the latter were extended north across Pennsylvania Avenue; then northerly from that point along a line forming a perpendicular to F Street, to the intersection of said line with the north side of F Street; then westerly along the north side of F Street to the northeast corner of the intersection of F Street and 15th Street (NW); then northerly along the east side of 15th Street to the southeast corner of the intersection of 15th Street, New York Avenue, and Pennsylvania Avenue (NW): then westerly along the south side of Pennsylvania Avenue to the southwest corner of Pennsylvania Avenue and East Executive Avenue; then southerly along the west side of East Executive Avenue to a point which would be the southwest corner of the intersection of East Executive Avenue and E Street; then easterly along the south side of E Street to the southwest corner of the intersection of E Street and 15th Street (NW); then southerly along the west side of 15th Street to the point or place of beginning."

Subject to the limitation contained in the second sentence of this paragraph, the administration, protection, and development of this national historic site shall be exercised in accordance witth the provisions of the act of August 21, 1935. Unless provided otherwise by act of Congress, no funds appropriated to the Department of the Interior shall be expended for the administration, protection, and development of the Pennsylvania Avenue National Historic Site.

In witness whereof, I have hereunto set my hand and caused the official seal of the Department of the Interior to be affixed in the city of Washington, District of Columbia, this thirtieth day of September, 1965.

STEWART L. UDALL,
Secretary of the Interior.

I Concur:

LYNDON B. JOHNSON,
President of the United States.

SEPTEMBER 30, 1965.

PERMANENT COMMISSION SHOULD BE ORGANIZED AS SOON AS POSSIBLE

Senator BARTLETT. When do you believe this permanent commission should be organized? Right away?

Mr. WOODBRIDGE. As soon as possible.

The problem now is that we are in a cooperative undertaking, as we see it. Pennsylvania Avenue is the greatest street in the Nation, and everyone, both Government and private, should be interested in it.

That has proven true to the point we think we have enough firm interest to actually rebuild the area without the rather cumbersome procedures that are normally necessary to renew a downtown area.

In other words, the speculative interest in the private sector is strong enough that they have gone ahead. In the case of Mr. Wolman, even under considerable odds he has gone ahead to develop, and we have assurance this can go on.

But the status of the plan, and the determination of the Government to back it to the fullest possible extent, are still somewhat in doubt.

The Temporary Commission, after all, is a Presidential appointment, and has to remain temporary. The real need is for, I would say, enhanced status for the whole plan.

This is really what a great many private individuals are waiting for.

Senator BARTLETT. Is the Federal Government cooperative in respect to the activities of the Temporary Commission?

Mr. WOODBRIDGE. I would say they have been extremely cooperative. The Commission and GSA, who has been involved in Government construction projects, have worked tremendously hard.

In the case of the FBI Building—which started out to be a rather monolithic, enclosed building—suggesting, naturally, the functioning of the FBI, it is now to be an open and welcoming space, with broad pedestrian areas, which the public would be welcome in.

This is the whole Pennsylvania Avenue idea. There should not be enclosed spaces. Criticism is sometimes leveled at the Federal triangle, that it is an enclosed area.

Senator BARTLETT. Is the District government similarly cooperative?

Mr. WOODBRIDGE. The District government has actually come to us to ask us to help in its long-range planning for the proposed District center on John Marshall Place.

Senator BARTLETT. Thank you very much.

SUPPLEMENTAL APPROPRIATION FOR FISCAL YEAR 1966

Mrs. Rowe, I note your statement that a supplemental appropriation for fiscal year 1966 is anticipated. How much do you propose to request, and what is the purpose of the supplemental estimate?

Mrs. ROWE. The request is for $68,000, and Mr. Conrad will speak to the individual items.

Mr. CONRAD. There are two parts to the supplemental request, one of which is the pay increase cost under Public Law 83–901. This amounts to $18,000 during the current fiscal year.

The second part of the supplemental request deals with funds for publications. "The 1965–85 Proposed Physical Development Policies for Washington, D.C., "has just been published. This cost the Commission $17,544.09.

We had budgeted for publications for the entire fiscal year $15,000, so this is already more than $2,000 over that budget.

Also within fiscal year 1966 we are to publish a proposed comprehensive plan for Washington, D.C., which will be the Commission's development recommendations to the various Federal and District agencies, as well as to the citizens of the District of Columbia. This will cost in excess of $17,000, which was the amount of this publication.

We also have consultant reports that should get to the public, as well as to the interested Federal and District agencies. These include the Fort Park system, the District of Columbia landscape plan, which is a methodology on how to accomplish a District of Columbia landscape plan and which is part of Mrs. Johnson's beautification study.

We also have a report by Victor Gruen on the urban design of a transit stop.

We have staff reports we would like to publish, such as the special street study on Pennsylvania Avenue SE. between Barney Circle and the Capitol, and the special place study of the Dupont Circle area. We have already published one special street study on Virginia Avenue

NW., to beautify the avenue and to coordinate the public and private developments adjacent to it.

COMMISSION PUBLICATIONS

Senator BARTLETT. Let me look at that. I have to drive that twice a day, and want to see what we are going to get.

Mr. CONRAD. Here is also a Fort Park report we would like you to have.

Under the normal publication and the reproduction costs, we figure this will come to $50,000. The total supplemental is $68,000, $50,000 for publications, and $18,000 for the increased cost on the pay increase.

PRINTING COSTS OF "THE 1965-85 PROPOSED PHYSICAL DEVELOPMENT POLICIES FOR WASHINGTON, D.C."

Mrs. ROWE. This document we anticipated was going to cost $5,000, and it appeared in our budget at $5,000. What happened is the publication ate up more than the total publication budget for the whole year.

Senator BARTLETT. That cost $17,000?

Mr. CONRAD. Yes.

Senator BARTLETT. Who printed it?

Mr. CONRAD. GPO.

Senator BARTLETT. How many copies were printed?

Mr. CONRAD. 5,000 copies.

Senator BARTLETT. Why did you need that many?

Mr. CONRAD. We felt this was a suitable amount to foster public discussion. It was published early so the people of the District could see what policies were being discussed for their city.

For the next comprehensive planning document we will need more than 5,000 copies printed. This is the Commission's planning proposal to the District in detail. We will need approximately 10,000 copies printed at that time.

Senator BARTLETT. How many of the 5,000 copies have been distributed?

Mr. CONRAD. We have, I believe, approximately 100 left.

Mrs. ROWE. Miss Small has that figure.

Miss SMALL. We have 65 left.

Senator BARTLETT. Do you charge for this?

Mr. CONRAD. No, sir. The Government Printing Office does charge for these documents. One of its bestsellers has been the "Year 2000 Plan," which the Commission published, I believe, 4 or 5 years ago. GPO is still getting requests for the "Year 2000 Plan," this document being the first step in the process of getting a comprehensive plan for our Nation's Capital.

I don't believe the Printing Office will have the same demands in the future for the proposed 1985 physical development policies for Washington, D.C. However, the first edition of the official comprehensive plan for Washington, D.C., when published, will have a substantial demand.

Senator BARTLETT. Have you sent that out only on a request, or have you done like the Farmer's Bulletin, made a definite effort to get them out to all?

Miss SMALL. We sent them out in answer to requests. But immediately after publication we made an effort to get copies to every civic and citizens organization in the District of Columbia, and in return have received comments and letters from nearly every civic and citizens organization.

RISE IN PRINTING COST ATTRIBUTED TO DEADLINE

Senator BARTLETT. Why was the price so much higher than the estimate?

Mr. CONRAD. There were numerous things that caused the price to be higher than the estimate. One was the need for color within the book, and the many maps that were presented in order to convey the physical development policies.

Another thing that caused the cost to go up was that we had a deadline to meet, and as a result there was overtime by our staff, as well as GPO, to get the document out on time.

I think the combination of these two things, plus underestimating in the beginning, was the cause of the difference between $5,000 and $17,000.

Senator BARTLETT. Was there an absolute need for color?

Mr. CONRAD. Yes, sir.

Senator BARTLETT. Why?

Mr. CONRAD. In a planning document like this, it is very difficult to bring out the plan implications solely by black and white tone.

This is just a two-color report.

As far as the cost of the color in this book, although it contributed to the cost, it is not a major amount. The major amount was the overtime plus the underestimation in the beginning.

TIMING OF REPORTS

Senator BARTLETT. Why did you have to have it out by a certain time?

Mr. CONRAD. We have a program to meet, and are required to have the proposed plan out the middle of this year, plus the official plan adopted by the end of the year. This is a schedule adopted by the Planning Commission.

We were already a year behind in getting this report out, and it was a case of making this deadline.

Senator BARTLETT. Why were you a year late in getting the report out?

Mr. CONRAD. Because of the magnitude of the problem itself in developing the comprehensive plan for the District of Columbia.

Mrs. ROWE. I think one of the big problems is so many projects coming up to a small staff that required immediate review by the staff and by the Commission, that the long-range plan which is reflected in this report is delayed because you have to take the people working on the long-range plans in order to review the Federal plans and the District plans on a project basis.

I understand this is a problem of planning commissions all over the country. I talked to the planners in Puerto Rico, and they said they had decided to put their long-range planners in a special room and

close all doors during their working day, so they could just produce a long-range plan, and not be taken off on projects.

I think this is really the big problem.

Senator BARTLETT. Do the planners write the book, or professional writers?

Mr. CONRAD. The writing itself is done by the professional staff with editorial help in writing the document itself.

Senator BARTLETT. Who is the editor or chief editor?

Mr. CONRAD. We have a consultant by the name of Henry M. Bain, Jr., who helped us edit this report.

Senator BARTLETT. Is it possible that this delay was caused by the shortage of secretarial help?

Mr. CONRAD. In all fairness to the secretaries; no, sir.

Senator BARTLETT. We shall now turn to another subject.

MAJOR PROGRAM OBJECTIVES

Will you, Mrs. Rowe, outline the major program objectives for the next fiscal year?

Mrs. ROWE. This report—this is the first step. Our main program objective is the completion of the comprehensive plan by the end of this year. This is the first step.

By June we hope to have the draft report, and by the end of the year we hope to have the comprehensive plan for the city, which will then go to the District Commissioners.

This includes other projects and the other plans, but this is the big program.

Mr. CONRAD. May I supplement that?

Senator BARTLETT. Surely.

Mr. CONRAD. Pages 8 to 10 of the justification outlines the fiscal year 1967 Commission program. I might highlight a few of these items for you.

The 1985 comprehensive plan is the major responsibility we do have. However, we also have the responsibility of developing a 40-year plan. We will be starting once more to bring into focus the 40-year plan, upon completion of the plan for the 20-year period.

We would also like to undertake the first year of a 2-year study to develop and initiate a program for landmarks. Miss Small, a member of our staff, has been heading up this program.

We would like to develop a program to preserve landmarks which the District has and to date has no means of protecting them.

Our program also provides for urban renewal projects such as working with Mr. Woodbridge on Pennsylvania Avenue and a feasibility study for the downtown area. These items will receive quite a bit of our attention, as well as the community renewal program to be approved by the District Commissioners for certain sections of the city.

We are also going to be working very closely with the National Capital Transportation Agency. As you know, their "bobtail" plan has been approved, and the Commission has recommended approval of their budget, as referred by the Bureau of the Budget.

As a further function of the Commission, we analyze the locations of the lines themselves, plus the transit stops and their implication on land use and access.

We will be working with the National Capital Transportation Agency in furthering their program for a rapid rail system for the District of Columbia.

We are going to be working in the cooperative transportation planning process to insure overall transportation for the metropolitan area, as well as the District.

We are also making additional studies of Federal land holdings in the District, at the request of the Bureau of the Budget.

We are also pushing very vigorously a program for the preservation of the banks of the Potomac River, as well as working with Secretary Udall in his program for the Potomac River Basin study.

We are members of several of his subcommittees, and will be doing this during fiscal 1967.

We would also like to dig deeper into things that cause the population and land use changes in the District of Columbia. This will require improving our research section in order to more adequately analyze the housing problems in the District. This will enable the planning mechanism to come in closer tune with the needs of the people.

There are requests from other agencies that we will be working on in the coming fiscal year. We will continue to help in the beautification program of Mrs. Johnson. We will continue to review the projects referred to us by the Federal agencies, as well as District agencies, for location, preliminary site plan approval, and in lieu of zoning actions.

We will continue to work very closely with the Department of Defense. They have requested that all the Department of Defense agencies in the metropolitan area prepare master plans, and to coordinate these plans with the Planning Commission, so they are in keeping with the orderly development of the Nation's Capital.

These are some of the things for fiscal 1967.

Senator BARTLETT. No shortage of work on plans?

Mr. CONRAD. No, sir.

SUBWAY RAPID RAIL SYSTEM

Senator BARTLETT. I note that one of your statutory responsibilities is to initiate planning studies to provide the necessary framework for decisions on the subway rapid rail system as it pertains to exact route and station locations.

Do I understand from this statement that although Congress has already appropriated money on the basis of route locations submitted to it, these are not firm, and you must yet decide just where the rapid rail transit will run, and where the terminals will be?

Mr. CONRAD. The Planning Commission has approved the "bobtail" system as presented to it by the National Capital Transportation Agency. This was part of the budget review of the NCTA's program.

This was a preliminary study. The locations as shown in this "bobtail" system are generally where they will be located.

When we speak of specific alinement, this is exactly where it will be in that corridor, and we would try to tie the particular station to the particular corner in the locality where it would be located, and to relate it to the land use around that area.

This is a difficult assignment and this is what we will be working with the National Capital Transportation Agency to obtain.

Senator BARTLETT. If it all went well, do you have any idea when that system might be completed?

Mr. CONRAD. I would say the "bobtail" system might be completed by 1972. This is a guess, sir.

Senator BARTLETT. How did they come to acquire that title, "bobtail"?

Mr. CONRAD. There was a system that reached out into the environs in Maryland and Virginia. This was a complete system of rapid rail. But you have to start somewhere, and the place to start rapid rail is the center of the city, and then reach to the suburbs.

It is not a complete system, and I guess that is why it earned the name as a "bobtailed" system.

The full system is recommended in our report on development policies for 1985, and we will be working with the NCTA, as well as Virginia and Maryland, to extend these lines out from the District.

Senator BARTLETT. What is the estimated total cost of the complete system?

Mr. CONRAD. I would have no idea.

Senator BARTLETT. That is not set forth there?

Mr. CONRAD. No.

Mrs. ROWE. I just learned that the origin of the term "bobtailed" system was Congressman Whitener's own way of describing it. He described it as a bobtailed system.

Senator BARTLETT. Well, he ought to have his name placed on some plaque somewhere.

Mrs. ROWE. I can tell you the residents of the District of Columbia are very grateful to him for the work he did on getting this bobtailed system.

CONTRACTS WITH EXPERTS

Senator BARTLETT. How many special experts did you retain during fiscal year 1966 thus far, and how much have you expended for their fees?

Would you put it in the record, please?

Mr. CONRAD. We will supply that.

(The information follows:)

	Date	Amount
Fiscal year 1966 contracts for experts and consultants, to date:		
A. M. Voorhees & Associates parking study	Oct. 15, 1965	$4,000
(Pending) Robert Gladstone & Associates, Georgetown market study		5,000
Noncontract items for experts and consultants, to date:		
Henry M. Bain, Jr., Purchase Order No. 11, draft of text for preliminary 1985 comprehensive plan.	July 1, 1965	2,150
Henry M. Bain, Jr., Purchase Order No. 45, report regarding design of urban transportation system.	Aug. 4, 1965	950
Henry M. Bain, Jr., Purchase Order No. 221, 2 reports contributing to formulation of the 1985 comprehensive plan.	Jan. 14, 1966	2,000
Robert Gladstone[&]Associates, Purchase Order No. 135, poupiation matrices.	Oct. 14, 1965	2,500
Robert Gladstone & Associates, Purchase Order No 139, eastern market study.	Oct. 18, 1965	2,500
Total, all items		19,100
Pennsylvania Avenue funds:		
Larry Smith & Co., economic study		4,000
(Pending) Dan Kiley, landscaping study		10,000
Total, Pennsylvania Avenue		14,000

STUDY ON BEAUTIFICATION PROGRAM

Senator BARTLETT. How many do you expect to retain for 1967? Perhaps you will have to make an inquiry there.

Mr. CONRAD. I would like to speak to this.

We do request an increase in the appropriation for experts in fiscal year 1967. In 1967 we expect to complete the landscape plan for the District of Columbia, which started this fiscal year.

We had Mr. Ian McHarg, from the University of Pennsylvania, make this study for us. It is in connection with Mrs. Johnson's beautification program. This is the first half of the report, and we would like to complete the report in 1967.

His present contract for fiscal year 1966 is for $15,000, and I am sure the price for completion would be around $15,000, too.

We would have an expert for the special work for the modifications in zoning necessary to comply with the comprehensive plan. This would be not only to dig into the zoning necessary, but also to see if there are any new types or methods of zoning which would accomplish some of the purposes of the comprehensive plan, such as the uptown centers that are planned as rapid transit stops; how do you design these to fit the comprehensive plan?

This is different from methods in use today, and we would like some additional expertise.

We have some specific plans for transit stops, too, and these are the type of things we would like these experts to go into.

In fiscal 1966, there were needs for experts which we did not expect. For instance, we were asked to go into the problem of the Eastern Market and the Georgetown Market, and the District government was wondering whether it should hold these markets, or let them go.

There was discussion on both sides. "Well, there is no need for these markets any longer. The farmers do not come in and show their produce here any more."

Before we could make a decision, we brought in a market analyst to study these problems. As a result, the Eastern Market is being retained, and people are very happy out there that we are retaining the market.

That has been the result of one of these market studies. We also have a consultant study underway on the Georgetown Market.

This is a landmark, and it is felt if it could be put into function as a market once more, it would be an asset.

The same question has come up: Is there a market for its use? Once more we have to get expertise, and a consultant is studying this market for us.

If you had asked us before fiscal 1966 if we would be doing this, we would have said "No." In fiscal 1967, there will also be this type of need.

Senator BARTLETT. I applaud the Commission's decision in the first instance and what I interpret to be the intention of the second.

Mrs. ROWE. Thank you.

You might be interested to have a copy of that Eastern Market study. We will send you a report.

Senator BARTLETT. Thank you.

BUREAU OF STANDARDS SITE

One of the special Federal studies which you are conducting now is a use for the old Bureau of Standards site on Connecticut Avenue. What is the status of that study at this time, and when do you expect that it will be completed?

Mr. CONRAD. The Bureau of Standards is moving out of the site, which brings up the question, What should this site be used for? And we are working with GSA on this program right now.

There is an interim program as well as a future program. The interim program is to use some of the structures on the site which, with minimum funds, can be rehabilitated, for the Weather Bureau until such time as the Weather Bureau can move to permanent quarters. For the next 8 or 10 years this site would provide accommodations for the Weather Bureau.

The ultimate use for this site is not determined. The policy document suggests that it be a Federal employment center for up to 8,000 employees.

There is a transit stop planned in the middle of the Bureau of Standards site.

Senator BARTLETT. You mean in this new system?

Mr. CONRAD. Yes, sir. This would provide the access for intensive Federal use on this site.

It is also hoped that certain portions will be retained in its natural state. There is some natural growth which is just beautiful and which contributes to the whole community.

We are also exploring the possibility that perhaps certain sections of this tract could go to private use, such as apartments or townhouses. These could blend in with the single-family-residence area that surrounds it. This is what we call an uptown center in our overall comprehensive plan.

There has been no decision on this. The specific decision is to program over an 8- or 10-year period accommodations for the Weather Bureau.

LANDMARKS PROGRAM

Senator BARTLETT. A new program which you propose to initiate is a study of landmarks in the Nation's Capital. How much do you propose to expend for this program, and how much of that is necessary in the coming fiscal year?

Mr. CONRAD. We are requesting $50,000 in the 1967 fiscal year budget, and $50,000 in the 1968 fiscal year budget, so it is a 2-year program.

Miss Small, here, who is "Miss Landmarks," will be glad to fill you in on where we are, and some of the implications of the landmarks problem.

Senator BARTLETT. I want to know.

Miss SMALL. As you know, we identified over 290 historic buildings and landmarks as well as several historic areas in the District of Columbia, and hope within the next 2 years to get the necessary legislation to preserve and protect the buildings and areas.

This has a high priority on our list.

During this time we will be making case studies of several typical landmarks in order to determine what kind of financial assistance would be necessary to owners to enable them to preserve buildings, and

still develop something on the site, or merely preserve the building and keep it in a use compatible with the landmark.

Senator BARTLETT. Do other cities have similar programs?

Miss SMALL. New York and Philadelphia have landmark or preservation legislation, but it isn't as effective as we hope our legislation will be.

They can merely ask for delay in granting of a demolition permit. We hope we can offer additional incentives to owners of landmarks to preserve them.

Mrs. ROWE. I might add to what Miss Small said.

We do have a committee of public-minded citizens who volunteer and serve on a landmarks committee. It is made up of architects, historians, and others interested in the city's landmarks, who have given a great deal of their time for this purpose, just out of the goodness of their hearts.

Senator BARTLETT. That is very encouraging to learn this.

Does this activity duplicate the landmarks program of the National Park Services?

Mrs. ROWE. We have a letter, Mr. Chairman, from the head of the Park Service on this very point, and I would like permission to introduce it into the record.

The Director is an enthusiastic supporter of this program as well as his own, and feels they are complementary to each other. His national landmarks work in no way duplicates the kind of landmark program we are working on.

Senator BARTLETT. The letter will be placed in the record.

(The letter follows:)

DEPARTMENT OF THE INTERIOR,
NATIONAL PARK SERVICE,
Washington, D.C., April 19, 1965.

HON. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: I have just learned from Mrs. James H. Rowe, Jr., Chairman of the National Capital Planning Commission, of the House's elimination of the Commission's request for $50,000 to support its landmarks program. The House Appropriations Committee reasons, as stated in its report, for the elimination of this item was that the work should be done by the Park Service.

The National Park Service, though its ex officio membership on the Planning Commission, has supported the Commission's program to identify landmarks of the National Capital as a first step to the preservation and protection of landmarks and historic areas and the development of necessary legislation. The Park Service's historic sites and historic American buildings survey programs are national in scope and embrace areas, structures, and objects associated with persons and events of national historic significance. The National Park Service will continue to encompass within these programs those landmarks in the District of Columbia which merit consideration for their national importance.

The landmarks program proposed by the Natonal Capital Planning Commission would, on the other hand, identify many landmarks, not necessarily commemorating national history, but nevertheless of importance and of public interest as a part of the local or regional scene. Thus, the two programs do not duplicate but supplement each other. The Park Service is working closely with the landmarks committee.

It seemed appropriate for me to make the record clear at this time—that there is no duplication of efforts in the Planning Commission's and the Park Service's programs. On the other hand, we are enthusiastic supporters of the Planning Commission's work on the National Capital's landmarks.

Sincerely yours,

(S) GEORGE B. HARTZOG, *Director.*

NATIONAL PARK SERVICE

Senator BARTLETT. Does the National Park Service do any landmark work at all in Washington, D.C.?

Miss SMALL. I believe the current budget of the Park Service requests funds to make measured drawings and photograph several national landmark buildings that have been identified as having national significance, by the Park Service. They will merely make a record of those buildings, and this record will be placed on file in the Library of Congress.

However, this does not offer any protection to the buildings, and the owner may tear down the building at any time.

This program, the historic American building survey, is a record of historic buildings, significant buildings, but offers no protection.

Senator BARTLETT. It is a notation for history?

Miss SMALL. That is right.

DESIGN STUDY OF CAPITOL HILL

Senator BARTLETT. You also propose to accomplish a design study of Capitol Hill. How long do you expect that this study will require, and what is its total cost?

Mr. CONRAD. We have $40,000 included in our budget request for a Capitol Hill study. We have been up to Capitol Hill to talk to Mr. Stewart, and perhaps Mrs. Rowe would like to give you an account of our discussion with him.

Mrs. ROWE. Mr. Stewart said he would welcome working with the Planning Commission on developing a plan for this area of the city.

As you may know, the Capitol Grounds, the Capitol Hill, and its environments, are exempt from the planning jurisdiction of our Commission.

Senator BARTLETT. No, I didn't know it. Do you know why this is so?

Mrs. ROWE. It is in our basic statute. It is spelled out there. So we hoped we could have a cooperative planning venture with the Architect of the Capitol, and have it incorporated as part of the comprehensive plan.

Senator BARTLETT. Does the Architect of the Capitol have authority in this planning?

Mrs. ROWE. Yes. This plan would reflect the growth of the Congress in the area that would be anticipated as needed.

It is very important to us, because in our preliminary plan we suggest a large development of Federal offices south of the Capitol, between the Capitol and the Anacostia River. And how close we can get to the Capitol in making such a plan is something we would like to work with the Capitol Architect on.

Senator BARTLETT. Mr. Stewart is enthusiastic about this cooperative effort?

Mrs. ROWE. He said he would be pleased to work with us on it.

Senator BARTLETT. Is the cost of this study supported by the legislative branch in the Federal Government?

Mrs. ROWE. I really don't know what Mr. Stewart's budget would be for this purpose. I have no information on that.

STATEMENT OF WILLIAM J. STEVENS, CHAIRMAN, NATIONAL CAPITAL REGIONAL PLANNING COUNCIL

Senator BARTLETT. Now, the committee will be glad to hear from the representative from the National Capital Regional Planning Council, Mr. Stevens.

Mr. STEVENS. I have a statement here. It is not too long, and in the interest of time I will summarize it.

Senator BARTLETT. Read it, if you prefer.

Mr. STEVENS. Very well. I will read the entire statement.

As indicated in the budget document, the Council's statutory responsibilities fall into three basic categories: First, the preparation and maintenance of a general development plan for the region; second, the initial review of proposed Federal installations which are to be located beyond the District of Columbia's boundaries; and third, the coordination of the planning efforts of the official local and subregional planning agencies, and the various special purpose agencies, to insure the conformance of all of their proposals to the general development plan.

I have brought along two graphic illustrations of some of the current work of the Council which depict each phase of our basic responsibilities as established by Congress in 1952. The first chart shows the composite land use plan developed during 1965 by the staff, and now before our executive committee for review and comment. During the past 2 years the council has worked on studies necessary for the creation and adoption of an up-to-date general development plan. These included the demographic and economic analyses of the region; the updating of a master transportation system as expressed in the 1959 mass transportation study; the evaluation of the jurisdictions' financial capabilities singularly and collectively; the exchange of information and planning data through the publication of a semimonthly bulletin; the personal liaison with local governments and their various agencies; the liaison with various regional and/or interstate agencies and groups; the continued review of local plans and those of special purpose agencies and groups; and the review of new Federal facilities—all in the light of, and in relation to, the year 2000 plan and the earlier general development plan adopted in 1958.

As part of the Council's work in the initial review of proposed Federal installations outside the District boundaries and within the National Capital region, during the past 2 years we have studied and recommended four such installations as they relate to local and regional plans. These are graphically shown on an overlay over the composite land use plan.

The sites include the National Institutes of Health, Bethesda, Md.; Cameron Station, Alexandria, Va.; Fort Belvoir, Va., and the Defense Intelligence Agency, Arlington Hall, Va. Presently on our agenda is the master plan of Andrews Air Force Base in Prince Georges County, Md.

With regard to coordination of the planning efforts of the local and subregional planning agencies, the example I have brought deals with the coordinated open space program for the region. As you may know, in 1963 the Council in conjunction with the National Capital Planning Commission and the Metropolitan Washington Council of Governments entered into a memorandum of agreement with all of the public bodies exercising or participating in the exercise of responsi-

bilities for the preservation of open space land in the National Capital region. To date, we have reviewed and determined to be consistent with the open space policies established 183 applications for acquisition and development funds, which amounts to a total of $35.8 million.

We consider this program and our coordination work as one of the more successful aspects of our current work.

The publications shown here have been distributed throughout the entire region, and are on our most popular list. The benefits of this program are now beginning to be seen through actual land acquisitions and physical development projects.

As for our program in fiscal year 1967, we propose to further refine or detail the general development plan and phase in regional social planning working with the United Planning Organization and other citizens groups; continue the action program for open space acquisition and development; strengthen the implementation of an agreed upon regional plan through improved methods of coordination with public and private groups; and establish a stronger and more effective clearinghouse for information on plans, projects, proposals, and policies of governmental and private organizations which have a direct relation to the growth and development of this region.

RANKING OF MAJOR STANDARD METROPOLITAN STATISTICAL AREAS

We are not requesting any increase in our appropriations over that appropriated for fiscal year 1966. We feel that the program I have just outlined can be carried out within the current level of appropriations. For comparative purposes I would like to present data indicating the trend and level of planning funds for the 15 major metropolitan areas in the United States.

(The information follows:)

By population	Number of persons	By area	Square miles
1. New York, N.Y. (Jersey City, Newark, Paterson-Clifton-Passaic, and Trenton, N.J.; Bridgeport, New Haven, Norwalk, Stamford, and Waterbury, Conn.).	17,000,000	1. Los Angeles-Long Beach, Calif.	9,000
2. Los Angeles-Long Beach, Calif.	7,750,000	2. New York, N.Y. (Jersey City, Newark, Paterson-Clifton-Passaic, and Trenton, N.J.; Bridgeport, New Haven, Norwalk, Stamford, and Waterbury, Conn.).	7,750
3. Chicago, Ill.	6,220,000	3. San Francisco, Oakland, Calif. (San Jose).	6,990
4. Philadelphia- Pa.-New Jersey	4,610,000	4. Seattle, Wash. (Tacoma)	6,313
5. Detroit, Mich. (Ann Arbor)	4,035,920	5. Pittsburgh, Pa.	4,501
6. San Francisco-Oakland, Calif. (San Jose).	3,638,939	6. Philadelphia, Pa.-N.J.	3,783
7. Boston, Mass. (Brockton, Lowell, Worcester, Lawrence-Haverhill, Mass.-N.H., and Providence-Pawtucket, R.I.-Mass.).	3,400,000	7. Chicago, Ill.	3,714
8. Pittsburgh, Pa.	2,599,598	8. St. Louis, Mo.-Ill.	3,567
9. Washington, D.C.-Md.-Va.	2,064,090	9. Detroit, Mich. (Ann Arbor)	3,250
10. St. Louis, Mo.-Ill.	2,000,000	10. Minneapolis-St. Paul, Minn.	2,813
11. Baltimore, Md.	1,803,745	11. Milwaukee, Wis. (Kenosha, Racine).	2,628
12. Milwaukee, Wis. (Kenosha, Racine).	1,573,614	12. Baltimore, Md.	2,362
13. Minneapolis-St. Paul, Minn.	1,525,297	13. Washington, D.C.-Md.-Va.	2,360
14. Seattle, Wash. (Tacoma)	1,500,000	14. Boston, Mass. (Brockton, Lowell, Worcester, Lawrence-Haverhill, Mass.-N.H., and Providence-Pawtucket, R.I.-Mass.).	2,200
15. Atlanta, Ga.	1,017,000	15. Atlanta, Ga.	1,724

[In thousands of dollars]

Budgeted or appropriated, 1965	Amount	By budget, 1963	Amount	By revenue, 1962	Amount
1. New York, N.Y. (Jersey City, Newark, Patterson-Clifton-Passaic and Trenton, N.J.; Bridgeport, New Haven, Norwalk, Stamford and Waterbury, Conn.)	$4,100.0	1. Boston, Mass. (Brockton, Lowell, Worcester, Lawrence-Haverhill, Mass.-N.H., and Providence-Pawtucket, R.I.-Mass.)	$5,060.0	1. New York, N.Y. (Jersey City, Newark, Patterson-Clifton-Passaic and Trenton, N.J.; Bridgeport, New Haven, Norwalk, Stamford and Waterbury, Conn.)	$2,732.0
2. Los Angeles-Long Beach, Calif	1,263.9	2. New York, N.Y. (Jersey City, Newark, Patterson-Clifton-Passaic and Trenton, N.J.; Bridgeport, New Haven, Norwalk, Stamford and Waterbury, Conn.)	2,752.0	2. Philadelphia, Pa.-N.J	760.0
3. Philadelphia, Pa.-N.J	933.0	3. Philadelphia, Pa.-N.J	825.0	3. Atlanta, Ga	460.1
4. Milwaukee, Wis. (Kenosha, Racine)	772.1	4. Milwaukee, Wis. (Kenosha, Racine)	784.4	4. Los Angeles-Long Beach, Calif	385.5
5. Minneapolis-St. Paul, Minn	583.7	5. Los Angeles-Long Beach, Calif	535.1	5. Chicago, Ill	350.2
6. Chicago, Ill	422.0	6. Minneapolis-St. Paul, Minn	365.8	6. Minneapolis-St. Paul, Minn	215.8
7. Atlanta, Ga	328.6	7. Chicago, Ill	316.5	7. Milwaukee, Wis. (Kenosha, Racine)	142.3
8. Baltimore, Md	317.6	8. Atlanta, Ga	260.2	8. Detroit, Mich. (Ann Arbor)	118.8
9. San Francisco-Oakland, Calif. (San Jose)	[1] 278.5	9. Pittsburgh, Pa	228.7	9. Washington, D.C.-Md.-Va	88.3
10. Pittsburgh, Pa	253.7	10. Detroit, Mich. (Ann Arbor)	120.3	10. Seattle, Wash. (Tacoma)	63.0
11. Detroit, Mich. (Ann Arbor)	149.2	11. Washington, D.C.-Md.-Va	97.7	11. Baltimore, Md	45.0
12. Washington, D.C.-Md.-Va	108.0	12. Baltimore, Md	83.4	12. Pittsburgh, Pa	43.5
13. St. Louis, Mo.-Ill	88.1	13. St. Louis, Mo.-Ill	75.0	13. St. Louis, Mo.-Ill	40.0
14. Seattle, Wash. (Tacoma)	76.7	14. Seattle, Wash. (Tacoma)	67.0	14. Boston, Mass. (Brockton, Lowell, Worcester, Lawrence-Haverhill, Mass.-N.H., and Providence-Pawtucket, R.I.-Mass.)	[2]
15. Boston, Mass. (Brockton, Lowell, Worcester, Lawrence-Haverhill, Mass.-N.H., and Providence-Pawtucket, R.I.-Mass.)	[2]	15. San Francisco-Oakland, Calif. (San Jose)	35.0	15. San Francisco-Oakland, Calif. (San Jose)	[2]

[1] Does not include 450,000 Federal, State, and local grants in cooperation with bay area transportation.

[2] Not available.

RATE OF GROWTH IN WASHINGTON METROPOLITAN AREA

Mr. STEVENS. The data show that although the Washington region is 9th in population at present, we are 12th in planning appropriations. In fact, the figures indicate that since 1962, the ranking of the appropriations for the National Capital region has declined from 9th to 12th place.

The Washington metropolitan area finds itself to be the fastest growing large metropolitan area in the United States. Additional employment opportunities mean more people who require new houses, schools, transportation systems, utilities, commercial establishments, cultural facilities, et cetera. All must be appropriately anticipated—planned for—or congestion and confusion will result.

While the Regional Planning Council's responsibilities do not include the finite and detailed input required by the local jurisdictions' planning effort, its work and scope is, nevertheless, increasing with each year. However, the budget and staff resources at its disposal remain among the smallest of any overall metropolitan program in the country serving areas of comparable size.

Let me thank you for your consideration of our budget request and for the support you have given us over the past several years. It is hoped you will approve our request as submitted.

Thank you.

Senator BARTLETT. Thank you for your statement, Mr. Stevens.

Mr. Stevens, what do you estimate the population of Metropolitan Washington to be at this time?

Mr. STEVENS. Two million six hundred thousand at this time, Senator.

GEORGE WASHINGTON MEMORIAL PARKWAY

LAND ACQUISITION, NATIONAL CAPITAL PARK, PARKWAY, AND PLAYGROUND SYSTEM

Senator BARTLETT. There will be placed in the record the budget justification for an appropriation of $6,100,000 for land acquisition.

(The justification follows:)

In the message from the President of the United States transmitting "A Message on Natural Beauty of Our Country" to the Congress of the United States on February 8, 1965, he referred to the Potomac River in these terms:

"The river rich in history and memory which flows by our Nation's Capital should serve as a model of scenic and recreation values for the entire country. To meet this objective I am asking the Secretary of the Interior to review the Potomac River Basin development plan now under review by the Chief of Army Engineers, and to work with the affected States and local governments, the District of Columbia, and interested Federal agencies to prepare a program for my consideration.

"A program must be devised which will * * * (d) Complete the presently authorized George Washington Memorial Parkway on both banks."

Section 2 of the act approved June 6, 1924 (43 Stat. 463) authorizes and directs the Commission "to acquire such lands as in its judgment shall be necessary and desirable in the District of Columbia and adjacent areas in Maryland and Virginia, within the limits of the appropriations made for such purposes, for suitable development of the National Capital Park, Parkway, and Playground System."

The $6,100,000 requested in this budget estimate is for the George Washington

Memorial Parkway established by the act of May 29, 1930 (46 Stat. 482) (the Capper-Cramton Act), as follows:

Fairfax County, Va	$3,200,000
Prince Georges County, Md	2,900,000
Total	6,100,000

Funds requested herein are the Government's one-half matching share and matching contributions will be received from the local jurisdictions.

Section 1(a) of the act provides "for the George Washington Memorial Parkway, to include the shores of the Potomac and adjacent lands, from Mount Vernon to a point above the Great Falls on the Virginia side * * * and from Fort Washington to a similar point above the Great Falls on the Maryland side except within the District of Columbia, and including the protection and preservation of the natural scenery of the gorge and the Great Falls."

In consultation with the National Park Service and the Interior Department's task force on the Potomac River Basin Development Plant, it has been agreed that the best means of completing the presently authorized George Washington Memorial Parkway on both banks of the Potomac River is through existing programs. This determination was made since the development plan for the Potomac River Basin will not be completed until about the fall of 1967.

Under the Capper-Cramton Act and other programs the land acquisition for the George Washington Memorial Parkway has been completed in Virginia from Mount Vernon to the Capital Beltway at Cabin John. In Maryland it has been completed in Montgomery County from Great Falls to the District line except for the Cabin John transit right-of-way and Little Falls connection to the George Washington Memorial Parkway. However, funds are available for the acquisition of the above two exceptions.

The two remaining areas to be acquired in order to complete the George Washington Memorial Parkway from Great Falls to Mount Vernon on both banks of the Potomac River are in Fairfax County, Va., and Prince Georges County, Md.

The taking lines for the George Washington Memorial Parkway in Fairfax County are the same as established by the National Capital Planning Commission in 1958 after consultation with the Board of County Supervisors and in addition includes the water frontage land along the Maderia School. The latter inclusion makes the George Washington Memorial Parkway continuous from Mount Vernon to Great Falls in Virginia. These taking lines are based on the present parkway highway extending west of the Capital Beltway in the vicinity of Route 193 and not along the Pallsades of the Potomac River between the Beltway and River Bend. Pedestrian and limited vehicular access to the George Washington Memorial Parkway in this area will be via the local stream valleys that extend inland to Route 193.

A total of 790 acres are yet to be acquired in Fairfax County. This acreage is located between the Capital Beltway and the Pepco tract at Great Falls and from Great Falls to River Bend. The National Park Service is sponsoring legislation to obtain the 790 acres comprising the Pepco tract at Great Falls. Therefore, this land is not included as part of the acreage to be acquired in Fairfax County under the Capper-Cramton Act. To date, no funds have been appropriated by Congress for the George Washington Memorial Parkway in Fairfax County between the Capital Beltway and River Bend.

The Prince Georges County, Md., taking lines for the George Washington Memorial Parkway are based on the December 1961 agreement between the National Capital Planning Commission and the Maryland-National Capital Park and Planning Commission. This agreement also provided for the connection of the Anacostia Freeway with the Indianhead Highway and only a minor park road to connect the various units of the parkway from the Capital Beltway down to Fort Washington.

The Congress has appropriated funds on two occasions in recent years for the George Washington Memorial Parkway in Prince Georges County. In 1961, $250,000 matching funds were appropriated "to permit acquisition of 240 acres of parkland in the vicinity of the new Washington Circumferential Highway and Woodrow Wilson Bridge approaches," in order to "provide a regional park of approximately 500 acres." In 1962 a sum of $500,000 matching funds for the parkway was appropriated "for the purchase of approximately 416 acres of parkland in Prince Georges County, Md., consisting of the Fort Foote extension to the Smoot Bay area; the Harmony Hall historic area between the Indian

Queen Estates and Broadwater Estates subdivisions; and the extension of Fort Washington to Swan Creek," thus preventing a continuous major parkway.

To complete the George Washington Memorial Parkway in Prince Georges County in accordance with the official plan as agreed to by the National Capital Planning Commission and the Maryland-National Capital Park and Planning Commission in December 1961, 660 acres remain to be acquired—325 acres lie between the Beltway and Fort Foote area, 150 acres between Fort Foote and Broad Creek area and 180 acres between Broad Creek and Fort Washington.

A record of unobligated balances as of December 31, 1965, follows:

George Washington Memorial Parkway:	
Arlington County, Va	$844
Fairfax County, Va	500
Montgomery County, Md	100,700
Subtotal	102,044
Maryland stream valley parks	12,345
Park, parkway, and playground system in the District of Columbia	683,249
Total unobligated balance	797,638

EXPLANATION OF BALANCES

George Washington Memorial Parkway

Arlington County, Va.—This amount represents the balance of funds appropriated for the parkway and allotted to Arlington County but unmatched by the local jurisdiction. Unless required to meet deficiency awards in pending condemnation cases and matched by the local jurisdiction or reallotted, these funds will be returned to the Treasury.

Fairfax County, Va.—This amount represents the balance of funds appropriated for the parkway and allotted to Fairfax County but unmatched by the local jurisdiction. Unless required to meet deficiency awards in pending condemnation cases and matched by the local jurisdiction or reallotted, these funds will be returned to the Treasury.

Montgomery County, Md.—$100,000 of this amount was appropriated in the Department of the Interior and Related Agencies Appropriation Act, 1963, for the acquisition of portions of the D.C. Transit Co. Cabin John right-of-way and several other properties necessary for the connection of the George Washington Memorial Parkway with the Little Falls Branch Parkway. It is anticipated that an agreement with the Maryland-National Capital Park and Planning Commission, providing for the matching of this amount, will be executed, and the amount obligated, during fiscal year 1966.

Maryland stream valley parks.—This amount represents the balance of funds appropriated under section 1(b) of the Capper-Cramton Act and not covered by agreements with the Maryland-National Capital Park and Planning Commission.

Park, parkway, and playground system in the District of Columbia.—The $16 million authorized to be appropriated under section 4 of the Capper-Cramton Act has heretofore been appropriated and the unobligated balance has been programed for expenditure by the Commission. The projects for which substantial amounts are unobligated are as follows:

1. Palisades Park: $135,000 is available for obligation for acquisition of the remaining properties comprising this project. It is anticipated that a substantial portion of this amount will be obligated in fiscal year 1966.

2. Addition to Morgan-Happy Hollow Playground: $375,000 has been allotted for the acquisition with the District of Columbia government of additional land for the Morgan-Happy Hollow Playground at 18th and California Streets NW.; $723,000 for this project is included in the fiscal year 1967 District of Columbia public improvements program submitted by the Commissioners of the District of Columbia. It is anticipated that the $375,000 or a portion thereof will be obligated during fiscal year 1966 or obligated and transferred to the District of Columbia government in fiscal year 1967 for the joint acquisition of land for addition to the playground.

NATIONAL CAPITAL PLANNING COMMISSION PROPOSAL

Senator BARTLETT. Will you please describe the location, quantity, and taking lines of the land which you propose to acquire?

Perhaps it would be well to furnish a schematic drawing of this area so that the committee can easily get in mind just what you propose.

Mrs. ROWE. Before Mr. Conrad speaks to the point specifically, and our General Counsel explains the situation, if I could just say again what I said in my prepared testimony, that we do plan to ask authorization before going ahead with the Fairfax County proposal.

We hope, as has been done in the past, to have congressional authorization for a transfer of funds within the overall Capper-Cramton authorization.

We have had a transfer of funds to Stream Valley parks from the George Washington Memorial Parkway. We hope to ask for a transfer from Stream Valley funds to the George Washington Memorial Parkway.

This will be necessary before we pursue the request for Fairfax County. So today we would like to limit our support for the land in Prince Georges County, the $2.9 million.

This review on the board here will show you the amount of money authorized, the appropriations made, and the amount left in the authorization, and the amount we are requesting for Prince Georges.

AMENDMENT OF JUSTIFICATION

Senator BARTLETT. The amendments which the committee received on March 8—they are applicable now?

Mr. SHEAR. Partially so. The revised justification, pages 86 and 87, are intended to correct certain errors in the justification previously transmitted, and to clarify the question of authorizing legislation for acquisition.

Senator BARTLETT. You say "partially so." What do you mean, precisely, by that?

Mr. SHEAR. The justifications are directed toward the earlier request for land acquisition funds for both Fairfax County and Prince Georges County. The Chairman, Mrs. Rowe, has indicated the request being put forward at this time is for the George Washington Memorial Parkway in Prince Georges County.

Senator BARTLETT. We need some clarification, here.

Mrs. ROWE. I believe the General Counsel should speak to this.

AUTHORIZATION FOR APPROPRIATION

Mr. SHEAR. There has been some confusion with respect to the authorizing legislation for the appropriation requested. I will assume a major part of the responsibility for the confusion.

The basic authority of the National Capital Planning Commission to acquire lands for the parks, parkways, and playgrounds systems of the National Capital is contained in section 2 of the act of June 6, 1924, which authorizes and directs the Commission to acquire such lands as, in its judgment, shall be necessary and desirable in the District of Columbia and adjacent areas in Maryland and Virginia, within the limits of the appropriations made for such land acquisition purposes, for the National Capital park parkway, and playground system.

The act further authorizes the Commission to acquire lands located in Maryland and Virginia either by condemnation or purchase, by such arrangements as to acquisition and payment for the land as it shall determine by agreement with the proper officials of the States of Maryland and Virginia.

In 1930 Congress enacted the Capper-Cramton Act, section 1(a) of which authorized the appropriation of $7½ million for the George Washington Memorial Parkway in Maryland and Virginia from Great Falls to Mount Vernon and Fort Washington.

There have been appropriations made to the Planning Commission under the authority of the act of June 6, 1924, apart from the appropriations made under the authority of the Capper-Cramton Act.

For example, last year Congress appropriated funds for the acquisition of land for the site of the John F. Kennedy Center for the Performing Acts and vicinity and the funds were requested for the Center under authority of the act of June 6, 1924.

The Congress also appropriated moneys for land acquisition in Maryland and Virginia for the George Washington Memorial Parkway, and in the District of Columbia for the park, parkway, and playground system under the Capper-Cramton Act.

The difficulty arises at the present time because the unappropriated balance of the authorization under section 1(a) of the Capper-Cramton Act for the George Washington Memorial Parkway is less than the amount initially requested for both Prince Georges County and Fairfax County.

However, as the chart indicates, the amount requested for Prince George County, $2,900,000, is within the balance of the available authorization under section 1(a), and we are seeking an appropriation in that amount, $2,900,000 for the parkway in Prince Georges County, under section 1(a) of the Capper-Cramton Act.

Senator BARTLETT. May I ask this question: Have any appropriations been made under the 1924 act for the George Washington Parkway since the Capper-Cramton Act came into being?

Mr. SHEAR. Not to my knowledge.

Senator BARTLETT. Continue.

FUNDS FOR ACQUISITION IN FAIRFAX COUNTY

Mr. SHEAR. If it were the pleasure of the committee to also appropriate the funds requested for Fairfax County, we believe there is adequate statutory authority to make such an appropriation under the 1924 act, but as the chairman indicated, we are not pressing that request at this time. We are concentrating on the request for Prince Georges County.

The Chairman has further indicated the Commission will seek an amendment to the Capper-Cramton Act to transfer within the existing overall authorization a portion of the authorization under section 1(c) of the act, which relates to the Virginia Stream Valley Park program, an entirely separate program, to section 1(a) of the act. If the Congress makes such a transfer of authorization, then I believe it is the intention of the Commission to come back before the Congress to seek an appropriation under the revised authorization of the Capper-Cramton Act for the Fairfax County portion of the parkway.

Senator BARTLETT. Apropos of these changes you sent up on March 8, were they cleared by the Bureau of the Budget?

Mr. SHEAR. There is no requirement, sir, for the budget narrative to be cleared by the Bureau of the Budget.

STATUS OF FUNDS UNDER CAPPER-CRAMTON ACT

Senator BARTLETT. Under the amendatory legislation which you are proposing, would all the other authorizations be permanently used?

Mr. SHEAR. No, sir. The Capper-Cramton Act contains authorization for appropriations for four programs: the George Washington Memorial Parkway in Maryland and Virginia, the Stream Valley Park program in Maryland, the Stream Valley Park program in Virginia, and the park parkway, and playground system of the District of Columbia.

All the money authorized to be appropriated for the District of Columbia program, and substantially all the money authorized to be appropriated for the Maryland Stream Valley program have been appropriated, and those two programs, at least, under the Capper-Cramton Act, have been completed.

REMAINING AUTHORIZATIONS UNDER THE CAPPER-CRAMTON ACT

All the money authorized to be appropriated for the George Washington Memorial Parkway has not been appropriated. There remains, as the chart indicates, $3,624,636 in appropriation authorization for the George Washington Memorial Parkway, and only $150,000 of an authorization of $4,500,000 for the Virginia Stream Valley program has been appropriated.

We do not anticipate seeking additional appropriations under that section of the Capper-Cramton Act, because there is now available under title VII of the Housing Act of 1961, as amended, a much more liberal Federal-aid program for the acquisition of parklands by local park authorities.

That is a 50–50 program, 50 percent Federal and 50 percent local, whereas the Stream Valley Park program under the Capper-Cramton Act is one-third Federal and two-thirds local.

Since we do not plan to seek further appropriations under the Virginia Stream Valley Park portion of the Capper-Cramton Act, we would seek to transfer a portion of that unused authorization to the George Washington Memorial Parkway authorization, all within the overall ceiling of the Capper-Cramton Act, in order to fund the Fairfax County acquisition.

Senator BARTLETT. Would that be a portion, or all the remaining portion?

Mr. SHEAR. I think that remains to be determined. I believe in all probability it would only be a portion, so much as our estimates indicate would be necessary to complete the acquisition of the land for the parkway.

LANDS TO BE ACQUIRED

Senator BARTLETT. Now, Mrs. Rowe, I will repeat that question, asking you to describe the location of the lands which you propose to acquire.

Mr. CONRAD. Since the Capper-Cramton Act was passed in 1930, some 6,000 acres have been put into the George Washington Memorial Parkway. Part of these acres were acquired through the Capper-Cramton Act, and other portions were transferred to the George Washington Memorial Parkway.

But up to now there has been acquired 6,000 acres, but there still remains 1,500 acres to complete the project.

Those acres are located primarily in Fairfax County, Va., and Prince Georges County, Md.

In Prince Georges County 660 acres are to be acquired. In Prince Georges County the area I have depicted is where the parkway would be located.

This is the Capital Beltway; this is the District of Columbia line, Blue Plains is over here; this is the Anacostia Freeway; this is the Virginia side; Alexandria is located here, and Mount Vernon around the corner.

This is Fort Foote; here is Fort Washington, and this is the interchange of the Capital Beltway where the Anacostia Freeway comes down.

As you can see, we have acquired to date approximately 826 acres, which includes Fort Washington, Fort Foote, and a portion up near the District line.

Funded but not yet acquired is 602 acres, shown in the hatched area just north of Fort Washington, around the Harmony Hall area, and just north of Fort Foote, as well as north of the Capital Beltway.

This has been funded by Congress and matched by the local jurisdictions. The total is $1½ million, so we are in the process of acquiring this.

We are requesting funding for the area shown in red, which comes close to 660 acres, from the Capital Beltway down to Fort Foote, from Fort Foote to the Harmony Hall area, from there to the Broad Creek area, and down to Fort Washington.

We estimate the cost to be $2.9 million, as the Federal share, and $2.9 million for the local share, for a total of $5.8 million.

Senator BARTLETT. Mrs. Rowe, can you have the words and figures on that chart reduced to typewritten form, so we may include them for the record?

Mrs. ROWE. We will be glad to.

(The information follows:)

CAPPER-CRAMTON ACT APPROPRIATIONS

Sec. 1(a), George Washington Memorial Parkway:	
Authorization	$7,500,000
Transfer of authorization to Maryland Stream Valley program (Sec. 1(b) under Public Law 85-707)	—750,000
Balance of authorization	6,750,000
Appropriated to date for:	
Virginia	1,300,711
Maryland	1,824,653
Balance of authorization	3,624,636
Appropriation requested, fiscal year 1967, for Prince Georges County, Md	2,900,000

AGREEMENT REACHED ON RIGHT-OF-WAY

Mr. CONRAD. We have letters from the county boards in Maryland and Virginia.

Senator BARTLETT. Have you reached agreement for rights-of-way for the parkway with Prince Georges and Fairfax Counties?

Mrs. ROWE. We have reached agreement with the Prince Georges County commissioners, and that letter is an indication of it, and the legislation has been introduced into the Maryland Assembly to authorize the bond issue, so they can meet their share of the cost.

From Fairfax County we have a letter which is not so conclusive, but expresses their interest in pursuing the preservation of the Potomac Palisades.

Senator BARTLETT. Very well. They will be made part of the record.

(The letters follow:)

COUNTY COMMISSIONERS,
PRINCE GEORGES COUNTY,
Upper Marlboro, Md., December 23, 1695.

Mrs. ELIZABETH ROWE,
Chairman, National Capital Regional Planning Council,
Washington, D.C.

DEAR Mrs. ROWE: This is to inform you that on Tuesday, December 21, the Board of Commissioners of Prince Georges County took official action approving the county's participation in the acquisition of land for the George Washington Memorial Parkway. The board will be making a formal request to the Prince Georges County delegation for bond approval in the amount of $2.9 million as the county's portion for this land acquisition.

The county commissioners have been interested in this project for many years and are sincerely hopeful that the matching Federal funds will be forthcoming.

Best regards for a Merry Christmas and a Happy New Year.

Sincerely,

THOMAS C. KELLY,
Administrative Assistant.

COMMONWEALTH OF VIRGINIA,
COUNTY OF FAIRFAX,
Fairfax, Va., March 4, 1966.

Mrs. JAMES H. ROWE, Jr.,
Chairman, National Capital Planning Commission,
Washington, D.C.

DEAR Mrs. ROWE: This is to inform you that on Wednesday, March 2, 1966, the Board of County Supervisors of Fairfax County, Va., took official action and requested that the following statement be forwarded:

The possible acquisition of the palisades of the Potomac between Cabin John Bridge and River Bend on the Virginia side is under study at the present time to determine what lands should be acquired by fee simple title, conservation easements with public access, or placed under restrictive covenants.

This study is being conducted by your staff in cooperation with the Fairfax County Park Authority at our request.

This board is interested in preserving the palisades of the Potomac River.

When this study is completed, presented, and if approved by this board, we will endeavor to seek the necessary funds to acquire and/or preserve the land authorized under the Capper-Cramton Act as recommended by the study.

Sincerely,

CARLTON C. MASSEY,
County Executive.

PRIORITY FOR APPROPRIATING FUNDS

Senator BARTLETT. In the event only a portion of the funds are approved, do you prefer their use in Virginia or Maryland?

Mrs. ROWE. Maryland.

Senator BARTLETT. Partly because this fund has been agreed to by local officials?

Mrs. ROWE. Yes.

Senator BARTLETT. Have the Maryland and Virginia governments concerned agreed to assume one-half of the costs of land acquisitions, either by bond issue or otherwise?

What is the status of their matching funds?

Mr. STEVENS. Yes.

Mrs. ROWE. Has the legislature passed the bill?

Mr. STEVEN. I think it is through the senate, but has to go through the House.

STATUS OF PRIOR APPROPRIATIONS FOR LAND ACQUISITION

Senator BARTLETT. How long are funds, which are appropriated to the National Capital Planning Commission for land acquisition, retained pending their matching by either Maryland or Virginia?

Mr. SHEAR. The appropriations have been so-called no-year appropriations. They continue to be available, that is, and are not made available on a fiscal year basis.

We attempt, of course, to conclude an agreement and have the local jurisdiction match the fund as quickly as possible after the start of the fiscal year in which the funds are appropriated.

Senator BARTLETT. Has Maryland yet agreed to match the funds furnished for land acquisition for connection of the George Washington Memorial Parkway to the Little Falls Branch Parkway?

Mr. SHEAR. We are about to conclude the agreement with Maryland National Capital Park and Planning Commission for the matching of the $100,000 previously appropriated for this purpose.

Senator BARTLETT. Thank you.

Thank you, Mrs. Rowe, and all of you who testified and have been present.

SUBCOMMITTEE RECESS

There being no further witnesses and no further testimony to be taken, the subcommittee will be in recess until 10 a.m., Monday, March 14, when we will consider the Corregidor-Bataan Memorial Commission and the National Capital Transportation Agency.

(Whereupon, at 12:40 p.m., Friday, March 11, 1966, the hearings were recessed, to reconvene at 10 a.m., Monday, March 14, 1966.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1967

MONDAY, MARCH 14, 1966

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., in room 1223, New Senate Office Building, Hon. Alan Bible presiding.

Present: Senators Bible and Young.

CORREGIDOR-BATAAN MEMORIAL COMMISSION

STATEMENT OF SAMUEL G. KELLY, EXECUTIVE DIRECTOR

1967 BUDGET REQUEST

Senator BIBLE. The subcommittee will come to order.

Our hearing this morning is first on the justification for the Corregidor-Bataan Memorial Commission.

There will be placed in the record the fiscal year 1967 budget estimate for the Corregidor-Bataan Memorial Commission in the sum of $35,000. This is $10,000 more than was appropriated during the last fiscal year.

(The justification follows:)

"For expenses necessary to carry out the provisions of the Act of August 5, 1953 (67 Stat. 366), as amended $35,000."

The Corregidor-Bataan Memorial Commission was created by an act of Congress in 1953 (Public Law 83-193) August 5, 1953. Its mission is to cooperate with the Philippine National Shrines Commission in a study for the survey, location, and erection on Corregidor Island of a memorial project dedicated to the American and Filipino servicemen who lost their lives while serving in the Pacific area during World War II. The enabling legislation authorizes appropriations of not to exceed $200,000 for necessary expenses of the Commission. One hundred and fifty-four thousand dollars has been appropriated for this purpose in prior years. An amendment to the basic legislation (Public Law 88-240) authorized an appropriation of $1,500,000 to the Veterans' Administration which is acting as construction agency for the Commission. The memorial will be put under construction contract during 1966 and completion is scheduled for 1967.

The $35,000 requested under this heading will provide for administrative expenses of the Commission incurred in performing the following tasks:

1. (*a*) Final selection of war mementos and historical markers and their placement in battlefield park. This is a legislative requirement of Public Law 88-240.

(*b*) Preliminary examination and final approval of documentary films. This is a legislative requirement of Public Law 88-240.

(*c*) Carrying out curator responsibilities in the determination of the final museum arrangement and approval of selection of exhibition items.

(*d*) Postdedication liaison with Corregidor Administrative Agency (a Philippine governmental agency) for first 6 months of operation of memorial.

2. Carrying out required liaison with Veterans' Administration on construction and postconstruction policy matters.

3. Maintaining required liaison with Philippine National Shrines Commission and other Philippine officials on matters dealing with the dedication ceremonies now planned for April 10, 1967. This is a legislative requirement of Public Law 88–240.

Previous appropriations and expenditures for salaries and expenses were as follows:

	Appropriation	Unexpended	Expenditures
1956–57	$56,000.00	$2,265.13	$53,734.87
1958	44,000.00	18,361.04	25,638.96
1959	4,443.04		4,443.04
1965	25,000.00	7.97	24,992.03
1966	25,000.00		[1] 25,000.00
Total	154,443.04	20,634.14	133,808.90

[1] Estimate.

This is the final budget request for the Commission as its date of disestablishment is May 7, 1967, in accordance with a requirement in Public Law 88–240; however, legislation has been proposed recently to extend this date to November 7, 1967, in order to insure full completion of the tasks enumerated in paragraph 1 above.

Comparative summary of requirements by object

	Fiscal year 1965 actual	Fiscal year 1966 estimate	Fiscal year 1967 estimate	Increase (+) or decrease (−), 1967 over 1966
Average employment	2	2	3	+1
11 Personnel compensation: Permanent positions	$22,000	$23,000	$30,000	+$7000
12 Personnel benefits	1,000	1,000	1,000	
Total, personnel compensation and benefits	23,000	24,000	31,000	+7,000
21 Travel and transportation of persons	2,000	1,000	4,000	+3,000
Total obligations	25,000	25,000	35,000	+10,000
Unobligated balance brought forward				
Unobligated balance carried forward				
Appropriation	25,000	25,000	35,000	+10,000

JUSTIFICATION AND EXPLANATION OF REQUEST BY OBJECT

11 and 12 Total personnel compensation and benefits, $31,000.—Personnel compensation in the amount of $31,000 is requested. This is an increase of $7,000 which is attributable to the employment of one additional employee, GS–8, increased costs due to the Pay Act (Public Law 89–301) and within-grade increases. Employment will include one GS–15, executive director, $19,415; one GS–8, research assistant, $6,869; one GS–6, Secretary, $5,702; and $1,000 in personnel benefits. The request for $31,000 will pay salaries plus terminal leave through May 7, 1967, the date of disestablishment of the Commission.

21 Travel and transportation of persons, $4,000.—Two trips to Manila for staff members and for domestic U.S. travel for Commission and staff members.

STATEMENT BY EMMET O'NEAL, CHAIRMAN

Senator BIBLE. We are happy to see you again, Captain Kelly. Would you please insert Mr. O'Neal's written statement in the hearing record, and then highlight it for the committee.

Mr. KELLY. Yes, sir.

(The statement follows:)

This will be my last appearance before your committee as Chairman of this Commission, because it will go out of existence on May 6, 1967, pursuant to law, or on November 6, 1967, if a proposed bill providing for a 6-month extension is enacted during this session of the Congress.

I appear today to justify a modest request for $35,000 for the expenses of the Commission during that part of the fiscal year 1967 ending May 6, 1967. This sum is primarily for the employment of three staff members and necessary travel to the Philippines in connection with the final phase of the construction of the Pacific War Memorial which, in accordance with Public Law 88-240, is being placed on Corregidor Island to honor the service of some 5 million American and Filipino soldiers, sailors, and marines who served in the Pacific area during World War II, particularly those who lost their lives in the cause of freedom.

If a bill extending the Commission for 6 months is enacted into law at an early date, the Bureau of the Budget will, I am informed, send a budget correction changing the above request for $35,000 to $45,000 in order to provide funds for the additional 6 months from May 6 to November 6, 1967. This latter figure is within our total authorization of funds.

The construction of the Pacific War Memorial will soon be underway. Bids are scheduled to be opened in Manila about March 16, 1966, and the general contractor awarded the project should start in April, with a tentative completion date for all items of construction now scheduled for about August 1967. You will recall that funds have been appropriated to the Veterans' Administration who acts as the agent for this Commission for the building of the Memorial.

The following tasks were listed in the statement made to this committee last year:

1. *Uncompleted design details.*—All of these have been completed after consultation with the architects—Naramore, Bain, Brady & Johanson. They included the final layout of the tourist center building, the wording of the texts of the inscriptions to go on the memorial altar, memorial frieze, and base of the vista monument, and the listing of campaigns and battles to appear on the 12 marble panels flanking the approach to the monument.

2. *Contiguous battlefield park—Location of walks and roadways to historical areas.*—This task has not been completed due to the inability to schedule travel to Manila because of a lack of travel funds. It is planned for completion during the coming fiscal year.

3. *War mementos for tourist center museum, and historical markers on Corregidor Island.*—This task has had to be deferred also for lack of travel funds during the current fiscal year.

4. *Documentary films.*—This task is underway. The Department of Agriculture, through its filmmaking facilities, will produce a documentary film of the Pacific War based on an historical concept developed by this Commission.

During the coming fiscal year the last three items above all will be scheduled for completion in addition to the following important tasks:

First, to confer with officials of the new administration in the Philippines, particularly newly appointed members of the Philippine National Shrines Commission, on the present status of the memorial, plans for the administration and maintenance of the memorial, and the plans of the Philippine Government in acting as host nation for the dedication ceremonies now rescheduled for April 10, 1967.

Second, to arrange for appropriate personnel to complete the curator work of assembling and installing in the museum (tourist center building) certain memorabilia of the Pacific war, and to cooperate and assist the Philippine officials, as necessary, in planning the operation and maintenance of the memorial.

In addition to the tasks discussed above the Commission will carry out a substantial amount of administrative work and maintain necessary liaison with Members of Congress, the Department of State, the Veterans' Administration, and various patriotic groups.

To carry out the tasks discussed above, the Chairman will be assisted by two regular staff members and one additional employee—a GS–8 historical researcher—until the date of disestablishment of the Commission. If this date remains May 6, 1967, then there will be a number of residual tasks which this Commission will not be able to complete. In that event, I can only hope that either the State Department or the Veterans' Administration will be able to complete them and thus forestall the transfer to Philippine jurisdiction of a memorial not full complete in all respects.

In closing, I will attempt to describe what I believe will be the results of the Congress erecting on Corregidor the Pacific War Memorial:

First, it will commemorate the services of over 5 million Americans who joined with their Filipino comrades in achieving victory and rekindling the flame of freedom in the area where the darkness of tyranny and oppression had prevailed.

Second, it will be a visible reminder to each new generation that their forefathers fought to preserve for them a freedom to create a government of their own choosing. It is necessary that these visible monuments be erected for without them the reasons for a war now a quarter century in the past will soon be forgotten.

Third, it will be a visible reminder to all nations that the forces of freedom when they are united in a common cause can overcome and conquer the forces of aggression.

Finally, I express my appreciation for the consideration this committee has given to our appropriation requests, and to the high interest each of you has displayed in the work of the Commission.

A statement of prior appropriations and expenditures is attached. I am accompanied by the executive director, Capt. Samuel G. Kelly, U. S. Navy (retired). We will be glad to answer any questions.

CORREGIDOR-BATAAN MEMORIAL COMMISSION

Statement of prior appropriations and expenditures

[Authorizations: Public Law 85–556 increases the total original authorization of $100,000 to $200,000]

	Appropriation	Unexpended	Expenditures
1956–57	$56,000.00	$2,265.13	$53,734.87
1958	44,000.00	18,361.04	25,638.96
1959	4,443.04		4,443.04
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1966	25,000.00		[1] 25,000.00
Total	154,443.04	20,634.14	133,808.90

[1] Estimate.

HISTORICAL STUDIES

Mr. KELLY. In summary, your statement is correct, sir. Our request is $10,000 higher than the amount appropriated last year, but it is the same amount that was in the budget request. As you may recall, the House Appropriations Committee reduced our budget request by $10,000. We have been able to live with this reduction, but we have not been able to carry out several important tasks which we hoped to do with the amount requested last year.

These tasks stem from a requirement in our legislation, and consist primarily of a historical study of the contiguous battlefield park, in order to place historical markers in the park; to make a historical study of the basis for a documentary film, which we have just barely started, and last, the important curator responsibilities for the museum in the Tourist Center Building.

This $10,000 requirement stems from the employment of a third staff member, a historical researcher, which will be about $6,800, sir; and necessary travel to Manila in connection with the memorial.

I might say that the bids for the construction will be opened in about 2 weeks, and we hope that construction will start about the 1st of May.

DEDICATION OF MEMORIAL, APRIL 10, 1967

Senator BIBLE. Refresh my memory, please. What is the estimated construction time for the building of the memorial?

Mr. KELLY. It will be 450 days after the contractor starts, and the estimated date is that he will start sometime in May, say the 15th of May, so this completion will be 450 days later, or about the middle of August 1967.

As you know, Senator Bible, we have planned the dedication of the memorial, which will be virtually complete, on April 10, 1967. We are going to discuss the composition of the U.S. delegation with the White House sometime in the next few weeks, and if I may end on a pleasant note, we hope to see some members of this Appropriations Committee invited to attend the dedication.

Senator BIBLE. Well, I hope we are not only invited, but I hope some of us can attend.

Mr. KELLY. I hope so, too, sir.

Senator BIBLE. That will be April, of course, and so a difficult month for Members of the Congress. That is usually when we are getting right into the thick of our work; but then, I think there should be representation from the Congress, and I am hopeful that there will be.

Now, your authorizing legislation expires in May 1967. Isn't that right?

Mr. KELLY. Yes, sir.

Senator BIBLE. The Commission goes out of business on that date.

LEGISLATION PROPOSED FOR EXTENSION OF LIFE OF COMMISSION

Mr. KELLY. May 6, sir. But in Mr. O'Neal's statement you will note that legislation has been proposed and will be introduced in the House before the Easter recess, making a simple amendment to extend the life of the Commission for 6 months.

Senator BIBLE. I see.

Mr. KELLY. This is necessary because the funds appropriated to the Veterans' Administration, who act as the construction agent for the Commission, were not made available in time to keep the planned date of completion of May 6, 1967. This planned date was made about 3 years ago, and there has been the usual slippage in the schedule, sir.

Senator BIBLE. April 10 is the dedication date. At that time, the memorial will be how far along? Ninety percent completed? You said it takes 450 days to complete it.

Mr. KELLY. 450 days. It will be virtually complete, sir, the two main parts of the memorial, the memorial rotunda and the Flame of Freedom Monument will be complete. There will be enough there to have a nice dedication ceremony. There will be a lot of tidying up, and completion of the tourist center building, and things like that, which will move the date of final completion up to some time in September 1967.

Senator BIBLE. Now you are a two-man agency at the present time, or a two-man Commission.

Mr. KELLY. Two employees, yes, sir.

Senator BIBLE. And now will you build into the record just a little more clearly the need for this third position?

DUTIES OF HISTORICAL RESEARCHER

Mr. KELLY. Yes, sir; the third position is for an historical researcher. The historical researcher is necessary to complete the historical concept of our documentary film. The chairman and members of the Commission feel very strongly that this documentary film should rest on a solid historical foundation, and not be subject to any criticism after the film is made that it shows events which are not historically sound.

That will be one task. The second task will be to develop the historical accuracy of the places to be marked on Corregidor by bronze plaques. This is a local project, not reflecting the entire Pacific war, but because of the number of visitors who will visit Corregidor, and who will be interested in the various historical spots on Corregidor, it is believed that these should be marked with historical accuracy.

A third task which the historical researcher will do will be to compile, and attempt to collect, a large number of memorabilia and other mementos pertaining to the Pacific war, and place them in the museum in the tourist center building.

Senator BIBLE. Thank you very much, Captain Kelly. I have no further questions, and I am sure your justification statement amplifies what you have just highlighted here. Thank you very much.

Mr. KELLY. Thank you, sir.

MONDAY, MARCH 14, 1966.

NATIONAL CAPITAL TRANSPORTATION AGENCY

STATEMENTS OF WALTER J. McCARTER, ADMINISTRATOR; WARREN D. QUENSTEDT, DEPUTY ADMINISTRATOR; HOWARD W. LYON, DIRECTOR, OFFICE OF ENGINEERING; WILLIAM I. HERMAN, DIRECTOR, OFFICE OF PLANNING AND FINANCE; OWEN J. MALONE, GENERAL COUNSEL; JOHN RANNELLS, DIRECTOR, OFFICE OF ARCHITECTURE; CODY PFANSTIEHL, DIRECTOR, OFFICE OF PUBLIC INFORMATION AND COMMUNITY SERVICES; AND J. NEAL TOMEY, DIRECTOR, OFFICE OF ADMINISTRATION

1967 BUDGET REQUEST

Senator BIBLE. Our next justification concerns the National Capital Transportation Agency. Mr. McCarter, I am delighted to see you again, and you, Mr. Quenstedt. Do you have others that you want to accompany you?

Mr. MCCARTER. Yes, my staff, listed there.

Senator BIBLE. How many do you want up here at the table?

Mr. MCCARTER. Mr. Tomey, here, and Mr. Malone. The others can sit behind us.

Senator BIBLE. Very well.

For fiscal year 1967, the National Capital Transportation Agency proposes a construction budget of $17,055,000. In addition, the Agency is requesting funds, through the District of Columbia, in the amount of $8,525,000, to make up a total construction budget for the coming fiscal year of $25,580,000. The justification for the estimate will be printed in the record.

(The justification follows:)

THE AUTHORIZED SYSTEM

The National Capital Transportation Act of 1965 (Public Law 89-173) authorizes the National Capital Transportation Agency to design, engineer, construct, equip, and take other action necessary to provide for the establishment of a system of rail rapid transit lines and related facilities for the National Capital. The legislation was signed by President Johnson on September 8, 1965.

The entire program, including actual construction of the system, is estimated to extend over a period of 7 years with initial parts of the system in operation as early as 5 years.

The approved system is essentially within the District of Columbia with one extension into Arlington County, Va., to serve the heavy Federal employment concentration at the Pentagon, and a second short extension into Montgomery County, Md., in order to reach a suitable terminal location.

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The total system will be 24.9 miles long, with double track throughout, and will include 29 stations. About half (13.1 miles) will be underground, 7.5 miles will utilize existing railway rights-of-way, and the balance of 4.3 miles will occupy other exclusive rights-of-way.

The total cost of constructing and equipping the system is estimated to be $431 million. The financing is to be provided by direct appropriations of $150 million ($100 million by the Federal Government and $50 million by the District of Columbia) and $281 million to be derived from the public sale of bonds to be repaid out of the revenues of the system.

Fiscal Year 1966 Programs

Funds in the amount of approximately $6 million were included in the Supplemental Appropriation Act, 1966, approved October 31, 1965.

The current programs of the Agency for the remainder of fiscal year 1966 include—

The initial phases of engineering and architectural "conceptual" activitives including the development of system standards, criteria, and specifications;

Initial actions to acquire the necessary rights-of-way and other land interests.

Projects involving the development of vehicle and wayside equipment.

Initial public utilities relocations.

Certain incidental construction.

In approving funds for the current year, the Congress expressed doubt that it would be possible to obligate all the funds requested (a total of approximately $9 million) particularly in the areas of final design projects and the acquisition of rights-of-way and land.

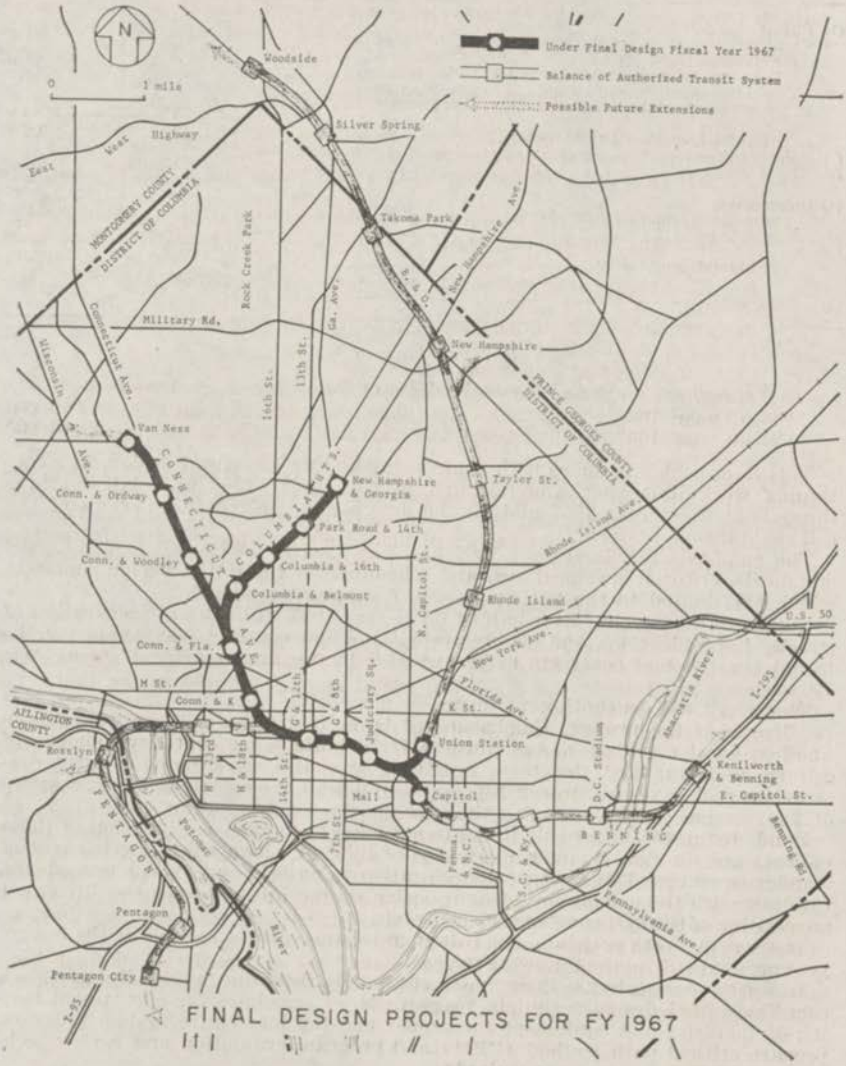
In programing the funds for the current year, the Agency has assumed that the fiscal year 1966 program for acquisition of rights-of-way, which consists essentially of easements and the purchase of one parcel of land, will proceed on schedule and that the awarding of final design contracts on initial portions of the downtown distributor segment will be postponed until fiscal year 1967.

Proposed Fiscal Year 1967 Programs

For the fiscal year 1967 the Agency is proposing programs which will require a total appropriation of $25,580,000 of which $17,055,000 would be appropriated directly to the Agency and $8,525,000 would be appropriated to the District of Columbia government.

The programs of the Agency will shift from the initial phases of engineering and architectural "conceptual" work to final design efforts in the early part of fiscal year 1967. Contracts for the final design of a total of 19 sections, including 14 stations and 2 bridges, will be let during fiscal year 1967 and other programs such as soil investigations and testing, land acquisition, and public utilities relocation will be carried out in phase with the final design efforts and in advance of construction. An item is also included for the procurement of tunnel liner for that portion of the system first to be in operation. Because of the leadtime involved in the manufacture of tunnel liner it will be necessary to place the orders for the initial increment in fiscal year 1967 and funds are included in these estimates for that purpose.

The following map highlights the sections of the system for which final design projects are proposed in fiscal year 1967. The map also shows the balance of the system as approved by Public Law 89–173.


N
0
1 mile
Under Final Design Fiscal Year 1967
Balance of Authorized Transit System
Possible Future Extensions
Woodside
Silver Spring
East West Highway
MONTGOMERY COUNTY
DISTRICT OF COLUMBIA
Rock Creek Park
Takoma Park
New Hampshire Ave.
B. & O. R.R.
Military Rd.
Ga. Ave.
13th St.
16th St.
Connecticut Ave.
Wisconsin Ave.
New Hampshire
PRINCE GEORGES COUNTY
DISTRICT OF COLUMBIA
Van Ness
CONNECTICUT - COLUMBIA - H ST.
Conn. & Ordway
New Hampshire & Georgia
Taylor St.
Park Road & 14th
Conn. & Woodley
Columbia & 16th
Columbia & Belmont
Rhode Island Ave
N. Capitol St.
Rhode Island
U.S. 50
Conn. & Fla.
M St.
Conn. & K
New York Ave.
Florida Ave.
Anacostia River
I-295
ARLINGTON COUNTY
Rosslyn
G & 12th
G & 8th
Judiciary Sq.
K St.
Union Station
Kenilworth & Benning
E. Capitol St.
H & 18th
H & 13th
14th St.
Mall
Capitol
D.C. Stadium
PENTAGON
Potomac
7th St.
Penna. & N.C.
N.C. Ave.
BENNING
Benning Rd.
Pennsylvania Ave.
Pentagon
Pentagon City
Potomac River
I-95
FINAL DESIGN PROJECTS FOR FY 1967

Summary of the estimates

[In thousands of dollars]

	Fiscal year 1966	Fiscal year 1967
(1) Engineering and design:		
System standards, criteria, specifications, and scheduling	1,000	2,100
Final design projects		6,940
Development projects (vehicle and wayside equipment)	500	
Soils investigations and testing	600	580
Joint projects and reimbursements to other agencies	100	55
Subtotal, engineering and design	2,200	9,675
(2) Public utilities relocation	450	
(3) Rights-of-way and land	3,100	3,330
(4) Construction:		
Purchase of materials (tunnel liner)		12,200
Specific projects	250	375
Subtotal, construction	250	12,575
Total	6,000	25,580

(1) Engineering and design

System standards, criteria, specifications and schedules:

Fiscal year 1966 ..... $1,000,000
Fiscal year 1967 2,100,000

This item, which includes both engineering and architectural design, is a continuing work item that was initiated in fiscal year 1966 and will continue throughout fiscal year 1967 and all the design and construction periods of the rail rapid transit system.

The emphasis for fiscal year 1966 has been on the development of sufficient standards, criteria, specifications, and schedules for the initial design contracts which are limited to the various types of subway construction.

Emphasis during the latter half of fiscal year 1967 will shift to preparation of standard specifications and general provisions and contract documents for the initial construction contracts to be awarded in the first quarter of fiscal year 1968.

This work will be continuous in one or more of its various forms throughout the length of the project. Emphasis will be shifted from one type of work to another as the project moves ahead. It is anticipated that development of criteria and standards for those segments of routes scheduled for early construction will have progressed sufficiently to permit the award of the first series of final design contracts during the first quarter of fiscal year 1967.

Funds requested under this item are expected to finance continuation of these efforts until the final quarter of fiscal year 1967, at which point development of standards, standard construction specifications, and field supervision procedures, together with the completion of final design on the initial segments will permit advertising of the first construction contracts.

The specific work programs for this item for the current as well as the budget year are set forth on the following pages:

1. *System scheduling.*—Programing of all activities prior to final design period, coordinate final design activiteis, preparation of schedules for operational testing of facilities and equipment for proper phasing into entire system program, prepare critical path method (CPM) and program evaluation and review technique (PERT) programs as required:

FISCAL YEAR 1966	FISCAL YEAR 1967
Overall schedule for design and construction for entire system under review, critical path method (CPM) and PERT programs for design and construction scheduling being developed.	Schedules, CPM and PERT programs to be established, maintained, revised, and expanded as required.

2. *Basic control surveys.*—Establishment of horizontal and vertical control points to be used in final design and construction:

FISCAL YEAR 1966	FISCAL YEAR 1967
This work was initiated January 24, 1966. Horizontal and vertical control surveys are scheduled for completion by April 30, 1966.	

3. *Topographic surveys.*—Aerial and field surveys for the preparation of planimetric and topographic mapping:

FISCAL YEAR 1966	FISCAL YEAR 1967
Aerial mapping is scheduled to commence on or about February 25, 1966. Estimated date of completion of initial mapping requirements March 25, 1966. Date of completion of all mapping required June 30, 1966.	

4. *Property surveys.*—Field surveys of properties which will be affected by construction:

FISCAL YEAR 1966	FISCAL YEAR 1967
Property surveys as required for easements and deed descriptions.	Property surveys for easements and deed descriptions in accordance with design schedule.

5. *Project coordinates.*—Development of project coordinates for purposes of orientation of design and connection to the national control net:

FISCAL YEAR 1966	FISCAL YEAR 1967
Computation of project coordinates scheduled for completion April 15, 1966, pending completion of horizontal control surveys.	

6. *Survey plats and description.*—Preparation of plats for record purposes in connection with property easements and acquisition:

FISCAL YEAR 1966	FISCAL YEAR 1967
Survey plats and descriptions of right-of-way to be prepared as required.	Continuous—In phase with item No. 4.

7. *Development of soils investigation programs.*—Investigation of subsurface soils and geological conditions as it may affect design and construction:

FISCAL YEAR 1966	FISCAL YEAR 1967
Preparation of specifications and contract documents for phase I of supplementary soils boring and testing program initiated February 1, 1966.	Specifications and contract documents for phase II of soil boring and testing program to be completed by December 1966.

8. *General plans.*—Preparation of general alinement and profile drawings for the entire system. Drawings to show base line, proposed transit construction,

buildings and property affected by construction, alinement and profile of entire system. Plans will serve as basis for final detail design:

FISCAL YEAR 1966	FISCAL YEAR 1967
Detailed studies of alinement and foundation problems initiated January 23, 1966. Development of plans and profiles to be programed and coordinated with progress and completion of mapping program. Development of preliminary planning, plans and specifications for mechanical facilities, traction power supply, transmission and distribution, signaling and train control, and other equipment development programed to commence the latter part of third quarter fiscal 1966. Approximately 25 percent of this work will be completed in fiscal year 1966.	Completion of the development of plans and profiles for the remainder of the system scheduled for completion by the end of fiscal year 1967. Development of plans and specifications for mechanical facilities, traction power supply, transmission and distribution, signaling and train control, and for other equipment for the remainder of the system scheduled for substantial completion by the end of fiscal year 1967.

9. *Preliminary station plans.*—Development of layout of stations and terminals, parking and other facilities, preliminary functional structural, electrical, ventilation, and mechanical designs coordinating with preliminary architectural design concepts:

FISCAL YEAR 1966	FISCAL YEAR 1967
Development of station and terminal plans scheduled to commence latter part of the third quarter fiscal 1966. Approximately 20 percent of this work will be completed by the end of fiscal year 1966.	To be substantially completed by the end of fiscal year 1967.

10. *Yards and shops.*—Development of preliminary layouts and plans for yards and shops:

FISCAL YEAR 1966	FISCAL YEAR 1967
Study of initial yards and shops initiated January 30, 1966.	To be completed by the end of fiscal year 1967.

11. *Preliminary track plans.*—Development of plans and designs for track in subway, at grade and on structures:

FISCAL YEAR 1966	FISCAL YEAR 1967
The development of preliminary track roadway plans and designs is scheduled to begin March 1966.	To be completed by the end of the second quarter fiscal year 1967.

12. *Design criteria.*—Preparation of standard design criteria to be used in final design of system facilities and equipment:

FISCAL YEAR 1966	FISCAL YEAR 1967
The preparation of design criteria is to be developed concurrently with the preparation of the general plans. Development of preliminary design criteria scheduled to begin March 1, 1966. Pertinent design criteria for early design sections is scheduled for completion by the end of fiscal year 1966.	Bulk of design criteria and standards expected to be completed by the end of fiscal year 1967.

13. *Specifications.*—Preparation of standard specifications for all forms of subway, surface, aerial, station, and equipment facilities:

FISCAL YEAR 1966	FISCAL YEAR 1967
Initial construction and definitive specifications to be 40-percent complete by the end of fiscal year 1966.	To be completed by the end of fiscal year 1967.

14. *Directive drawings.*—Preparation of standard designs and drawings for typical details of construction:

FISCAL YEAR 1966	FISCAL YEAR 1967
All pertinent directive drawings for early design sections scheduled for completion by the end of fiscal year 1966.	Substantially all directive drawings to be completed by the end of fiscal year 1967.

Coordinating functions

15. *Design.*—Activity will consist of coordinating all design contracts, including review and appropriate recommendations as to approval of plans and other items of contract documents submitted by design engineers:

FISCAL YEAR 1966	FISCAL YEAR 1967
Limited activity in fiscal year 1966.	First design contracts to be let in first quarter of fiscal year 1967. Activities will require coordination of all design contracts, including review, appropriate recommendations as to approval of plans, special provisions, and other items of contract documents as submitted by design engineers.

16. *Utilities.*—Coordination of Agency's programs with those of various public and private utilities, including preparation of utility reconstruction contracts and coordination of utilities construction supervision:

FISCAL YEAR 1966	FISCAL YEAR 1967
Coordinate Agency's program with those of various public and private utilities. Development of program commenced February 1, 1966.	Delineation of specific projects required to be undertaken in advance of transit to be completed by the end of fiscal year 1967.

17. *Construction.*—Activity will include the responsibility to approve, coordinate, and supervise the field inspection forces furnished by others, including testing services:

FISCAL YEAR 1966	FISCAL YEAR 1967
Limited activity in fiscal year 1966.	In early fiscal year 1967, this activity will be directed only to essential utility construction which proves to be necessary in advance of transit construction. Construction coordination functions will markedly increase during the latter half of fiscal year 1967 in anticipation of first construction contracts early in fiscal year 1968.

18. *Coordination of public agencies and private interests.*—Coordination of agency's program with those of other affected agencies, local jurisdictions and private interests:

FISCAL YEAR 1966	FISCAL YEAR 1967
Coordination of agency program with other public agencies and private interests will continue in fiscal year 1966.	Continuous in fiscal year 1967.

19. *Cost control and estimating.*—Preparation and maintenance of records of project expenditures and commitments; estimates of project costs; cost forecasts for budgeting and project control:

FISCAL YEAR 1966	FISCAL YEAR 1967
Cost control, project control and estimating systems under development as of January 28, 1966.	Continuous and expanding program for fiscal year 1967.

Architectural design

20. *Conceptual design.*—Development of architectural concepts establishing the physical appearance of all transit facilities used or seen by the public, including details of pedestrian circulation, planning of exterior and interior spaces and approaches to stations. A concept design report will state policies for all areas affected by architectural design, as a guiding framework, for the architectural development of the entire system:

FISCAL YEAR 1966	FISCAL YEAR 1967
Completion by the end of fiscal year 1966.	

21. *Preliminary design.*—Preliminary layouts of stations, terminals, parking and other facilities, for coordination with engineering plans, as noted in item 9 and for use in connection with revenue forecasts by Office of Planning and Finance.

FISCAL YEAR 1966	FISCAL YEAR 1967
For early design sections by end of fiscal year 1966.	Completion in fiscal year 1967.

22. *Standard details.*—Develop standard system details and specifications for use by final design architects:

FISCAL YEAR 1966	FISCAL YEAR 1967
As required by final design program.	Completion in fiscal year 1967.

23. *Presentations.*—Presentations before public bodies having jurisdiction and private interest groups, for necessary clearances and approvals:

FISCAL YEAR 1966	FISCAL YEAR 1967
For early design sections late in fiscal year 1966.	Continuing through final design program.

24. *Coordination.*—Coordination of all architectural work with work of engineers and the various public and private utilities, during entire design and construction periods:

FISCAL YEAR 1966	FISCAL YEAR 1967
Continuing in phase with items 15 through 18.	Continuing through Construction period.

25. *Continuing program.*—Organize program for final design contracts for construction drawings and specifications; includes supervision of final-design contracts and field inspection to assure conformance with architectural design requirements:

FISCAL YEAR 1966	FISCAL YEAR 1967
As required by final design program.	Continuing through construction period.

Final design projects

Fiscal year 1966	----------
Fiscal year 1967	$6,940,000

The Agency's plan provides for the award of final design contracts on 19 projects during fiscal year 1967. The first transit operation, providing service from Van Ness Station to Capitol and Union Station, consists of 16 design projects of which 15 are to be awarded in fiscal year 1967. The adjoining Columbia Heights Line consists of four design projects which are also scheduled to be awarded in fiscal year 1967. The first operation is composed of the Connecticut Avenue route, a segment of the Benning route west of the Capitol, and the transit facilities serving Union Station. Each design contract will require the preparation of contract plans, final engineer's estimate of cost, construction specifications and other elements of the construction contract documents. A first phase submission of contract plans and documents will insure the compliance by designers with system standards, design criteria, standard specifications and design directives previously established. Unless otherwise noted, the estimates represent approximately 5 percent of the preliminary estimate of construction cost for each design section plus a 10 percent contingency allowance.

Connecticut Avenue route

Section A–1: This contract is scheduled to be awarded about July 1966 and will run for approximately 1 year. It will include design of a cut and cover station at 12th and G Streets NW., plus 2,800 linear feet of double tube earth tunnel under G Street.

Section A–2: This contract is scheduled to be awarded about July 1966 and will be approximately 1 year duration. It will include a cut and cover station at Connecticut Avenue and K Street NW., plus 2,300 linear feet of double tube tunnel under Connecticut Avenue and Lafayette Square.

Section A–3: This contract is scheduled to be awarded in the last quarter of the fiscal year about April 1967 and will be approximately 1 year duration. It will include 1,110 linear feet of cut and cover construction in Connecticut Avenue NW., from the vicinity of De Sales Street to N Street NW.

Section A–4: This contract is scheduled to be awarded about November 1966 and will be approximately 1 year duration. It will include cut and cover construction plus modifications to existing streetcar subway in the Dupont Circle area for a total of 1,985 linear feet of transit line.

Section A–5: This contract is scheduled to be awarded about December 1966 and will be approximately 1 year duration. It shall consist of the 600 linear feet of cut and cover station at Connecticut and Florida Avenues NW.

Section A–7: This contract consisting of 1,590 linear feet of rock tunnel and a bridge across Rock Creek Park is scheduled to be awarded about September 1966 and will be approximately 1 year duration.

Section A–8: This contract consisting of 2,280 linear feet of earth, rock and mixed face tunnel as well as the cut and cover station at Connecticut Avenue and Woodley Roard NW., is scheduled to be awarded about September 1966 and will run for approximately 1 year.

Section A–9: This contract consisting of mixed face tunnel, a bridge over Klingle Valley, cut and cover construction and the cut and cover station at Connecticut Avenue and Ordway Street NW., is sheduled to be awarded about August 1966 and will run for approximately 1 year.

Section A–10: This contract consisting of double box cut and cover construction in Connecticut Avenue between Ordway and Tilden Streets NW., is scheduled to be awarded about August 1966 and will run for approximately 1 year.

Section A–11: This contract consisting of 400 linear feet of rock tunnel and rock tunnel station at Connecticut Avenue and Van Ness Street is scheduled to be awarded about July 1966 and will run for approximately 1 year.

Benning route

Section B–1: This contract is scheduled to be awarded about August 1966 and will run for approximately 1 year. It will consist of the design of a cut and cover transit station at 8th and G Streets, NW., plus 1,050 linear feet of double tube tunnel under G Street and portions of three squares of private property.

Section B–2: This contract is scheduled to be awarded early in the fiscal year or about July 1966 and will run for approximately 1 year. It will consist of a cut and cover transit station in Judiciary Square plus 130 linear feet of cut and cover construction under the intersection of 5th and F Streets NW., plus 4,070 linear feet of double tube earth tunnel under D Street, two squares of private property and the Capitol grounds.

Section B–3: This contract is scheduled to be awarded about July 1966 and will run approximately 1 year. It will consist of the design of a cut and cover transit station to service the U.S. Capitol.

Columbia Heights route

Section C–1: This contract is scheduled to be awarded in the early part of the fourth quarter of the fiscal year of about April 1967 and will run for approximately 1 year. It will include 1,540 linear feet of rock tunnel commencing at the junction with the Connecticut Avenue route plus the cut and cover station at Columbia Road and Belmont Road NW.

Section C–2: This contract, consisting of earth tunnel construction and a cut and cover station at 16th Street and Columbia Road, is scheduled to be awarded about March 1967 and will run approximately 1 year.

Section C–3: This contract, consisting of earth tunnel construction and a cut and cover station at 14th Street and Park Road, is scheduled to be awarded about March 1967 and will run for approximately 1 year.

Section C–4: This contract, consisting of earth tunnel consrtuction and a cut and cover station at New Hampshire and Georgia Avenues, is scheduled to be awarded in the last quarter of the fiscal year, or about May 1967, and will run approximately 1 year.

B. & O. route

Section E–9: This contract is scheduled to be awarded in July 1966 and will run for approximately 1 year. It will include the design of transit station and facilities to be built at the subbasement level of the Union Station Building and train yard.

Section E–15: This contract is scheduled to be awarded in October 1966 and will run for approximately 1 year. It will include the design of the cut and cover construction and the tunneling to connect Union Station transit facilities to the junction in the vicinity of D Street and New Jersey Avenue.

Summary

Connecticut Avenue route (10 sections)	$3,410,000
Benning route (3 sections)	1,630,000
Columbia Heights route (4 sections)	1,560,000
B. & O. route (2 sections)	340,000
Subtotal, design projects	6,940,000

Development projects (vehicle and wayside equipment)

Fiscal year 1966	$500,000
Fiscal year 1967	

The Agency's program of development projects for vehicle and wayside equipment, initiated with funds provided in the current year, will be continued in fiscal year 1967 within these amounts.

Soils investigations and testing

Fiscal year 1966	$600,000
Fiscal year 1967	580,000

With funds provided in fiscal year 1966, the Agency has initiated the first phase of a total soils investigation program which will extend over approximately 5 years, substantially in phase with the design effort.

Field and laboratory work to commence in the third quarter of fiscal year 1966 will include essentially all of the proposed definitive borings and analyses for the Connecticut Avenue and Columbia Heights routes and that part of the Benning route in the scheduled first operation. In addition, specialized tests will be conducted in the same general areas utilizing test pits, large diameter holes, open instrumented excavations, and supplementary test holes. These

facilities will be used for pumping and ground water drawdown tests, percolation tests, soil stabilization tests, and for the determination of the influence of construction on nearby foundations. This program will be essentially complete in mid-fiscal-year 1967.

With funds requested for fiscal year 1967, the Agency will extend this program to the Benning and Pentagon routes and a portion of the B. & O. route. Phase II of the program will thus be initiated in mid-fiscal-year 1967 and be essentially complete in mid-fiscal-year 1968.

Joint projects and reimbursements to other agencies

Fiscal year 1966	$100,000
Fiscal year 1967	55,000

There are a number of major street and highway construction projects under design or are being planned in the region which may affect the transit development program. The Agency has been working with these groups and the transit program will benefit by appropriate reimbursement to the agencies, both public and private, for redesign of necessary substructure elements and incremental construction charges attributable to the redesign or changes to accommodate transit. Projects underway in fiscal year 1966 include the Inner Loop center leg, Shirley Highway (near Pentagon), and track changes by the Washington Terminal Co. between Union Station and Rhode Island Avenue.

Funds are requested in fiscal year 1967 for the following projects:

Washington Terminal Co.—This project is to reimburse the WTC for track and wayside facility changes in the train yard that extends from Union Station Building (vicinity of Massachusetts Avenue) to Wye Track (vicinity of T Street NE.).

Pennsylvania Railroad.—This project is to reimburse the Pennsylvania Railroad for changes to their catenary power distribution system which extends from Union Station to junction with Ivy City freight yard (vicinity of New York Avenue NE.).

Lyttonsville Highway bridge.—This highway bridge in Montgomery County, Md., will span the B. & O. Railroad tracks and proposed transit tracks in the vicinity of the Georgetown junction on the metropolitan branch of the B. & O. Railroad Co.

(2) *Public utilities relocation*

Fiscal year 1966	$450,000
Fiscal year 1967	--------

The Agency in conjunction with the District of Columbia Department of Sanitary Engineering has developed a program for fiscal year 1966 and 1967 which remains within the limitations of appropriated funds. This public utilities relocation program can be set in operation during the balance of current fiscal year or in fiscal year 1967 should circumstances indicate that public utilities relocation problems adversely affect the adherence of the transit program to the construction schedule. This utilities program takes into consideration the transit lines and segments that are involved in the first transit operations. No additional funds are requested in fiscal year 1967.

(3) *Rights-of-way and land*

Fiscal year 1966	$3,100,000
Fiscal year 1967	3,330,000

The program of the Agency will require the acquisition of certain easements to permit the subway tubes or boxes beneath the surface of private property. In addition the Agency contemplates the purchase of certain properties needed for the operation of the proposed system.

The program for fiscal year 1966 includes easements affecting 53 parcels ($1,250,000) and the acquisition of 10.85 acres ($1,850,000). The program for fiscal year 1967 contemplates the initiation of all required land acquisition actions on the Columbia Heights route ($446,100) and easement actions affecting 50 parcels on the Columbia Heights and Connecticut Avenue routes ($2,882,300) substantially in phase with the design effort.

The estimates are based on independent professional appraisals or recognized formulas for determining the values of the properties involved. The market values are based on the recorded assessed values of land and improvements as indicated in the current records of District of Columbia tax assessor's office. The assessed value on a citywide basis is considered to be approximately 40 per-

cent of the market value and, in determining the fair market, the assessed value has been multiplied by 2.5. Factors have also been included for acquisition costs and contingencies.

Detailed information is available on the individual parcels but is not being published to protect the Government in negotiations.

(4) Construction

Fiscal year 1966	$250,000
Fiscal year 1967	12,575,000

Purchase of material, $12,200,000

The shield and tunnel liner technique for subway construction is a well-proven method that has been used successfully in all major cities around the world. New York, Chicago, London, Toronto, and Moscow are the major examples where this type of construction has been used. This method has been adopted for subway construction in large cities where safety of existing structures, underground utilities, thoroughfares, and the safety of the workmen are of paramount importance.

In the technique contemplated for use in the tunnel sections, excavation is carried out in the following manner:

In order to provide immediate and continuous support to the tunnel face and all the surrounding ground, a tunnel shield is driven forward as the excavation is advanced. A tunnel shield, in effect, is a temporary tunnel structure which is driven forward to enable safe excavation at the face and the construction of the permanent lining of the tunnel. The tunnel linings are installed under the protection of the shield as the shield advances. The tunnel linings are designe to provide permanent support to the ground surrounding the tunnel.

Tunnel liners consist of several segments to form one complete tunnel ring. For a 16-foot diameter subway tunnel, there are normally eight segments. Each segment is 2 feet wide and approximately 6 feet long along the circumference.

Three different materials are under consideration for the tunnel liners—steel, cast iron, and concrete.

Steel liners.—Two methods of using steel liners are available:

In one method, steel liner segments are installed initially to support the ground until a permanent tunnel structure in the form of concrete lining is cast in place. The steel segments would be relatively light in weight and easy to erect, and together with the poured-in-place permanent concrete lining, a watertight, corrosion free section would be obtained.

In the other method, heavier steel liners are used in lieu of lighter segments. In this case the steel segments are designed to support the ground both during the tunnel excavation and to form the permanent tunnel structure. This eliminates the need for the cast-in-place concrete linings required as a permanent tunnel structure as outlined in the first method, thus assuring a safe and relatively watertight structure immediately following each shove of the tunnel shield.

Cast iron liners.—Cast iron segments are another suitable tunnel lining for providing ground support during the tunnel excavation and to form the permanent tunnel structure. These are similar in shape and form to the steel liners described as the second method of manufacture.

Precast concrete liners.—Another suitable alternative is available in the form of precast concrete liners. These, as in the case of cast iron linings, form the permanent tunnel structure. Similarly the main difference being in the material used and method of manufacture.

The cast iron and steel liners are in general use for subway tunnels and have a history of satisfactory performance. The choice between these two types will be influenced by economics and availability.

Further investigations into soil conditions, design considerations, and construction methods are currently underway in order to assess their suitability with respect to corrosion resistance, watertightness, and maintenance and operating characteristics.

A more recent development on this continent, following a satisfactory demonstrated performance in London, is the alternative of using precast concrete liners. This type of liner is a promising alternative since there are indications that lower costs may be realized and that the manufacture of this product opens additional sources of availability.

It appears that a great number of suppliers would be interested in competing in the precast concrete liner field. As in the case of cast iron and steel, further investigations are now underway to assess the suitability of precast concrete liners.

While the Agency's preliminary estimates of cost are based on the use of cast iron tunnel liner, studies of the various alternatives are now being initiated with a view to the ultimate selection of the type or types offering the best combination of safety, cost, and maximum degree of competition. Alternate bids will be considered. The Agency's timetable calls for this decision to be made in December 1966.

As opposed to more standard construction supplies, such as structural steel shapes, reinforcing steel, concrete, bricks, concrete blocks, asphalt, etc., tunnel linings are more of a special product and are normally not a stock item. Consequently it is necessary to exercise foresight in preordering this item to insure an uninterrupted supply required by the overall schedule of the project. Any delays in the flow of this item which is required to meet construction demands will directly affect the progress of the work. It is therefore essential to examine manufacturing facilities, availability, and delivery of various types of tunnel lining.

The overall delivery situation can be summarized as follows:

Cast iron.—Cast iron linings have not been produced in large quantities in this country in recent years. However, in the past, a great number of tunnels were constructed using this material which was manufactured here. The manufacture of these linings in the quantity required for this project can be readily handled by the potential of existing basic iron and steel industries with only minor innovations. Existing basic facilities can be geared to the production requirements, in the order of 2,000 to 3,000 tons per month, provided a sufficient leadtime is given to start up. At this time, it appears that approximately 9 months would be required between the ordering and first production of the lining.

Steel.—Since steel liners are currently being produced by several manufacturers for projects now under construction, the leadtime required for these items would be less critical. Therefore, orders for steel liners could be incorporated in the manufacturer's production schedules. It appears that approximately 6 months should be allowed between the ordering and start of delivery of the linings.

Precast concrete.—The field of potential precast concrete suppliers is quite large, but the use of this material for tunnel linings is a relatively new development on this continent. The precasting of concrete for this purpose requires special attention to techniques not always encountered in other fields, such as very fine casting tolerances and a very high quality of concrete. A leadtime of 9 months between the ordering and initial delivery is considered appropriate.

The first construction contracts involving tunneling are scheduled to be advertised in early fiscal year 1968. Taking into account the time required to accumulate the necessary stockpiles of liner to meet the peak demand, and making due allowance for advertising for bids, award of procurement contracts, and leadtime required by the manufacturer, it will be necessary to initiate the first major procurement contract in mid-fiscal-year 1967.

The requested amount will enable the Agency to place orders for liner required for the tunnel sections of the first operable route, extending from the Capitol and Union Station area to Connecticut and Van Ness. It is estimated that 11,815 linear feet of double tunnel and 2,765 linear feet of single tube will be involved in this first operation.

Further procurement contracts would be advertised in early fiscal year 1968 and fiscal year 1969, assuring an adequate supply of tunnel liner to meet the demand during construction of the entire project. Advance procurement of tunnel liner will thus insure that there will be no delay in the construction schedule due to the lack of this critical item. A cost benefit could also be realized through volume purchase.

Specific projects, $375,000

For the current year, the Agency has programed funds for incidental construction involving projects under final design which have an effect on the transit development program. The Agency is working with these groups and the transit plan will benefit by appropriate redesign of necessary elements and incremental charges attributable to the redesign and construction to accommodate rapid transit. Two projects in fiscal year 1966 include a section of the inner loop center leg at Second and D Streets NW., and a structure in connection with the

redesign of the Shirley Highway near the Pentagon. In both instances, the Agency will reimburse the responsible organization for any cost of redesign and incidental construction. The cost of the two projects in fiscal year 1966 is estimated to be $250,000.

A similar project is programed for fiscal year 1967 involving Montgomery County, Md., and a highway overpass structure which will span the Baltimore & Ohio Railroad tracks and the proposed transit tracks in the vicinity of the Georgetown junction on the metropolitan branch. While the principle of reimbursement for additional design and incidental construction costs attributable to the rapid transit plans has not as yet been established in this case, the requested amount would put the Agency in a position to do so if necessary.

BIOGRAPHICAL BACKGROUND SKETCH

Senator BIBLE. Mr. McCarter, although construction funds were provided for you in the supplemental appropriation bill for fiscal year 1966, the Senate did not call you to appear and agreed with the action of the House. Therefore, this is the first time you have appeared before this appropriations subcommittee. You have appeared before me in other capacities, but I think this is the first time that you have appeared before the Appropriations Committee. Therefore, without objection, I will incorporate in the record at this point the biographical sketch of your background.

(The biographical summary follows:)

Walter J. McCarter was nominated by President Johnson as Administrator of the National Capital Transportation Agency on May 6, 1965, and was sworn in on May 21, 1965.

Born in Odon, Ind., on April 5, 1900, Mr. McCarter attended Purdue University, where he was graduated as an electrical engineer in 1921. After graduation he entered the employ of the Milwaukee Electric Railway & Light Co., as a student engineer and advanced to the position of assistant educational director. In 1929, he was appointed personnel director of the Cleveland Railway Co., and from 1939 until 1947 he served as general manager of the Cleveland Railway Co., and its successor the Cleveland Transit System. In 1947 he was appointed general manager of the Chicago Transit Authority and served in this capacity until his retirement in 1964.

As general manager of the Chicago Transit Authority, Mr. McCarter had the task of changing over the Chicago Surface Lines and the Chicago Rapid Transit Co., from private ownership and operation to public ownership and operation, coordinating their duplicate department activities, and planning and directing modernization of equipment and facilities as well as improvements in service.

Under Mr. McCarter's direction, modernization of the Transit Authority's rolling stock, its equipment, and its service progressed at a rate unprecedented in Chicago. The authority invested $185,520,000 (in addition to $16,400,000 paid for the Chicago Motor Coach properties in 1952) in new buses and cars (including 180 "new look" air-conditioned rapid transit cars), and other modern equipment, tools, and facilities.

Among the authority's achievements were a number of "firsts" in the transit industry—development of the lightweight, all-metal, high-performance rapid transit car, design and construction of prototype high-speed rapid transit cars, centralized control of service supervision, inauguration of the alternate stop, express plan of rapid transit operation, installation of transit phones for direct voice communication between central operations control and in-service trains, and purchase of the first air-conditioned rapid cars ever bought by any authority-type transit operation in the United States.

The authority also, together with the city of Chicago, Cook County, the State of Illinois, and the Federal Government, pioneered in design and construction of the first multilane highway, the Congress Expressway, coordinating rail rapid transit and automobile transportation within the same below street-grade right-of-way.

Prior to his appointment as Administrator, Mr. McCarter served as the nonsalaried president of the Institute for Rapid Transit, an industrywide nonprofit organization which he helped establish in 1961 to promote rail rapid transit.

In addition to the degree of bachelor of science in electrical engineering from Purdue University in 1921, Mr. McCarter received a master of arts degree from Western Reserve University in 1932. He is a member of Tau Beta Pi, Eta Kappa Nu, and various professional transportation and transit organizations.

TRANSPORTATION PROBLEMS OF NATION'S CAPITAL

Senator BIBLE. And I repeat here what I said in the District Committee. I admire you for your devotion to public service—to leave the Virgin Islands, and come up to wrestle in the Nation's Capital with transportation problems. I commend you for that, and I wish you well as you move along. You have your work cut out for you.

Mr. MCCARTER. Thank you very much.

Senator BIBLE. I am sure that you bring to this job a type of experience, particularly in mass transit, which will be very helpful. I am very happy to receive your statement, in support of your budget, and will incorporate it in full in the record. I don't think you have to read it in its entirety. Why don't you just highlight the statement?

Mr. MCCARTER. Fine; thank you, Mr. Chairman.

(The prepared statement of Administrator McCarter follows:)

I am pleased to appear before you today in support of the Agency's appropriation requests for fiscal year 1967. Since this is my first appearance before this subcommittee I would like to file a background statement of my experience prior to becoming Administrator of the National Capital Transportation Agency.

The National Capital Transportation Agency has the responsibility for designing, engineering, constructing, and equipping the vitally needed rail rapid transit system for the National Capital region authorized by the National Capital Transportation Act of September 8, 1965. Our work has only recently been launched with the funds provided in the supplemental appropriation act approved last October. The appropriation being requested now is needed to continue the work already underway, to finance final design contracts for a substantial segment of the system, for land and right-of-way acquisition, and for the procurement of an initial increment of tunnel liner (a long leadtime construction item)—all of which must be accomplished before construction of the system can be undertaken. The program covered by this request stops short of actual construction which is not contemplated until fiscal year 1968.

As you know, the Agency did not appear before a subcommittee of the Senate Appropriations Committee in connection with the supplemental request last fall but we did have hearings in the House. Before turning to the substance of the present requests, Mr. Chairman, I want to address myself to a number of matters about which the subcommittee of the House indicated special interest last October.

In the report accompanying the supplemental appropriation bill, 1966, the House Appropriations Committee directed attention to certain issues which it felt should be clarified before any actual construction of the transit system is initiated. Although the budget before you now does not involve any actual construction, I want to comment on each of the matters referred to in the House report.

First, there is the matter of an independent traffic survey. I am able to report at this time that such a survey has been launched. The Agency has engaged the services of Alan M. Voorhees & Associates, Inc., of Washington, an outstanding firm of independent professional traffic engineers for the purpose. They are now performing a transportation study of the authorized NCTA system and of the system as it would operate in conjunction with the privately owned bus services in the region. These experts are developing estimates of the num-

bers of passengers that will use the rail transit system and the combination rail and bus system. Their work includes (1) the collection of detailed data on present transit movements in the region, (2) estimating the portion of these that can reasonably be expected to be diverted to the rail system, (3) estimates of the number of automobile users that will use the new system, and (4) the projection of these estimates to future years, taking into account the expected population increase and growth of downtown employment.

As part of this work, a post card, origin-designation survey of bus transit passengers has already been made and the results are being tabulated.

I am especially pleased to report that this work is being accomplished with the full cooperation and assistance of the privately owned bus companies, the Washington Metropolitan Area Transit Commission and the District of Columbia Highway Department. This kind of survey could not be done properly by the Agency alone. To be well done it has to be a cooperative venture. The bus companies, the WMATC and the District have come forward and are wholeheartedly behind the effort. They have devoted a great deal of time and talent to assisting in planning the study. Their people have been and will continue to be actively involved in the origin-destination work, and in assisting our engineers in developing realistic assumptions concerning the coordination of rail and bus operations.

The bus companies' part in this is a real contribution on behalf of the public interest in better transit. I am grateful for it, and I think they are to be commended.

The results of the study will be available in July, and I am confident that it will provide a reliable basis for financial decisions.

Secondly, recognizing that present legislation authorizes only a portion of the funding needed to establish the transit system, and that the program contemplates additional funding through the sale of revenue bonds to be authorized by future legislation, the House committee's report pointed out that before construction is initiated there should be a clarification of specific plans for bond issuance.

In this connection, I am unable now to report on any specific plan for the issuance of bonds. But, this budget does not involve construction, and I am confident that such a plan will be presented to the Congress before construction funds are requested, and in time for the Congress to give full consideration to the course to be pursued.

The question of future financing for this program has, from the beginning, been closely related to the efforts that have been underway for the past several years to negotiate and obtain the approval of an interstate compact which would establish a tristate agency to plan and develop a regional transit system. When he sent the 1965 act to Congress, President Johnson expressed his hope that the compact agency would come into being by the time additional funding is required, and assume the responsibility for the issuance and sale of the revenue bonds. Also, in testimony before the authorizing committees, the Bureau of the Budget made it clear that if for any reason the compact agency does not materialize, the administration will be prepared to recommend an alternative approach to bond financing, possibly through the creation of a Government corporation.

As I say, there is no specific plan available at the moment. I am able to report, however, that there has been very significant progress respecting the interstate compact. It was approved by the Virginia Legislature a few weeks ago. It was passed in Maryland last year. It has been endorsed by the District of Columbia Commissioners, and it is now under consideration by the administration. Our understanding is that the necessary legislation to obtain the Congress consent and approval is being drafted, and will be forwarded to the Congress soon.

I think this is a major step forward. The States approval of the compact is positive evidence of the intent and desire of the suburban jurisdictions to participate financially and otherwise in developing a truly regional transit system. The compact is a significant development in intergovernmental cooperation. Given Congress approval, the compact agency will be in a position to formulate a plan for bond financing under its auspices.

Our hope and expectation is that an acceptable plan can be developed and implemented by the compact prior to the time bond funding is needed for the NCTA program. And, in any case, as I've said, should delay arise an alternative will be recommended in time for Congress full consideration.

Another matter mentioned in the House committee's report has to do with arrangements for approvals of the stations on the authorized system that are

located in Maryland and Virginia. The National Capital Transportation Act of 1960 requires the Governors' approval of the location of Agency facilities within their respective States.

Regarding this, I want to recall that the transit development program published by NCTA in November 1962—of which the present system is a part—received the approval in principle of both Governors, or their designated representatives. Of course, at that time the proposed system was little more than lines on a map, and the States reserved the right of further approval when the alinements and station locations became more specific. All of the local governments of the region endorsed the present program when it was before the Congress last year.

Both Virginia and Maryland have created special transportation districts and commissions covering their respective portions of the National Capital region—the Northern Virginia Transportation Commission and the Washington Suburban Transit Commission. These commissions are authorized to plan the location of transit facilities within their districts. The Agency has been and will continue to be in close touch with each of these bodies, and also with the local governments, their highway departments, and the other local planning agencies. We have also been consulting with officials at the Pentagon. Our working relationships are excellent.

We understand that the precise alinement of routes and location of stations in these areas must take account of local development and highway plans. Under our schedule, the final design of the suburban segments of the system is still two and more years away. We will be working with the localities as we go along, and we anticipate no difficulty in reaching mutually satisfactory agreements.

Finally, the House committee expressed considerable interest in the question of joint fare arrangements with the local bus companies after the rail system begins operations. The budget request before you now includes funds to carry out a necessary study of this subject. This kind of study will be a logical sequel to the traffic study that is now underway. The traffic study will develop a feeder bus network geared to the rail system—one calculated to provide the best possible service for the public. This network will form the basis for our joint-fare study. We will analyze the economic consequences of the joint system and develop recommendations as to the allocation of fares.

I've already mentioned our excellent working relationship with the bus companies and the regulatory commission on the traffic study. We look forward to the same close coordination in our work on fares. The justification material already submitted to the subcommittee contains more detailed information on this project.

Mr. Chairman, I think that covers the points mentioned in the House committee's report, and I want to assure you and all of the members of this subcommittee that we are alert to these problems and will be bending every effort to produce sound workable solutions.

1967 Requirements

Turning now to the Agency's present budget request, the subcommittee will recall that the National Capital Transportation Act of 1965 (sec. 5(a)) provides that the cost of this program is to be shared by the Federal and District of Columbia Governments. Of the total appropriations authorized ($150 million), two-thirds is to be provided by the Federal Government and one-third by the District of Columbia government.

Our present request includes $25,580,000 under the appropriation, "Construction, rail rapid transit system." Of this, we are requesting $17,055,000 from this subcommittee as the Federal portion of our requirements. The balance, or $8,525,000, is being requested of the Subcommittee on the District of Columbia, as the District of Columbia share.

In addition, we are requesting $1,575,000 from this subcommittee under the appropriation, "Salaries and expenses, NCTA," to cover the Agency's administrative costs during the next fiscal year.

Program to Date

It has been 4 months since the funds approved in the 1966 supplemental appropriation became available to the Agency. As pointed out in connection with the supplemental request last fall, the primary emphasis in the current fiscal period is on the development of design criteria and standards for those segments of the

system scheduled for early construction, and the architectural concept and configuration of the physical structures of the system.

The engineering portion of this work is well underway, and is proceeding very well. The Agency has engaged the services of De Leuw, Cather & Co. of Chicago, one of the Nation's outstanding engineering firms, and a recognized authority in the planning, design, and construction of transit facilities. There is no more experienced firm in the country. They served as consultants on the construction of the State Street subway in Chicago, as the principal consultant on the design and construction of the Cleveland rapid transit system, and played a major role in the design and construction of the Yonge Street subway system in Toronto, Canada.

The contractor now has a Washington staff of 29 professional and technical people working full time on the project. Their work to date and that scheduled for accomplishment during the balance of this fiscal year is described in detail in the justification material submitted to the subcommittee. Briefly, they are reviewing the overall schedule for design and construction. Basic control surveys are underway. Survey crews are already on the city streets. Aerial topographic surveying is also underway. Specifications and contract documents for a supplementary soils boring and testing program are being prepared and a contract for this work will be let shortly. Alinement and foundation studies have begun. Preliminary plans and specifications for mechanical facilities, traction power, and other equipment, and station and terminal plans will be in preparation within the next few weeks.

These are only a few of the activities detailed in the justification material. There are many more. I feel that our engineering progress to date has been very satisfactory, and we expect to be able to adhere substantially to the schedule we presented to the subcommittee in September.

In the field of architecture, the President has asked that special emphasis be placed on the beauty and attractiveness of the system, and last week the Agency engaged the firm of Harry Weese & Associates, Ltd., of Chicago, to develop architectural concepts establishing the physical appearance and environmental setting of all the stations of the system. Mr. Weese is an outstanding, nationally known architect. We expect to accomplish the preparation of a concept design report for the system and the preliminary layout of stations on a portion of the system during the remainder of this fiscal period.

As I pointed out earlier, we have also launched our traffic study.

The Agency has also moved ahead in the matter of land acquisition. We are about to conclude arrangements under which we will purchase a substantial parcel of real estate at one of the station locations on the system. In addition, as the engineering work proceeds, we may be in a position to begin negotiating for the purchase of some easements by the end of this fiscal period.

Problem for Fiscal Year 1967

The Agency's request for $25,580,000 under the construction appropriation for the next fiscal year is needed to continue the work now in process, and that which will begin over the next 4 months.

During fiscal year 1967 the program will take on a new dimension. In addition to continuing the present engineering work and the architectural conceptual work, the Agency will move into final design work on many elements of the system.

Under the present schedule, final design contracts will be let on 19 segments of the system on the Connecticut Avenue route, the Columbia Heights route, and on portions of the Benning and B. & O. routes. These are described in the justification material. The budget item totals $6,940,000.

The Agency will also have to continue the soil boring and testing program for these three routes to keep phase with its final design activity. An additional $580,000 is needed for this.

Rights-of-way and land acquisition will be a major part of next year's program. Again, this is necessary to keep abreast of the final design effort. In addition to any carryover from the present period, the Agency proposes to undertake negotiations to acquire all of the property needed for the Columbia Heights route and easements affecting 50 parcels of land on that route and the Connecticut Avenue route. Our request includes $3,330,000 for this.

Finally, as I indicated in the beginning of my statement, the present budget stops short of actual construction of any part of the system, but does include

a request for funds to procure tunnel liner. Under the present schedule construction funds will not be requested until fiscal year 1968. The first construction contracts involving tunneling would be advertised early in that period.

But, if this schedule is to be maintained it will be necessary to place orders for the tunnel liner in mid-fiscal-year 1967. We have discussed this item in some detail in the justification material submitted earlier. Unlike most standard construction supplies, tunnel lining is a specialized product, and ordinarily not a stock item. It has to be manufactured specially. The Agency's investigation shows that depending on the material used (cast iron, steel, precast concrete) delays of from 6 to 9 months must be expected between the placement of orders and delivery on the job. Taking into account the time needed to accumulate the necessary stockpile of liner to meet peak demand, the time it takes to advertise and award contracts, and the manufacturer's leadtime, to keep the program on schedule, the Agency will have to place orders for this tunnel liner in mid-fiscal-year 1967.

The amount requested now ($12,200,000) will cover the tunnel sections of the first operable route of the system—that extending from the Capitol-Union Station area to Connecticut Avenue and Van Ness Street NW.

As I said, this is an unusual item. It is a critical item. Its procurement in advance of actual construction is essential to insure that there will be no delay in the program.

ADMINISTRATIVE FUND REQUEST

In addition to the funds requested under the appropriation "Construction, Rail Rapid Transit System," as I noted earlier, the Agency is also requesting $1,575,000 under the appropriation "Salaries and expenses," to defray its administrative costs during the next fiscal year.

The Agency's current funding covers 51 full-time staff positions, the services of experts and consultants compensated on a when-actually-employed basis, related support costs, and special contract work to augment and supplement the in-house activities of the staff. The most significant project in this category is the independent traffic survey which I discussed earlier.

The present budget request would provide a staff of 66 full-time positions, an increase of 15 over the presently authorized level. It also makes provision for the continued utilization of part-time experts and consultants, and includes $477,500 for a number of special projects that will require the assistance of outside contractors.

Concerning personnel, I want to assure the subcommittee that we have been and will continue to be mindful of the cautionary statement contained in the House committee's report of last October concerning grade structures and specialist positions. Since then, at our request, all of the Agency's posiitons have been reviewed by representatives of the Civil Service Commission. The Commission has been most cooperative and very helpful. The Agency will continue to work with the Commission so as to be sure its positions are established at appropriate levels.

Of the 15 new positions requested at this time, 8 will be in the Office of Engineering. In the nature of our business, this has to be the Agency's largest activity. The additional positions are needed to work on the extensive final design activities planned for the new fiscal year.

Four of the new positions will be in the Agency's Office of Planning and Finance. They are necessary to support the accelerated staff activities of that Office, including the special projects I mentioned a moment ago.

One of these projects will be the study of joint fare arrangements with local bus companies. I discussed this earlier in my statement. The project is referred to in our justification material as the "Bus Coordination Project."

The Agency also plans to contract out the development of plans for external traffic movements for each of the 22 uptown stations on the transit system. This work will be directed by the Office of Planning and Finance. Its object will be to produce specific plans to facilitate the movement of vehicular and pedestrian traffic within and through the area served by each of the transit stations. Careful planning is essential so that congestion in the vicinity of the stations will be kept to a minimum.

One additional position is include for the Office of Architecture. This will bring the strength of that Office up to four architects and one secretary. The activities of that Office will increase sharply with the letting of final design contracts during the coming year.

Finally, the present budget would provide two positions for the Agency's Office of Real Estate Acquisition and Relocation Assistance. As I explained earlier, the Agency's land acquisition activity will be increased to keep pace with the final design projects to be undertaken during the next year. At this point, our authorization includes one real property specialist position. These new positions represent the Agency's minimal requirement for the immediate future.

In conclusion, I want to emphasize to this subcommittee some of the things I said to the subcommittee of the House when I appeared before them last September. I stated that when I came to Washington to accept this job I did so out of a very keen professional interest in rail rapid transit as a means of solving the critical urban transportation problem, and with a particular interest in seeing the best possible system built in our Nation's Capital.

I also stated that by reason of my own background and experience I have a very healthy respect for sound financial management and economy.

After some 10 months on the job I am more than ever convinced that this transit development program is essential for the welfare and orderly growth of the National Capital, and is a sound Federal investment.

I think we have made substantial progress over the past few months. I am confident that the work program the Agency has laid out for the next year is realistic, and that with the subcommittee's support, it will be achieved.

As was the case last September, the estimates and staffing proposals before you today are based on maintaining the Agency staff at a minimum level consistent with sound management and the accomplishment of the final design projects scheduled for the next fiscal year.

The funds requested are needed to keep the program on schedule. If appropriated, I assure the subcommittee that every effort will be made to obtain a dollar of lasting value for every dollar spent.

I appreciate this opportunity to outline the Agency's requirements, and I urge your favorable consideration of our requests.

Leadtime Before Starting Construction

Mr. McCarter. The appropriation request is in two parts. I would first like to discuss the construction budget, although I would emphasize that no actual construction funds are asked for in fiscal year 1967. We are, however, asking for $12.2 million for tunnel liner, which is a leadtime item, needed to insure that we are on time with construction.

The tunnel liner is a manufactured product. It can be of cast iron, or of steel, or it might be concrete. It would have to be molded into sections. As you push forward, you line the tunnel, so that it is watertight and safe. Since if it is cast iron, or concrete, it has to be molded, it has to be machined, and you have to have a manufacturing setup for it. The leadtime, before you actually start construction, in order to assure that there will be enough available to start construction, is from 6 to 9 months.

Now, in San Francisco, they allowed 9 months' leadtime on steel tunnel liner. Kaiser Steel got the bid for $15 million worth of tunnel liner, and they said it cost them a million dollars to setup to manufacture this steel, and they now have the setup.

They said if they perchance were to get the bid, they would need at least 5 or 6 months' leadtime, even if steel were the material selected. That is the reason for including this item in the fiscal year 1967 request.

Now we are proceeding with what I call the conceptual engineering. De Leuw, Cather & Co. has been employed as the conceptual engineers.

INDEPENDENT TRAFFIC SURVEY

Senator BIBLE. Before you get to that—if I might interrupt you—I think it would be best if you developed your statement somewhat in line with the matters that you touch on in your prepared statement.

You say, first, that there is the matter of an independent traffic survey. Now why don't you tell us about this survey—how far it is along, what you have done, how much it is going to cost?

Mr. MCCARTER. Yes, sir.

These series of items have to do with the questions raised in the House Appropriations Committee. One of the questions raised was whether or not the traffic survey that the Agency had made, prior to my coming here, was of sufficient validity that we could make the proper estimate of patronage and income on the system.

I agreed that although I thought the survey was reliable, it had been made without the cooperation of various other agencies in the area, particularly the bus companies. Consequently, I arranged for complete cooperation with all of the bus companies, including D.C. Transit, the Virginia company, the Maryland company, the regulatory body, and the Traffic Department of the District of Columbia, who are all on a committee with the Agency. We have engaged Alan M. Voorhees & Associates, an outstanding firm of transportation engineers here in Washington. They have the necessary Washington background to make this new traffic survey.

Now, the first portion of the current study is the card survey you've probably read about. They passed out cards to the bus riders in the area on their inbound trips, to obtain origin and destination data. Now, those cards, when they are all assembled and are put through the proper IBM machines, will give a pattern of the flow of bus riders, so that it then can be determined what changes need to be made in the bus routings, to establish feeder bus lines to the rapid transit system in certain locations or whether or not the buses just pass certain stations and go by.

Now I will emphasize that we have had complete cooperation from the bus companies. They have spent a great deal of their own time and their own staffs' time in working on this project, so that I am confident that when we get a result, it will be——

Senator BIBLE. When will this study be completed, Mr. McCarter?

Mr. MCCARTER. It is supposed to be completed July 1. Now, that includes not only the bus survey, but a survey of automobile riders, people who walk to the station, all the possible riders that might use the rapid transit system. The first phase of the study was the bus rider survey.

RELIABLE BASIS FOR FINANCIAL DECISIONS

Senator BIBLE. Then tell me what you mean by this next sentence. "I am confident that the study will provide a reliable basis for financial decisions."

What does that mean?

Mr. MCCARTER. Well, we have to know how many riders we expect. Then you have to multiply the riders by the amount of fare you are going to charge. That gives your income. Now, with that, and with the operating expenses computed, then we know what our net income will be.

Senator BIBLE. I thought you had all that material all worked out before you came to the Congress.

Mr. MCCARTER. We have.

Senator BIBLE. And asked for authorization to build a mass transit system.

Mr. MCCARTER. We have, but the House committee didn't consider it sufficiently reliable.

Senator BIBLE. Well, I don't want to borrow trouble, but what if this should turn out to prove to you that your original estimates were all haywire? You would be in bad shape, wouldn't you?

Mr. MCCARTER. We would be in bad shape. But let me mention just one little figure from my experience. I have——

Senator BIBLE. Well, what that is designed to do, then, is to double-check what you have already done?

Mr. MCCARTER. To doublecheck what we have already done, and I think it will prove that the Agency was ultraconservative in the previous estimates.

Senator BIBLE. In other words, that you will have more riders, and you will receive more revenues than originally estimated?

Mr. MCCARTER. Yes.

FUTURE FINANCING THROUGH INTERSTATE COMPACT ORGANIZATION

Senator BIBLE. Now, you say:

> Secondly, recognizing the present legislation authorizes only a portion of the funding needed to establish the transit system, and that the program contemplates additional funding through the sale of revenue bonds to be authorized by future legislation, the House committee's report pointed out that before construction is initiated, there should be a clarification of specific plans for bond issuance.

Mr. MCCARTER. Yes.

Senator BIBLE. Now what do you say about that?

Mr. MCCARTER. When the legislation was first presented, for the basic system, there was nothing in it for bond financing, except that the Treasury and the Budget Bureau did say that if there was no other form of bond financing, then the Treasury would underwrite revenue bonds for this part of the system, possibly, through a Government corporation.

However, it was the desire of the administration that there be an interstate compact authority formed, between Maryland, Virginia, and the District, and that they would market the bonds, and to give them a chance to get organized, and be ready to market the bonds, this was held up, until they were organized.

Now both Maryland and Virginia have adopted their legislation. The District Commissioners have approved it in principle. There will be submitted to the Congress consent legislation for the formation of the compact authority. That legislation is not in final form yet.

Senator BIBLE. But when will it be drafted and in form?

Mr. MCCARTER. I thought it was in form a couple of weeks ago, but it should be within another week or two.

COMPACT LEGISLATION

Senator BIBLE. Now this goes to the Congress and to the Judiciary Committee. Is this right? Is this where the compact legislation goes?

Mr. MCCARTER. It goes to the Judiciary Committee, unless they would want to refer it to some joint committee, or a District committee, or something like that.

Senator BIBLE. I think normally compact legislation goes to the Judiciary Committee.

Mr. MCCARTER. It goes to Judiciary in the first instance, yes.

Senator BIBLE. And again, you expect that will be before the Congress how soon?

Mr. MCCARTER. I would think within 2 weeks.

Senator BIBLE. You hope to have the congressional consent given during this session of the Congress?

Mr. MCCARTER. Yes, but this agency is not directly involved in the matter. The proposed signatories to the compact have their own committee organization that is developing the legislation. There is the Federal representative appointed pursuant to our original statute, and they have Counsel and they have been working with the Budget Bureau. As a courtesy, I have been sitting in on some of the negotiations, and Mr. Malone, our general counsel, has been sitting in on some of them, but it is now in the hands of the Budget Bureau, and Mr. Horsky. I believe that there are conferences going on now with some of the members of the Judiciary Committee, I think, in the House.

CLARIFICATION OF SPECIFIC PLANS

Senator BIBLE. You say the House committee in their report said that you should not proceed with construction until there was a clarification of specific plans for bond issuance.

Mr. MCCARTER. That is right. But this year, they didn't seem quite so determined on that subject. The budget I've presented, does not include any actual construction, but does include the $12 million for tunnel liner, which relates to construction, and I don't know whether we will get it or not, but there seemed to be no question but what we needed it, and it might go forward.

Senator BIBLE. Do I understand, though, that you are asking for $25 million for construction?

Mr. MCCARTER. Well, our request is in the construction appropriation, but all but the $12.2 million is for design. Preliminary design, and final design, engineering. It was their first thought that we ought not to do anything but engineering, until either the compact was formed or a Federal corporation was formed, but they didn't raise serious objection in our hearings this year, when I pointed out that we are not asking for any actual construction money, but we are asking for money for some materials which relates to construction.

Senator BIBLE. I can't quite see the difference, though, in their philosophy, because if you start buying material that is related to construction, haven't you, in effect started on construction?

Mr. MCCARTER. I think we have, so that I have a feeling now, and it is just a feeling, that they have receded a little from their previous

position that we ought not to start construction, because the chairman of the subcommittee, in an opening statement at the hearings expressed the view that since the Congress had acted, the subcommittee would do everything within its power to see that the wishes of Congress are carried out and to see that the construction and financing programs are sound and practical.

Senator BIBLE. Very well. You may continue.

APPROVAL FOR STATIONS IN VIRGINIA AND MARYLAND

Mr. MCCARTER. The House committee also asked whether or not we had had approval of the stations in Virginia and in Maryland. On the original study, there was approval in principle by the Governors of each of the States, or their designated representatives. Since we are not going into final design on those stations, even in this budget, we have not asked for any final approval of the location of stations.

Now Maryland and Virginia, each have a transportation district with their own planners, and they are considering the plans that we have, and they are considering the plans for extension and expansion within Maryland and Virginia. There is nothing that has happened so far that would change our plans as we have them. We have had meetings with the planning group from Arlington County, we have had meetings with the Pentagon, and they all seemed to be satisfied generally with our location of stations, except they are interested in expanding, and the expansion will come, if the compact is formed. I would say that the consent legislation will permit the compact, within the next year or year and a half, to plan a regional system, so that then you would have those stations in Maryland and Virginia fitting in with the regional system; but we have found no objection so far to the location of the stations as they are now proposed.

PROGRAM ENDORSED BY LOCAL GOVERNMENTS

Senator BIBLE. Now, Mr. McCarter, in the last sentence of the first paragraph on page 6, you say, "All of the local governments of the region endorsed the present program when it was before the Congress last year."

Would you explain that? How did they endorse the present program?

Mr. MCCARTER. Well, I think in writing. We had endorsements from almost everybody.

Mr. QUENSTEDT. May I amplify? The various local jurisdictions through their elected bodies, in almost every instance, wrote an unequivocal endorsement of the "bobtailed" plan for inclusion in the record in the House in connection with the hearings in early 1965. We also had a letter of endorsement in principle of the proposal from the Governor of Virginia, and from the delegated organization exercising the Governor's power in Maryland. That is what the sentence means: that this bobtailed plan was submitted and endorsed, in the same fashion that the previous regional plan had been endorsed.

Senator BIBLE. Well, the thing that concerns me is that as you start moving forward on right-of-way acquisitions—that is always the sticky and difficult area in any type of transportation building, whether it is a highway or a transit system, or where to locate an airfield, any-

thing in that area—you always run into some problems. Now, under your "bobtailed" plan, you first go north to Takoma Park, and, of course, that is in the District of Columbia; but from there you go to Silver Spring, and from there you go to your terminal, to Woodside?

Mr. QUENSTEDT. A place called Woodside; yes, sir.

NEGOTIATION WITH PUBLIC WORKS DIRECTOR OF MONTGOMERY COUNTY

Senator BIBLE. What problems do you encounter when you go into Silver Spring and on to Woodside?

Mr. QUENSTEDT. Throughout this entire route, Mr. Chairman, we follow the right-of-way of the B. & O. Railroad. The interested parties are fully aware of what we intend and there has been full and easy exchange with regard to how we would do it. It will be accomplished essentially by separating the two railroad tracks and putting transit tracks in between. We have had conversations with property owners in the Woodside area who would be affected, but it would not be appropriate to say that we have had negotiations with them with respect to the property. We have also been in very close communication with the Public Works Director of Montgomery County, because our proposals in this area affect in some respects their own plans with regard to upgrading the Woodside area, and certain highway and street realinements in the county.

Senator BIBLE. I assume that when you acquire right-of-way from the B. & O. Railroad concurrence of any of the governing authorities of Montgomery County is not required, or is it?

Mr. QUENSTEDT. Not of Montgomery County, sir, but it would require the approval of the Governor of Maryland before we could actually physically do something within the confines of that State.

Senator BIBLE. And that requirement is why? Because of the act?

Mr. QUENSTEDT. The basic act in 1960 which created the NCTA.

APPROVAL TO GO UNDER RIVER, JURISDICTION OF DISTRICT OF COLUMBIA

Senator BIBLE. All right. Now, when you come down into Virginia, give us your problems there.

Mr. QUENSTEDT. The problem here is that we come under the river, underneath Rossyln.

Senator BIBLE. From whom would we have to get approval to go under the river? The Army Engineers?

Mr. QUENSTEDT. I don't know whether the Corps of Engineers figure in it, since that is within the jurisdiction of the District of Columbia, but it may be that the Corps of Engineers have a specific interest in the matter.

Senator BIBLE. Does the District of Columbia have complete jurisdiction over the Potomac?

Mr. QUENSTEDT. I don't know the answer. I don't know the specific definition of responsibility within jurisdictions, but it is within the legal jurisdiction of the District of Columbia, because the boundary is the high-water mark on the Virginia side of the Potomac.

Senator BIBLE. You are across the Potomac, and you are starting to drop south into Virginia. Where do you go there for clearance?

Mr. QUENSTEDT. The local bodies, of course, for their acquiescence.

The ultimate clearance will be the Governor of Virginia, because he has not delegated the authority.

Senator BIBLE. I take it that that sentence means you do not anticipated any difficulty from the Governor of Virginia or the Governor of Maryland in that respect.

Mr. QUENSTEDT. No, sir; we have no reason to expect any difficulty from either one of them.

Senator BIBLE. When you got the approval last year, were you dealing with the same Governor in each of the two States as you are dealing with now? I know you are in Maryland. Is that true of Virginia?

Mr. QUENSTEDT. We have very close and friendly relationships with Governor Godwin. And I feel that he is thoroughly in support of this, because under his administration as Governor of Virginia, the general assembly ratified the compact.

NO DIFFICULTY ANTICIPATED IN REACHING MUTUAL AGREEMENTS

Senator BIBLE. Very well. Fine. Thank you, Mr. Quenstedt.
Now, the last paragraph on page 6, Mr. McCarter, you say:

> We understand that the precise alinement of routes and location of stations in these areas must take account of local development and highway plans. Under our schedule, final designing of the suburban segments of the system is still 2 or more years away. We will be working with localities as we go along, and we anticipate no difficulty in reaching mutually satisfactory agreements.

Is that limited to the "bobtailed" system?
Mr. MCCARTER. Yes.
Senator BIBLE. You are talking there about the "bobtail" system?
Mr. MCCARTER. Yes.
Senator BIBLE. And that is what you have testified to now?
Mr. MCCARTER. Yes.
Senator BIBLE. That is not an enlargement of it.
Mr. MCCARTER. No, sir.
Senator BIBLE. All right, now, develop the next point.

DETAILED STUDY OF JOINT FARE ARRANGEMENTS

Mr. MCCARTER. The next point, the House Appropriations Committee felt that we ought to have a detailed study on the joint fare arrangement with the bus companies. In our estimates for the authorized system, we had estimated that with a 25-cent fare, on a transfer from the buses, or to the buses, that one-half of the 25-cent fare would go to the bus company and one-half to go to rapid transit. That is the way we came up with our income. The Washington Metropolitan Area Transit Commission regulates the bus fares, so that we need a study following the traffic study that we will have completed, to make a tentative layout of bus routes, and so forth, as they feed the rapid transit system. We would then determine what is the proper division of fares between a feeder bus and the rapid transit. That would be an independent engineering study, and we are asking in the administrative budget for funds for that purpose in this 1967 budget. It is a difficult study, but San Francisco is going through that now. As a matter of fact, they employed three engineering firms, representing each of the bus companies and the rapid transit system, to try and make that division there. Although

they are all publicly owned in San Francisco, still, the San Francisco bus system, and streetcar system, is separate, and the Oakland bus system is separate from the rapid transit system, but they are all going to feed the rapid transit system, so they have to determine the proper division of fares.

Now it is difficult, but we are going to try to do the best we can.

Senator BIBLE. Well, for the record, explain how a joint fare arrangement comes into play when you cross the Potomac and get into Virginia. What you are saying is that I get on the transit system here at the Capitol, and I go to Pentagon City. Then what do I do if I want to go to Alexandria.

Mr. MCCARTER. You transfer to a bus.

TRANSFER ARRANGEMENT

Senator BIBLE. It is a transfer arrangement.

Mr. MCCARTER. The bus transfer would be at the Pentagon, where the Virginia bus company has service. The feeder buses at the Pentagon would be used by people who come from outlying areas to the transit station and then would be distributed via the rail system. Now we will have the origin and destination of those people, and then we will try to compute what it cost the bus company for that shorter ride to the transit station, and how much of the 25-cent fare should go to the bus company, and how much of it should go to the rapid transit system.

Senator BIBLE. Is this based on a 25-cent fare? I have forgotten the figure.

Mr. MCCARTER. Yes.

Senator BIBLE. It is 25 cents?

Mr. MCCARTER. That is the original.

Senator BIBLE. Well, if I paid 25 cents at the Capitol, how far could I ride on the transit system and the bus company, into Virginia?

Mr. MCCARTER. That has not been determined yet. It might be an additional fare to outlying areas.

Senator BIBLE. That is what I am asking. Twenty-five cents takes me where, to Pentagon City?

Mr. MCCARTER. To Pentagon City. Yes. Although to Woodside, it would be a 35-cent fare.

Senator BIBLE. I understand. But I want to go to Alexandria. How much would it cost me, if I get on at the Capitol?

Mr. MCCARTER. I would think it would be more than the 25 cents.

Senator BIBLE. I would think so, too.

Mr. MCCARTER. That is what we will have to determine, what the costs will be, in this study, as to how much should be paid through to the bus, for bringing people to this destination.

Senator BIBLE. I understand. I just want this record to be clear on that. But if I get on at the Capitol, and I go to Woodside, it costs me 35 cents.

Mr. MCCARTER. That is right.

Senator BIBLE. If I wanted to go to Alexandria, you don't know how much it will cost me, because they haven't entered into an arrangement with the connecting bus company.

ESTIMATE ON JOINT FARE ARRANGEMENTS

Mr. MCCARTER. But if you wanted to go up here to Military Road, and you transferred to a bus here, it would still be 25 cents—within the District—for the joint fare.

Senator BIBLE. Well, that has been worked out, then, with Capital Transit?

Mr. MCCARTER. No; it has not been worked out. That is, our estimates are based on that. Our estimates were based on a passenger taking rapid transit at a station within the District and later transferring to a bus. It was proposed that the rapid transit would get 12½ cents of the fare, and the bus company would get 12½ cents.

Senator BIBLE. I see.

Mr. MCCARTER. I don't know whether that is a proper division, but that is the way the estimates were made, and a new study will determine whether the proposed division is appropriate or new formula should be used.

Senator BIBLE. Very well.

Mr. QUENSTEDT. May I illustrate one point about the trip to Alexandria under present circumstances?

Senator BIBLE. Surely.

Mr. QUENSTEDT. From our office, using both the D.C. Transit——

Senator BIBLE. Give your office location, please.

Mr. QUENSTEDT. From our office at the corner of 17th and I Streets, if you ride a D.C. Transit bus and then transfer at an appropriate point to the A.B. & W. bus which would then take you to Alexandria, the total fare is 45 cents, today. And that involves some kind of a division of the fare between the two companies.

Mr. MCCARTER. Mr. Eisen says 50 cents.

Mr. QUENSTEDT. Fifty cents. Well, I relied on our general counsel.

Mr. MALONE. I ride it every day, Mr. Chairman, and it costs me 45 cents for my interline ticket.

Senator BIBLE. Well, it is either 45 or 50, depending on where you are going in Alexandria.

Mr. QUENSTEDT. I will now make what I believe will be a clarifying statement; that in all of our recommendations to the public, we have stated that whatever the fare system might be, it would be that fare system now obtaining or obtaining in the future at such time as we go into operation.

Senator BIBLE. Very well. Well, I think we have the record clear on what your House committee is doing on the joint fare arrangements.

Mr. MCCARTER. Yes, sir. I think that is all that we have about that.

FISCAL YEAR 1967 REQUIREMENTS

Senator BIBLE. Now tell us about your fiscal year 1967 requirements.

Mr. MCCARTER. For fiscal year 1967 we are requesting a total of $25,580,000 under the appropriation "Construction, Rail Rapid Transit System," of which $17 million-plus is from the Federal grant, and $8,525,000 from the District of Columbia share.

Of the $25,580,000, $12,200,000 is for the purchase of tunnel liners. The rest of that is——

Senator BIBLE. I want to make that crystal clear, in view of the House language of last year. You proposed, because of leadtime, the purchase of these tunnel liners at a cost of $12 million-plus.

Mr. MCCARTER. Yes.

Senator BIBLE. And yet the House report language of last year made it very clear that you were not to initiate construction until there was a clarification of the specific plans for bond issuance.

How do you reconcile those two?

Mr. MCCARTER. I assured the House at the hearing this year that if the compact, which I understand will be given—in one draft of legislation that I saw until July 1, 1967, to develop the financial plan and the ability to market the bonds—is not ready at that time, a corporate structure would be recommended. I have had recent assurances from the Secretary of the Treasury, and from Mr. Elmer Staats when he was still with the Budget Bureau, that the commitment made to the District Committee would be maintained. To meet such a circumstance the Budget Bureau has a draft legislation ready to set up a Federal corporation that would market bonds guaranteed by the Treasury.

Now that would not be the tax-free bonds that the compact might market. They would be corporate-type bonds, taxable by the U.S. Government.

SUFFICIENT AUTHORITY FOR BONDING

Senator BIBLE. Well, I am sure the concern of the Members of the House in this problem is that there be sufficient authority for bonding and such sufficient opportunity for bonding so that the bonds can be repaid. Undoubtedly, that is what is concerning them.

Mr. MCCARTER. That is right.

Senator BIBLE. They don't want to move forward with even a $12 million item until they know that that is clear.

Mr. MCCARTER. Yes. I am hoping that they will.

Mr. MALONE. Mr. Chairman, may I make a comment on this?

Senator BIBLE. I wish you would because it concerns me a little, if something should go awry with the bonding plans, though I don't think it will. I think you have made splendid progress today. I don't think you should be in a position of saying, "Well, we are sorry, we have already spent $12 million."

Mr. MALONE. We are working, of course, against a program deadline, in a way. The program calls for first transit operations in 1970.

Senator BIBLE. Correct.

Mr. MALONE. Now in order for the agency to stay on this schedule, to achieve that goal, it is necessary, because of a leadtime involved in the purchase of this tunnel liner item, to begin to buy it during the next fiscal year. It is one of those items which we cannot avoid in the next fiscal year, if we expect to keep this program going on schedule.

PLAN FOR BONDING TO BE MADE BEFORE STARTING CONSTRUCTION

Senator BIBLE. I understand your dilemma, but I also am concerned about the House language that says, "Don't start construction until you have given us a plan for bonding." It seems to me with the two that you are caught in somewhat of an inconsistent position there.

Mr. McCarter. I am hoping that they have softened their attitude on that point.

Senator Bible. Well, I will ask Mr. Eaton to check that out with them, because I don't want to see you or the agency in a position of doing something where you don't have the clear blessing of the Congress of the United States, and then when you come back a year from now, asking for money, they will say, "How come you spent $12 million?"

I think we certainly want to clear that up.

Mr. McCarter. Yes, the leadtime we are talking about would begin about next December.

Senator Bible. You mean you would have to make the purchase by December?

Mr. McCarter. We would have to have a requirement contract for a certain amount of tunnel liner to start the manufacturing process, and then we would determine the maximum amount of material that had to be on hand, so that when construction started they would keep up with construction. You see, there has to be a little peaking there of the material.

Now, actually, we would not have $12 million worth of tunnel liner on hand. But to get a set-up, you almost have to have about $12 million worth, or it is going to be very expensive. You are going to have to pay for tooling up more than you would need to if it can be spread over more material, so that that ought to be about the minimum contract that you would let and get the right price.

General Progress to Date

Senator Bible. I understand. Now tell us about your program to date.

Mr. McCarter. As you know, we have a contract with DeLeuw, Cather & Co. for engineering services. My statement indicates that they have 29 professional men on the job but as of this morning, it was 31. They expect to have the conceptual work done on the section that we are talking about here, which is indicated on the map in black, so that they will have the specifications for the beginning of final design contracts in July, or by the beginning of fiscal 1967. You may have seen the engineering crews that are surveying. They are doing a good deal of it at night, to keep out of traffic. Recently, they have been painting manhole covers and other markers. We have permission now to fly the route for low-flying aerial photography. Special permission was required to fly near the White House and the Capitol, so that we will have the survey of the complete system aerially, with everything located. We are also working on the underground utilities. We are part of a committee, now, the District Underground Utility Committee, and we are working on the location of all the underground utilities. They have worked with the District on relocation of sewers and so forth, and are almost ready to go to work on that any time we indicate. And all the other conceptual approaches are coming along, and I think we are on time, schedulewise.

FINAL DESIGN CONTRACTS TO BE LET

As a matter of fact, they are working day and night. And I am satisfied with their progress.

Senator BIBLE. On page 11, you get into an area where I think maybe you had better read that in detail, because the justification will be $25,580,000.

Mr. MCCARTER. Fine, thank you, Mr. Chairman.

The Agency's request for $25,580,000 under the construction appropriation for the next fiscal year is needed to continue the work now in process, and that which will begin over the next 4 months.

During fiscal year 1967, the program will take on a new dimension. In addition to continuing the present engineering work and the architectural conceptual work, the Agency will move into final design work on many elements of the system.

Under the present schedule, final design contracts will be let on 19 segments of the system on the Connecticut Avenue route, the Columbia Heights route, and on portions of the Benning and B. & O. routes. These are described in the justification material. The budget item for final design projects totals $6,940,000.

Senator BIBLE. And after you have expended that amount of money, you would have a final design for the areas which you have described?

Mr. MCCARTER. That is correct. The routes indicated in black, and the specifications and final design would be completed, so that then in fiscal year 1968 we could advertise for bids for actual construction.

Senator BIBLE. Very well.

SOIL BORING AND TESTING PROGRAM

Mr. MCCARTER. The Agency will also continue the soil boring and testing program for these three routes, to keep pace with this final design activity. An additional $580,000 is needed for this.

As an aside—we are just about ready to decide on a contractor for soil borings and testings. DeLeuw Cather has to decide how much more soil borings they need for this conceptual approach, so we are going ahead with that. The right-of-way and land acquisition will be a package or part of next year's program. Again, this is necessary to keep abreast of the final design efforts. In addition to any carryover from the present period, the Agency proposes to undertake negotiations to acquire all the property needed for the Columbia Heights route, and easements affecting 50 parcels of land on that route and the Connecticut Avenue route. Our request includes $3,330,000 for this item.

RIGHTS-OF-WAY AND EASEMENTS

Senator BIBLE. On that point, because my experience in right-of-way acquisition has always been that this is one of our most difficult areas, will $3,330,000 buy all the rights-of-way and easements that you need for the transit system?

Mr. MCCARTER. No, only for this section.

Senator BIBLE. By this section, again you mean the section marked in black?

Mr. MCCARTER. The black section, yes.

DISPLACEMENT OF FAMILIES

Senator BIBLE. How much displacement will you have in this acquisition?

Mr. QUENSTEDT. People, sir?

Senator BIBLE. People.

Mr. QUENSTEDT. There will be fewer than a hundred persons dislodged or displaced in this particular set of construction, sir.

DESCRIPTION OF ROUTE

Senator BIBLE. By "this particular set of construction," you mean the black area within the District of Columbia?

Mr. QUENSTEDT. Yes, sir, and it might be well for the record to describe what we keep referring to as "the black area."

Senator BIBLE. Yes, all right.

Mr. QUENSTEDT. It is a route which begins at or about the Capitol, at or about Union Station. There may be a choice as between the two for its actual initiation, proceeding westerly to Judiciary Square, and then a bit northwesterly to G Street.

Senator BIBLE. Where is Judiciary Square?

Mr. QUENSTEDT. Judiciary Square is in the vicinity of the court of general sessions of the District of Columbia, the U.S. district court, and the juvenile court, sir.

Senator BIBLE. Give a street designation.

Mr. QUENSTEDT. It is Fourth and Indiana Avenue, sir.

Senator BIBLE. All right.

Mr. QUENSTEDT. From that point a bit northwesterly to G Street, and then proceeding west along G Street, until it comes to the end of G Street, and then on a northwesterly line across the front of the Treasury Department, diagonally across Lafayette Square, into the alinement of Connecticut Avenue, and then proceeding out Connecticut Avenue until it terminates at the old Bureau of Standards. That line will have a branch running northeasterly from the vicinity of Florida Avenue and Connecticut, proceeding along Columbia Road, thence Park Road, and finally terminating in the vicinity of Georgia and New Hampshire Avenues.

Senator BIBLE. Now is the proposed transit system shown in black entirely underground?

Mr. QUENSTEDT. It is entirely underground; yes, sir, with the exception of two small portions; where an aerial structure will cross Rock Creek Park and another similar crossing of Klingle Valley at Connecticut Avenue.

Senator BIBLE. Well, if it is all underground, why are you displacing a hundred people?

DISLOCATIONS IN VICINITY OF PARK ROAD AND 14TH STREET

Mr. QUENSTEDT. There are a number of people affected in the vicinity of a station at Park Road and 14th Street, sir. If I may, for the record, I would like to submit a clarification, more precise as to the number of people, because it is around 129 families for the entire system.

Senator BIBLE. That may be supplied for the record, Mr. Quenstedt.
Mr. QUENSTEDT. Thank you.
(The information follows:)

The construction of the authorized system will result in the dislocation of 129 families and 29 commercial enterprises. As to the dislocations in the vicinity of the station at Park Road and 14th Street, 55 families (or housing units) representing a total of 165 persons, based on 1960 census data will be displaced.

VERY LITTLE DISRUPTIVE TO HOMES AND BUSINESS ESTABLISHMENTS

Senator BIBLE. Of course, this is also a problem area. Whether it is the north leg of the inner loop or a transit system, you have displacement problems, and I think we should have a clear record on it.
Mr. QUENSTEDT. I might mention that last week we signed a contract with an architect, Harry Weese & Associates, and one of the first things that Mr. Weese did was to fly this route in a helicopter, over a period of about 2 hours; his first comment when he came back from the trip was to express his amazement at how little disruption of the city and how few homes and business establishments would be affected by the construction.
Senator BIBLE. Thank you.

RIGHT-OF-WAY COSTS

The total cost, then, of the right-of-way would be what?
Mr. MCCARTER. On this request, $3,330,000. And the other request under last year, $3,100,000, so the two added together would be $6,430,000.
Now, under this year's request, we are about to consummate, with the GSA acting in our behalf——
Senator BIBLE. I am sorry. I was distracted there, and I didn't hear what you said.
Mr. MCCARTER. Under our current real estate program with this year's funds, we are just about to consummate the purchase of the parking lot area next to this station. The owner appears willing to sell and we are proceeding at the request of the District of Columbia. The District had an appraisal made of this particular piece of property, and we, in turn, have asked that GSA be our agent in acquiring it for us.
Senator BIBLE. Very well.
Mr. MCCARTER. So that from, say, this point, and we are also——
Senator BIBLE. From this point, you mean from Rhode Island Avenue? South to Union Station?
Mr. MCCARTER. That is right.

ACQUISITION POWERS

Senator BIBLE. And that is along the B. & O. right-of-way?
Mr. MCCARTER. That is right. That includes the real estate for this big lot and station location there. We are also——
Senator BIBLE. "There" means Rhode Island Avenue?
Mr. MCCARTER. Rhode Island Avenue. Excuse me.
Also, we had originally planned that our shops and yard be at a terminal over at the end of the Benning route, at the corner of Ben-

ning and I–295, on Pepco property. We would have some difficulty in relocating their facilities, and the DeLeuw, Cather engineers have, I think, come up with a better plan of using a part of the yards at the Union Terminal for our shops and yards, so that would be another purchase. I hope this is not a change in the plan that requires additional legislation.

Senator BIBLE. Offhand, I would not think that would require new legislation, but this would be up to your lawyers.

Mr. MCCARTER. I would think so, yes.

Senator BIBLE. It seems to me that the basic act is broad enough to give you acquisition powers, but I don't know.

Mr. MALONE. The act provides, Senator Bible, that we build substantially in accordance with the plan submitted to the Congress. The change Mr. McCarter is talking about involves no alteration in the service qualities of the system, and would probably increase the efficiency of the operation, and perhaps at a cost advantage to the agency, so I would think that new authorizing legislation would not be required for this kind of a change.

Mr. MCCARTER. Those, Mr. Chairman, might be the two principal purchases under this year's legislation.

Senator BIBLE. Very fine.

TUNNEL LINER

Now on the middle of page 12, you get back into the tunnel liner problem, and I think we have pretty thoroughly covered that already.

Mr. MCCARTER. Yes, sir.

ADMINISTRATIVE FUNDS

1967 BUDGET REQUEST

Senator BIBLE. That is the $12,200,000. Now you get over to page 13 on the administrative fund requests.

Mr. MCCARTER. Well, we are asking under our administrative budget for an appropriation of $1,575,000, under the appropriation "Salaries and expenses."

Senator BIBLE. At this point the justification for this estimate will be printed in the record.

(The justification follows:)

The National Capital Transportation Act of 1965 authorizes the Agency "to design, engineer, construct, equip, and take other action * * * to provide for the establishment of the system of rail rapid transit lines and related facilities" in the Nation's Capital.

The system, as authorized, will be 24.9 miles long, with double-track throughout, and will include 29 stations. About half (13.1 miles) will be underground, 7.5 miles will utilize existing rights-of-way, and the balance of 4.3 miles will occupy other exclusive rights-of-way.

The total cost of constructing and equipping the proposed system is estimated to be $431 million to be provided by direct appropriations of $150 million ($100 million by the Federal Government and $50 million by the District of Columbia) and $281 million to be derived from the public sale of bonds to be repaid out of the revenues of the system.

Funds totaling approximately $6 million were appropriated in fiscal year 1966 under the appropriation "Construction, rail rapid transit system" and administrative funds in the amount of $915 thousand were appropriated under the appropriation "Salaries and expenses, NCTA."

The programs of the Agency during the current fiscal year relate to—

The initial phases of engineering and architectural "conceptual" activities including the development of system standards, criteria, and specifications.

Initial actions to acquire the necessary rights-of-way and other land interests.

Projects involving the development of vehicle and wayside equipment.

Initial engineering to provide for public utilities relocations.

Certain incidental construction.

Restudy of traffic forecasts and related planning activities.

The programs proposed in fiscal year 1967 will shift from the initial phases of engineering and architectural "conceptual" work to final design efforts on a substantial portion of the downtown distributor segment, as well as soil investigations and testing, land acquisition, and engineering to provide for public utilities relocations of those portions of routes involved in the first phase of the construction program. During fiscal years 1966 and 1967, contracts will be awarded for the final design of a total of 19 sections, including 14 stations and 2 bridges. These final design contracts will cover all sections of the Connecticut Avenue and Columbia Heights routes and portions of the Benning and B. & O. routes.

Programs for the acquisition of rights-of-way will be continued in fiscal year 1967. The program for fiscal year 1966 includes easements affecting 53 parcels ($1,250,000) and the acquisition of 10.85 acres ($1,850,000). The program for fiscal year 1967 involves easements affecting 50 parcels ($2,871,400) and the acquisition of 0.71 acres ($446,100).

In addition to the engineering and land acquisition programs, the Agency will also be engaged in important activities involving revenues, estimates of costs, and financing of the proposed system. Operating costs of the system need to be continually modified as technological improvements permit economies in operation. During the current year projects involving the updating of passenger and traffic estimates and the development of non-fare-box revenue estimates are being undertaken and several significant projects are proposed in fiscal year 1967. Of particular importance are projects involving the preparation of a feeder bus network to service rapid transit operations, including the calculation of revenues, costs, and rate of return for each of the four bus companies of a feeder operation, a determination of the financial impact of feeder operations upon residual bus operations, and the development of an equitable fare arrangement between bus-rapid transit operators.

Other programs include a substantial amount of information and community service activities generated by unusual degrees of interest by the various media—radio, television, and press—as well as the general public, in the work of the Agency. In the past, the Agency has dealt with federations and groups representing more than 500 organizations in the National Capital region and interest in the specific programs of the Agency as they relate to station locations and design, routes and proposed service of the system, and other aspects of community relations are on a continual increase. In this connection, it should be emphasized that the Agency responds to the needs of the community and this represents an obligation of real importance.

The estimates also provide for the continuation of administrative arrangements with the General Services Administration to provide basic "housekeeping" services such as payroll, purchasing, accounting, and related functions.

The estimate of $1,575,000 for the appropriation "Salaries and expenses, NCTA" would provide for 66 full-time positions, the services of experts and consultants to be compensated on a "when actually employed" basis, and other costs such as travel, communications, supplies, and related support expenses.

Summary of estimates by budget activities

[In thousands of dollars]

	Fiscal year 1966	Fiscal year 1967
1. Engineering direction	182	312
2. Traffic and system financial planning	276	662
3. Architectural design	65	105
4. Real estate acquisition and relocation assistance	12	37
5. Executive direction and administration	380	459
Total estimate	915	1,575

1. Engineering direction

Fiscal year 1966	$182,000
Fiscal year 1967	312,000

The Office of Engineering is responsible for the preparation of engineering plans, estimates of cost, specifications, and supervision of construction of the rail rapid transit system. The various elements comprising the total system include basic subway, aerial, and other open construction; track work, train control, power distribution, and related wayside facilities; stations, parking lots, and bus-transfer facilities; the rolling stock and associated equipment; and right-of-way requirements for the various items of construction. The estimated cost for these facilities totals $431 million phased over a 7-year period. The design and construction phases of the transit development program must be coordinated with the programs of other agencies and jurisdictions.

The authorized strength for the current year is as follows:

Civil engineer, GS–16 (director)	1
Civil engineer, GS–15	1
Civil engineer, GS–14	1
Right-of-way engineer, GS–13	1
Electrical engineer, GS–14	1
Electrical engineer, GS–13	2
Civil engineer, GS–12	1
Civil engineer, GS–11	1
Civil engineer, GS–9	1
Engineering technician, GS–9	1
Draftsman, GS–7	1
Secretary, GS–7	1
Secretary, GS–6	1
Draftsman, GS–5	1
Total	15

During the current year the Office of Engineering is concentrating on establishing standards and criteria to the level of refinement required to award final engineering design contracts for portions of the system scheduled for early construction. In addition, equipment development efforts are being emphasized as well as the final soils exploration program.

The additional positions required in fiscal year 1967 are as follows:

Equipment engineer, GS–14	1
Utilities engineer, GS–13	1
Specifications engineer, GS–13	1
Civil engineer, GS–12	1
Electrical engineer, GS–11	1
Electrical engineer, GS–7	1
Civil engineer, GS–7	1
Secretary, GS–5	1
Total	8

The additional positions will permit the Agency to initiate extensive final design activities during fiscal year 1967. Detailed monitoring of final design contracts and increasing utility coordination efforts will be the responsibility of the civil engineering division. Substantial portions of the detailed specifications for construction will be written.

The Office of Equipment will complete drafts of the various final specifications for the rolling stock, associated carborne and wayside equipment during fiscal year 1967. These drafts will be reviewed with all interested manufacturers and transit operating properties and prepared for distribution to prospective bidders.

These estimates include $312,000 for this activity to provide for 23 full-time positions, the services of consultants and experts to be compensated on a "when actually employed" basis, travel, and a pro rata share of administrative support expenses.

2. Traffic and system financial planning

Fiscal year 1966	$276,000
Fiscal year 1967	662,000

The Office of Planning and Finance is responsible for all functions which affect operating costs, traffic, fares and revenues, and financial plans for the proposed system. It is also responsible for the coordination of rapid transit planning with other areawide transportation planning and land use planning.

It's responsibilities include preparing operational patterns and specific service schedules; forecasting traffic; negotiating for the provision of feeder bus services and determining an equitable allocation of fares between bus and rapid transit operators; developing a fare schedule and a fare collection system; providing for non-fare-box revenues; preparing programs to provide financial support for the construction and operation of the system including the type or types of bonds to be issued, the scheduling of the bond issues, and the underwriting provisions; developing depreciation policies and schedules; determining, in coordination with the Office of Engineering, specific rapid transit routes and station locations; coordinating with all local planning highway, and public works agencies; planning for development of areas close to rapid transit stations; and developing a plan for the external flow of traffic in station areas.

The authorized staff of the Office of Planning and Finance for the current year is as follows:

Financial economist, GS–16 (director)	1
Urban planner, GS–15	1
Urban planner, GS–14	1
Traffic engineer, GS–14	1
Transit operations analyst, GS–14	1
Economist (public finance), GS–14	1
Industry economist, GS–13	1
Traffic engineer, GS–11	1
Transportation financial specialist, GS–10	1
Highway engineering aid, GS–4	1
Secretary, GS–7	1
Clerk-stenographer, GS–5	1
Total	12

During the current year the Office of Planning and Finance has been involved in programs involving fare collection systems, sources of non-fare-box revenue, parking facilities, station locations and alternative route alinements, bond financing proposals, and coordination of bus and rapid transit operations. The Office has also initiated a comprehensive project, by contract, to update traffic estimates for the proposed system.

This project is being carried out in cooperation with the operating bus companies in the region, with the regulatory agency, and with the Highway and Traffic Department of the District of Columbia.

The additional positions requested in fiscal year 1967 are:

Urban planner, GS–9	1
Economic statistician, GS–7	1
Statistical clerk, GS–4	2
Total	4

The additional positions are necessary to enable the Office of Planning and Finance to undertake its accelerated staff activities by providing supplemental skills and backup support to the professional technicians responsible for these staff activities and for the monitoring of the following contract projects to be undertaken in fiscal year 1967:

1. Bus coordination project. This project will coordinate service and financial arrangements between the rail rapid transit system and the private bus systems. It will lead to better service for the users of public transportation and will provide a basis for the allocation of fares between the rail rapid transit system and the bus systems.

2. Development of a plan for external traffic. This will provide for each of the 22 nondowntown stations, a specific plan for the safe and expeditious movement of traffic (automobile, bus, pedestrian) going to or through the area influenced by the rapid transit station.

3. Development of technical arrangements for the issuance and sale of revenue bonds. This will serve to provide financial guidance to the Agency in the implementation of its financial program and will decrease the need to hire permanent staff to accomplish this objective.

These estimates include $662,000 for this activity to provide for 16 full-time positions, the services of consultants and experts to be compensated on a "when actually employed" basis, special contracts, travel, and a pro rata share of administrative support expenses.

3. Architectural design

Fiscal year 1966	$65,000
Fiscal year 1967	105,000

The Office of Architecture is responsible for the quality of design of all visible features of the rapid transit system, e.g., stations and transfer terminals, with their furnishings and equipment, and all exterior structures. The impact of the new stations and structures on their surroundings will require the most sensitive design treatment in order that the amenities of affected neighborhoods may be enhanced.

The architectural-design program has two phases:

1. Systemwide "concept" design, including criteria and standards and preliminary drawings for the various stations and structures.
2. Production of plans and specifications for actual construction.

In the first phase, consultants are employed to extend the Agency's staff, enabling the necessary range of design talents to be applied quickly and economically, as required. Early in this phase, the scope of work for final design of stations and structures is determined so that the latter can be performed under fixed-fee contracts, to the advantage of the government. During this phase, which will extend for the duration of the construction program, close coordination will be maintained with the Office of Engineering, with the Office of Planning and Finance, and with various agencies of Federal, State and District of Columbia governments. Exhibits and models for submission to these agencies and for public presentations will be prepared by the consultants, whose product will be monitored continually by the Office of Architecture.

The second phase is governed by the requirements of the construction schedule, prepared by the Office of Engineering, and is intended to implement that schedule. Architect consultants will be employed to produce detailed plans for specific construction contracts, in close collaboration with engineering consultants. This work will be monitored jointly by the Office of Architecture and the Office of Engineering.

The authorized strength of the Office of Architecture for the current year is as follows:

Senior architect, GS–15 (director)	1
Architect, GS–14	1
Architect, GS–12	1
Secretary, GS–5	1
Total	4

During fiscal year 1966, the Office of Architecture is concentrating on "conceptual design" for the system as a whole, including preliminaries for projects that will be executed in the second phase of the architectural design program.

The additional position required in fiscal year 1967 is as follows: 1 architect, GS–11.

This additional position is needed to implement the second phase of architectural design which will be in full swing during fiscal year 1967. The work program will be marked by an added burden of more or less routine checking and coordinating of drawings and specifications for actual construction.

These estimates include $105,000 for this activity to provide for five full-time positions, the services of consultants and experts to be compensated on a "when actually employed" basis, travel, and a pro rata share of administrative support expenses.

4. Real estate acquisition and relocation activities

Fiscal year 1966	$12,000
Fiscal year 1967	37,000

The construction program of the Agency will require the acquisition of certain easements to permit the subway tubes or boxes beneath the surface of private property and the purchase of other property for the operation of the system. Authority is contained in the basic legislation of the Agency for condemnation of property but it is also provided that no action in condemnation of any property shall be commenced in behalf of the Agency until a reasonable effort has been

made to negotiate with the owner of the property. All negotiations and negotiated purchases will be handled by the Agency. Condemnation litigation will be conducted by the Department of Justice on behalf of the Agency.

The acquisition program for fiscal year 1966 includes easements affecting 53 parcels ($1,250,000) and the purchase of 10.85 acres ($1,850,000). The program for fiscal year 1967 involves easements affecting 50 parcels ($2,871,400) and the purchase of 0.71 acre ($446,100). The total dollar value of these programs is in excess of $6.4 million for the 2 fiscal years.

The Office of Real Estate Acquisition and Relocation Assistance has been established with responsibility for the implementation of these programs in collaboration with the Office of Engineering and the Office of General Counsel.

For the current year the authorized strength of this Office is: one real property specialist, GS–14. For fiscal year 1967 it is proposed to add the following positions:

Real estate negotiator, GS–11	1
Secretary, GS–4	1
Total	2

Upon the definition of a project for which funds have become available, and the establishment of taking lines, the basic procedures and responsibilities of the Office are to:

(*a*) Identify the parcels, and ownerships of the land affected, and the occupants thereof.

(*b*) By letter, notify all owners and occupants that they lie within the taking area, and that the Agency will proceed with the appraisal of the property. This notice will apprise all owners and occupants of the authority for the Agency's action and of the availability of relocation payments and services. Occupants will be encouraged to work with the Agency so that relocation requirements can be determined and met in advance of the taking. For this purpose, the Agency will establish a working agreement with the Relocation Office of the District of Columbia Redevelopment Land Agency.

(*c*) Not less than two independent appraisals will be obtained respecting each parcel of land. For this purpose, the Agency will establish a list of qualified outside appraisers, and will obtain their services by contract on a job basis.

(*d*) Negotiations with owners looking to negotiated purchase.

(*e*) The Agency will establish a working arrangement with the Department of Justice for the obtaining of necessary Attorney General opinions respecting title, and for the referral of cases for condemnation action in instances where a negotiated purchase is not feasible.

These estimates include $37,000 for this activity to provide for three full-time positions, travel, and a pro rata share of administrative support expenses.

5. Executive direction and administration

Fiscal year 1966	$380,000
Fiscal year 1967	459,000

This activity provides for the Offices of the Administrator and Deputy Administrator, Office of the General Counsel, Office of Public Information and Community Services, and the Office of Administration.

OFFICE OF ADMINISTRATOR AND DEPUTY ADMINISTRATOR

The Office of the Administrator and Deputy Administrator is concerned with the overall policy and executive direction of the Agency. The Deputy Administrator also serves as the principal contracting officer for the Agency in addition to other supervisory responsibilities.

The authorized strength of the Office for the current year is as follows:

Administrator (statutory position)	1
Special assistant for congressional liaison, GS–16	1
Confidential assistant, GS–11	1
Deputy Administrator (statutory position)	1
Contract specialist, GS–14	1
Secretary, GS–9	1
Total	6

No additional positions are proposed in fiscal year 1967.

OFFICE OF GENERAL COUNSEL

The General Counsel is the principal legal adviser of the Administrator and the chief law officer of the Agency. Under his direction, the Office of the General Counsel is responsible for all of the legal work of the Agency including consideration of legal problems relating to the broad policy aspects of the Agency's programs, the issuance of opinions on legal questions arising in the administration of Agency programs the preparation and review of administrative rules and regulations, analysis and drafting of proposed legislation, the preparation and interpretation of contracts, leases, deeds, and similar documents, representation of the Agency in administrative proceedings or quasi-judicial hearings held in connection with the administration of the Agency's program and arising out of its contracts or otherwise, assistance of the Department of Justice in the preparation of civil litigation cases arising out of the Agency's work including eminent domain and other proceedings.

The authorized strength of the Office of General Counsel for the current year is as follows:

Attorney-adviser, GS–16 (General Counsel)	1
Attorney-adviser (contract), GS–15	1
Attorney-adviser (real property), GS–14	1
Secretary, GS–7	1
Secretary, GS–5	1
Total	5

No additional positions are proposed in fiscal year 1967.

OFFICE OF PUBLIC INFORMATION AND COMMUNITY SERVICES

The Office of Public Information and Community Services is responsible for the public information and public relations programs of the Agency as well as tne internal information facilities. The Office also maintains the necessary liaison with the various media—press, radio, and television, as well as the general public. In this latter function, the Office of Public Information and Community Services deals with federations and groups representing more than 500 organizations in the National Capital region.

The authorized strength of the Office for the current year is as follows:

Information officer, GS–15 (Director)	1
Information specialist, GS–9	1
Secretary, GS–6	1
Total	3

Because the Agency's program is local in application it will affect physically, financially, and personally every citizen of the region. There is a high degree of interest in the project. In consequence, the Agency's public information and community service work is in response to demands from media, organizations, and the general public for personal briefings and information concerning station design, routes, proposed service, location of facilities, effects and timetables of construction, and similar matters. In the spirit of the President's increased efforts to better the Government's service to the public, it is incumbent on the Agency to provide detailed and personal information services.

In the process of participating in this relationship of the Agency with the community, this Office is able to relieve the technical and executive staff of the tasks which develop, resulting in more efficient operation of the total staff. There is, of course, the further advantage that close relations with the community through this Office assure that Agency staff is aware of public reactions to the Agency program with regard to transportation problems.

Because architectural and engineering plans will become specific in fiscal year 1967, the workload and requests for services can be expected to increase greatly, but no additional positions are proposed.

OFFICE OF ADMINISTRATION

The Office of Administration is responsible for all management services including personnel, budget planning and execution, accounting and fiscal activities, mail and records, space, equipment, and similar matters.

The authorized strength of the Office of Administration for the current year is as follows:

Administrative officer, GS–15 (Director)	1
Budget-personnel assistant, GS–13	1
Staff assistant, GS–12	1
Administrative clerk, GS–5	1
Secretary, GS–5	1
Total	5

The Agency has a working arrangement with the General Services Administration to provide for certain services such as payroll, purchasing, machine accounting, and related "housekeeping" functions. The Agency expects to continue this arrangement in fiscal year 1967.

No additional positions are proposed for the Office of Administration in fiscal year 1967.

SPECIAL CONTRACTS

Funds totaling $477,500 are requested to cover the following projects:

(*a*) *Bus coordination project.*—It is anticipated that the authorized rail rapid transit system will supplement rather than replace existing modes of transportation. A large number (over 50 percent during the peak hour) of rapid transit riders will transfer from a bus. Thus, it is vital to coordinate service and financial arrangements between the rapid transit system and the private bus systems.

This project will lead to better service for the users of public transportation and will provide a basis for the allocation of fares between the rapid transit system and the bus systems. Both of these results are essential to the success of the rapid transit system: the level of services for combined bus-subway riders will have a great influence upon the number of riders, using the subway system and the determination of the fare split will enable both the subway and bus systems to provide for an economically sound operation. The project will also provide needed information upon which a fare structure and a fare collection system can be developed in coordination with bus companies.

The project will necessitate a continuation of the present cooperative working relationships between the Agency, the bus companies, and WMATC. It will involve a detailed analysis of present bus operations and projections for revision of service to accord with the operation of the rapid transit system. Based upon the projected operation, cost and revenue projections will be made for both the feeder operation and for the regular service routes of each individual company. A certain amount of balancing will be required to equate fare levels with a reasonable rate of return. This will result in a gross revenue requirement from which an allocation of joint bus-subway fares can be determined.

Thus, the project will—

1. furnish basic data regarding the specific kind of feeder bus system necessary to provide adequate service to the public.
2. provide information regarding the proper distribution between the two modes of travel of fares collected from the rapid transit bus riders.
3. be used to determine the level of fares required to make both the rapid transit system and the bus operations viable operating systems.

(*b*) *Project for development of a plan for external traffic.*—This project will provide information needed by the engineers and architects for the location and design of station entrances and exits, parking lots and bus bays. It will also develop a specific plan for the safe and expeditious movement of traffic (automobile, bus, pedestrian) going to or through the area influenced by each of the 22 nondowntown rapid transit stations.

In order to obtain the required data, it will be necessary to utilize the results of the traffic study now being undertaken in the current fiscal year. This will provide the contractor with information on the number of buses, automobiles, and pedestrians arriving at each of the rapid transit stations. To this, the contractor will provide supplemental information on the number of buses and automobiles passing by the station vicinity.

In cooperation with local highway and traffic officials, detailed plans for the free flow of traffic will be prepared. The development of such plans will require an analysis of local street capacity, recommendations for one-way streets or added capacity on existing streets, the location and number of bus bays, egress and access to parking facilities, and other necessary details to insure that traffic will proceed in a smooth and orderly fashion.

(c) *Project for technical aspects of financial program.*—During fiscal year 1967 it is anticipated that the transition from NCTA to an interstate authority will take place. This will require the development of a financial plan which is acceptable to the Congress and will necessitate coordination of the financial details involved in the transition. Rather than requesting permanent technical staff for this function, the Agency feels that it would be more efficient and economical to contract with financial consultants who are already completely familiar with the Agency's program.

If the transition from NCTA to interstate authority does not take place next year, there will be many details of an interim financial plan which must be developed. The contractor will also advise the Agency on financial aspects of negotiations for the rental or use of railroad property.

(d) *Budget and accounting systems development.*—This project will be a continuation of the integrated budget-accounting project to be undertaken in fiscal year 1966. The first phase of this project, which will be completed in fiscal year 1966, is designed to develop—

1. A uniform classification of construction program accounts for use in all phases of planning, budgeting, accounting, and reporting.
2. A programing and scheduling system and a budgeting system complying with the requirements of the Bureau of the Budget.
3. General ledger system of accounts conforming to the requirements of the General Accounting Office.
4. System of cost accounts for construction as subsidiary to the general ledger.
5. A classification of property accounts for completed facilities as subsidiary to the general ledger.

The first phase of this project will identify the basic ingredients of the financial management system and coordinate them with the consulting engineer and interested agencies such as the Bureau of the Budget, General Accounting Office, Treasury Department, etc. In fiscal year 1967, it is proposed to implement the system through—

1. Development of the detailed design of the additional systems components which relate to the consulting, contracting, and other participating organizations.
2. Preparation and installation of procedures, forms, and financial schedules to implement the planning-programing budget system.
3. Extension of cost and other accounting records and procedures to specific projects underway and with particular reference to actual construction projects to be undertaken in fiscal year 1968.

(e) *Interstate compact negotiations.*—The Federal representative for interstate compact negotiations has requested funds for the development of plans associated with legal and administrative requirements governing transfer of the assets and administrative facilities of NCTA to an interstate agency as contemplated in title III of the National Capital Transportation Act of 1960 and the President's program for transit development in the National Capital region. A portion of these funds will be used for the study of technical aspects of the consent legislation to be proposed by the President to bring the proposed interstate compact between Virginia, Maryland, and the District of Columbia into force when it is recommended to the Congress.

SUMMARY OF ESTIMATES BY OBJECT OF EXPENSES

11 Personnel compensation.—The estimate of $908,000 includes $740,000 to finance 66 full-time positions, $150,000 for the employment of consultants and experts to be compensated on a "when actually employed" basis, $3,000 for 1 extra day above the 52-week base, and $15,000 to cover payments for reimbursable details.

12.0 Personnel benefits.—The estimate of $54,500 includes funds to cover benefits authorized by law including retirement contributions, health benefits, life insurance, and Federal Insurance Contribution Act taxes. The estimate is based on a percentage of the net personnel costs. The estimate also includes $500 for reimbursement to Bureau of Employees' Compensation, Department of Labor, pursuant to the 1960 amendments to the Federal Employees' Compensation Act (5 U.S.C. 785).

21.0 Travel and transportation of persons.—Includes $20,000 to cover official travel expenses and per diem costs for the regular full-time staff and consultants and experts employed on an intermittent basis.

23.0 Rent, communications, and utilities.—Includes $25,000 for rent, communications, and utilities. The principal item of expense in this account is telephone services.

24.0 Printing and reproduction.—The estimate includes $25,000 to cover miscellaneous printing and reproduction services including the cost of printing an annual report as required by the authorizing legislation.

25.1 Other services.—Includes $477,500 for special contractual services as follows:

1. Bus coordination project.
2. Development of a plan for external traffic.
3. Project for technical aspects of financial planning.
4. Budget-accounting project.
5. Interstate compact negotiations.

25.2 Services of other agencies.—The estimate includes $35,000 for reimbursement to the General Services Administration for miscellaneous administrative services provided on a reimbursable basis and $10,000 to cover medical services provided at a U.S. Public Health Service health unit, charges by the Buildings Management Service for such items as carpentry or electrical services, moving services, etc.

26.0 Supplies and materials.—Includes $15,000 for consumable drafting, engineering, and clerical supplies.

31.0 Equipment.—Includes $5,000 to cover possible equipment needs. This is a minimal amount to meet any contingencies that might develop during the year.

Program and financing

[In thousands of dollars]

	1965 actual	1966 estimate	1967 estimate
Program by activities:			
1. Engineering direction	90	182	312
2. Traffic and system financial planning	103	276	662
3. Architectural design		65	105
4. Real estate acquisition and relocation assistance		12	37
5. Executive direction and administration	369	380	459
Total program costs, funded [1]	562	915	1,575
Change in selected resources [2]	−63		
10 Total obligations	499	915	1,575
Financing:			
11 Receipts and reimbursements from administrative budget accounts (OEO)	−8		
22 Unobligated balance transferred from "Land acquisition and construction" (78 Stat. 273)	−500	−490	
25 Unobligated balance lapsing	9		
40 New obligational authority (appropriation)		425	1,575
Relation of obligations to expenditures:			
10 Total obligations	499	915	1,575
70 Receipts and other offsets (items 11-17)	−8		
71 Obligations affecting expenditures	491	915	1,575
72 Obligated balance, start of year	191	51	166
74 Obligated balance, end of year (−)	−51	−166	−416
77 Adjustments in expired accounts	−68		
90 Expenditures	562	800	1,325

[1] Includes capital outlay as follows: 1965, none; 1966, $1,000; 1967, $5,000. Excludes adjustment of prior year costs of $68,000.

[2] Selected resources as of June 30 are as follows: Unpaid undelivered orders, 1964, $144,000 (1965 adjustments, $61,000); 1965, $20,000; 1966, $20,000; 1967, $20,000.

Object classification

[In thousands of dollars]

		1965 actual	1966 estimate	1967 estimate
	Personnel compensation			
11.1	Permanent positions	387	477	743
11.3	Positions other than permanent	20	141	150
11.4	Special personal service payments		15	15
	Total personnel compensation	407	633	908
12.0	Personnel benefits	28	35	54
21.0	Travel and transportation of persons	5	10	20
23.0	Rent, communications, and utilities	13	20	25
24.0	Printing and reproduction	6	10	25
25.1	Other services	16	165	478
25.2	Services of other agencies	22	30	45
26.0	Supplies and materials	2	11	15
31.0	Equipment		1	5
99.0	Total obligations	499	915	1,575

CURRENT STAFF POSITIONS

Senator BIBLE. You may proceed.

Mr. MCCARTER. The agency under its present program is authorized to have 51 full-time staff positions. Actually, we have 31, and, in other words, we have not built up to that 51. We are asking——

Senator BIBLE. Is that authorization or funding?

Mr. TOMEY. We were authorized 55, but through our own management review, we reduced it to 51 positions for fiscal year 1966. These are funded and authorized.

Senator BIBLE. Funded and authorized. All right.

Mr. MCCARTER. We are asking——

Senator BIBLE. And how many vacancies would that make, then? You said you had how many aboard now?

Mr. TOMEY. Thirty-one, sir.

Senator BIBLE. So you have 20 vacancies.

Mr. TOMEY. We have 1 case in process so actually there are 19 vacancies as of today.

ADDITIONAL POSITIONS PROPOSED IN FISCAL YEAR 1967

Senator BIBLE. And how many personnel do you propose to add in fiscal year 1967?

Mr. TOMEY. Fifteen.

Senator BIBLE. You are going to add the 15 in 1967?

Mr. TOMEY. That is correct.

Senator BIBLE. And where would you add them?

Mr. TOMEY. Various offices.

Mr. MCCARTER. Principally in engineering, because of the additional——

Mr. TOMEY. Of the 15 new positions for fiscal year 1967, there are 8 additional positions in the Office of Engineering, 4 in the Office of Planning and Finance, 1 in the Office of Architecture, and 2 in the Office of Real Estate Acquisition and Relocation Assistance.

TENTATIVE STAFFING FOR 1967

Senator BIBLE. Well, your organizational table, entitled "NCTA Tentative Staffing for Fiscal Year 1967," can be made a part of the record at this point.

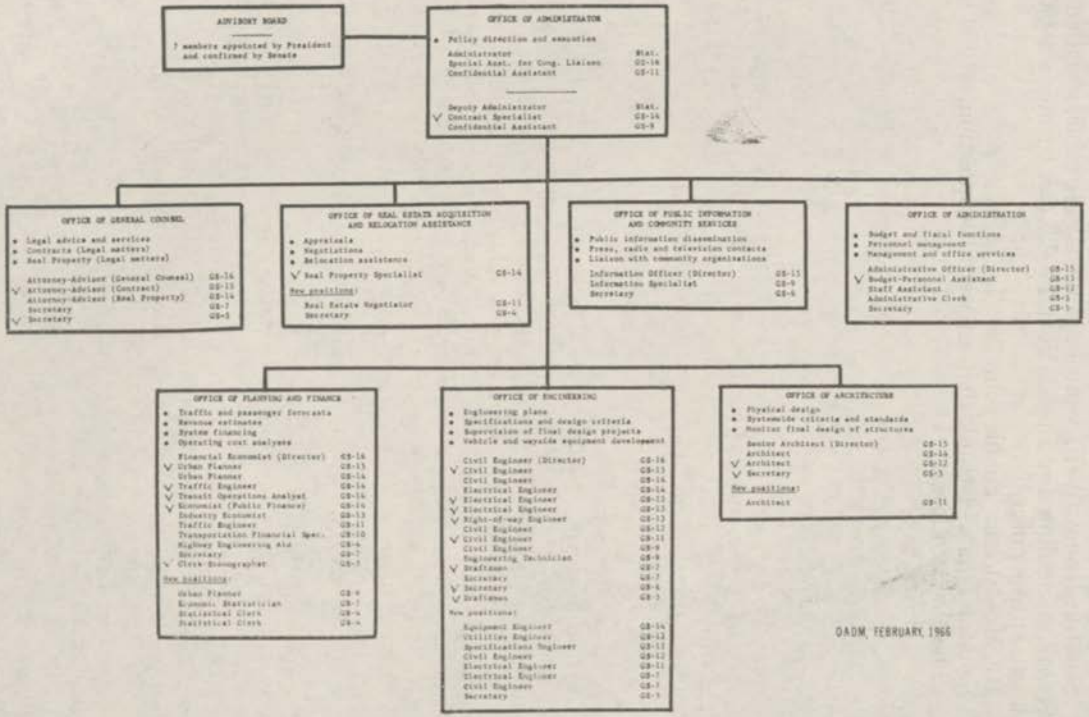
Mr. MCCARTER. Thank you.

Senator BIBLE. I think that answers the question.

(The chart follows:)

NATIONAL CAPITAL TRANSPORTATION AGENCY

TENTATIVE STAFFING, FY 1967



OADM, FEBRUARY, 1966

REVIEW OF POSITIONS BY CIVIL SERVICE COMMISSION

Mr. MCCARTER. Even though these are authorized, Mr. Chairman, we will employ only as actually needed, and what can be done through contract engineering, we will do as much as we can, but as we have more contract engineering, we need more supervision of them, so that is the reason for the increases.

Now concerning our personnel program, I told Mr. John Macy, the Chairman of the Civil Service Commission, that being new to Government, I would like to have our staff surveyed, both from a management standpoint and from a position classification standpoint, and he did send in two people, one from his Management Division, and one from his Position Classification Division. They made a very thorough study of our program, and their approval of the classifications and the organizational setup is reflected on the chart which you just put in the record.

APPOVAL OF PROGRAMS BY OTHER AGENCIES

Senator BIBLE. Yes, I think that speaks on the point, and I think I only have one question in this area. That is, part of your engineering and design statement indicates that presentations must be made before public bodies and private interest groups.

Mr. MCCARTER. Yes, sir.

Senator BIBLE. What are these groups, and do any of them have a veto over your plans?

Mr. MCCARTER. Officially, we must——

Senator BIBLE. I suppose if you appear before the Governor of either Maryland or Virginia, he has a veto over your plans.

Mr. MCCARTER. Yes, he does; yes, officially, in the District, we must appear before the National Capital Planning Commission, as all Government construction must, and before the Commission of Fine Arts.

Now, I don't know how much veto power the Commission of Fine Arts has, but——

CONSENSUS OF PLANNING COMMISSION AND FINE ARTS COMMISSION

Senator BIBLE. I don't know how much they have in this particular area. I do know in past history that where we have been building some bridges across the Potomac, we always seem to run into the Planning Commission and the Fine Arts Commission; and, of course, we finally get them all to a consensus. They finally are built. I think there are other problems where they have had some question, and——

Mr. MCCARTER. I might say, Mr. Chairman, that——

Senator BIBLE. I would hope we don't run into delay in this. You work with them closely?

Mr. MCCARTER. We do work with them very closely. I am on the Planning Commission, as a result of my position as Administrator. Mr. John Rannells, the Director of the Office of Architecture, has had some conferences with the Commission of Fine Arts. The Chairman of the Commission and the Chairman of the Planning Commission were particularly delighted at our choice of an architect, who is the one that must appear before them. Mrs. Rowe appeared at our press

conference when we introduced the architect, and assured the public that there would be no delay there.

Now I just hope there won't be any delay, and I think they are all sufficiently interested to be very helpful.

Now also, of course, in the station in the Capitol Grounds, we must have the approval of the Architect of the Capitol, so that is one other point.

Development Projects for Vehicular and Wayside Equipment

Senator Bible. It has been suggested by staff, Mr. McCarter, that last year, $500,000 was provided for development projects related to vehicular and wayside equipment. Now would you please discuss just what is included within this activity, and how much of the $500,000 available last year remains available now?

Mr. McCarter. Mr. Chairman, we haven't spent any of that.

Senator Bible. What is included within the activity?

Mr. McCarter. What would be included normally within the activity would be matters of a conceptual nature—first, we must have the configuration of the equipment, to see that it fits within the station platforms, and the subway tube, and so forth. But to design the equipment, we will have to have a design by people who are expert in body design, in truck design, and controls, with the automatic safety equipment, and all of those things assembled in a car.

Now there will be two approaches to that. One will be, and we have included the preliminary on that in our architects' scope of work, the conceptual approach to the appearance of the vehicle, the interior appearance, the exterior appearance, and how it fits into the program. When I was in Chicago, we hired a designer from Detroit, Sundberg-Ferar, who designed automobiles, and they designed the front end of the car to be a good-looking car, and the interior decor, and so forth. We have to determine the type of lighting, and all that sort of thing.

Now, a lot of that has been done, but every car is a little different in size. For instance, Chicago cars are short, because of curves and so forth. These will be larger cars, so that, and we haven't gotten into that yet, except for the conceptual approach to that by De Leuw Cather, and the conceptual approach by the architect, but regarding that particular budget item, we haven't spent any money out of it, and may not this year.

Authority for Relocation Payments

Senator Bible. Now, Mr. McCarter, are you authorized to make relocation payments to the persons and businesses who have to move because of the taking of their properties for the purpose of the rail rapid transit system?

Mr. Malone. May I answer that, Senator?

Senator Bible. Yes.

Mr. Malone. Under the 1965 act, the Relocation Act which was enacted by the Congress in October of 1964, is applicable to any relocations caused by this program. The schedule of payments would be the same as they are in other District of Columbia relocations. I believe they vary from $200 for an individual or family up to as much as $25,000 on an actual expense basis for the relocation of a business, or

a nonprofit organization. This act applies generally to relocations necessitated by public works within the District of Columbia.

Senator BIBLE. Very well, and you are going to supply for the record a little more accurate statement as to the exact number affected by relocation in the District of Columbia. It runs in the neighborhood of 100 to 125 people.

Mr. QUENSTEDT. That is correct.

Senator BIBLE. That is going to be supplied for the record.

Mr. QUENSTEDT. Senator, if I used the word "people," I was incorrect. It is families.

Senator BIBLE. Families, 100 to 125 families. That could be as many as five times that amount of people.

Mr. QUENSTEDT. It could be as many. I don't think it is, sir.

Senator BIBLE. Will you please supply that for the record?

Mr. QUENSTEDT. Yes, sir.

EXECUTIVE DIRECTION AND ADMINISTRATION

Senator BIBLE. Under executive direction and administration, for which you request $459,000 you list four offices. How much of the $459,000 do you propose for each of these offices?

Mr. TOMEY. Funds in the budget activity "Executive direction and administration" are allocated as follows: $166,000 for the Office of the Administrator and Deputy Administrator; $90,000 for the Office of the General Counsel; $58,000 for the Office of Public Information and Community Services; and $145,000 for the Office of Administration.

FUNDS FOR SPECIAL CONTRACTS

Senator BIBLE. How are the funds being requested for special contracts in the amount of $477,500 distributed among your various offices?

Mr. TOMEY. Of the total of $477,500 being requested for special contracts in fiscal year 1967, the bus coordination project will be under the supervision of the Office of Planning and Finance; and and the project for the development of the plan for external traffic and the project for the technical aspects of the financial program, will also be under the supervision of the Office of Planning and Finance. We have a project for a budget and accounting systems development under the Office of Administration, and we have a small item, it is indicated under the Office of the Administrator, but it is for the Federal representative for interstate compact negotiations, for which we are designated by the White House to provide administrative support. He is asking for a small amount to develop a project in connection with his interstate compact negotiations.

OVERALL PERSPECTIVE OF PROGRAM

Senator BIBLE. Thank you. Now, I think it would be of assistance to the members of the committee and to the Congress if you would put the national capital transit plan in overall perspective. It is a so-called bobtailed system, or you used some other word.

Mr. MCCARTER. I call it the basic system.

Senator BIBLE. I think maybe that is a better choice of words. The basic transit system for the District of Columbia is going to serve the areas shown on the map, which has been made a part of our record. What is the total mileage within this system? You have testified to this before, and I should remember it, but I don't.

Mr. MCCARTER. It is a total of 24.9 miles.

Senator BIBLE. A total of 24.9 miles.

Mr. MCCARTER. Of which 13.1 miles are underground, subway.

Senator BIBLE. My memory was, it is about 50–50.

Mr. MCCARTER. That is right, and the rest of it on railroad rights-of-way, or other exclusive rights-of-way.

Senator BIBLE. Now this system will be built at a total cost of——

Mr. MCCARTER. $431 million.

Senator BIBLE. $431 million.

Mr. MCCARTER. Yes.

DATE FOR STARTING CONSTRUCTION

Senator BIBLE. You will start construction of the system on what date?

Mr. MCCARTER. Actual construction should start early—well, shortly after July of 1967. Fiscal 1968.

Senator BIBLE. Fiscal year 1968, but the actual construction, it is estimated, will start in——

Mr. MCCARTER. We would be advertising for bids, we hope, in July.

Senator BIBLE. 1967?

Mr. MCCARTER. 1967, yes, sir.

Senator BIBLE. Now, what is the estimated contract time?

Maybe I could reframe the question and ask, when will the system be operational?

Mr. MCCARTER. The first phase of the system, the part that we are working on now, and probably——

FIRST PHASE OF THE SYSTEM

Senator BIBLE. For the record, what is the first phase of the system?

Mr. MCCARTER. For the record, the Connecticut Avenue, Columbia Heights, G Street, down through the Capitol, and out Benning Road, to the end of the Benning line, just across the river, may be the first operable section, and that should be in operation by late 1970.

Senator BIBLE. That should be in operation by late 1970?

Mr. MCCARTER. Yes, sir.

COMPLETION DATE

Senator BIBLE. When will the remaining part of your system be in operation?

Mr. MCCARTER. It is scheduled to be completed in 1972.

Senator BIBLE. And that means, then, that the total system which you have shown on the map, both the underground and overhead, with all the acquisition of rights-of-way, and so forth, will be completely operational in 1972?

Mr. MCCARTER. That is correct.

Senator BIBLE. At a total cost of $431 million?

Mr. McCarter. That is correct.

Senator Bible. Your further statement is that to date, you are holding to the timetable to accomplish this?

Mr. McCarter. Yes. We are on time.

Senator Bible. You have very little slippage in what you have been doing to date.

Mr. McCarter. Mr. Chairman, some people might consider that we were 1 or 2 months slow in getting started after our appropriation. However, we are in high gear, and by July 1, we will be right back on schedule.

Senator Bible. Well, I am very happy to hear that. I think your agency has a great challenge ahead of it. I am sure that you have the capability, the background, and the experience to cope with this problem. It is a difficult one. It is one on which, I suppose, we should have made more headway earlier, but we have to face the facts as they are, and I do hope that you will meet this timetable that you have set forth.

Mr. McCarter. Thank you.

Extension of System Into Maryand and Virginia

Senator Bible. Let me ask one additional question, because you do comment on the routes outside the District of Columbia boundary line.

Mr. McCarter. Yes, sir.

Senator Bible. Now, does anybody other than the Federal Government in the District of Columbia participate in the financing of those portions of the routes?

Mr. McCarter. Not at this time. Those portions outside of the District of Columbia, as I pointed out, we will not be working on them, really, until about 2 years from now. If the compact authority is formed, and if they develop their financial program, it is assumed that they will participate not only in what you might call extensions, but they will participate in the entire system.

In other words, it would be a united regional system, and the money spent on it would not be, let us say, allocated here and there, and so forth.

Now, the amount of money to be allocated by a regional system to Maryland and Virginia would have to be worked out by the compact, themselves, with the consent of Congress, so I assume that they will be coming back to Congress, maybe a year and a half from now, with their financial plan, and tell you how much Maryland is going to contribute, and how much Virginia is going to contribute, and so forth. But up until that time, if they don't do that, and if they never do that, then the only contribution in the form of grants would be by the Federal Government and the District of Columbia.

Mr. Quenstedt. Mr. Chairman, I wonder if I might make one point for the record, sir.

Senator Bible. Certainly.

Mr. Quenstedt. And that is, since the question was whether or not there is contribution by either Maryland or Virginia in the present system, it might be well for the record to show that the selection of Woodside as a destination for the B. & O. route was to serve the convenience of the system as an appropriate place for a terminus, car

storage and matters of that sort related to efficient operation. We go into Virginia for almost exactly the same reason, that is, to reach an appropriate terminus and yard facilities over south of the Shirley Highway, but with the added advantage that we serve the tremendous Federal establishment of the Pentagon and all that it represents in respect to Federal employees and potential bus transfer, and matters of that sort, again to serve the efficiency of operation, sir. This is not to deny a desire or interest on our part in obtaining financial contributions from the others, but until such time as their problems can be worked out, this decision was made in the interest of an efficient transit system, sir.

CONTRIBUTIONS FROM MARYLAND AND VIRGINIA ON EXTENSIONS OF SYSTEMS

Senator BIBLE. As the system is extended beyond the basic system, then certainly you would expect contributions from Maryland and Virginia. Isn't this true?

Mr. QUENSTEDT. Without question, sir.

Senator BIBLE. I mean, if you extend it further into their territories.

Mr. QUENSTEDT. Without question.

Mr. MCCARTER. That is right.

Senator BIBLE. What was the cost of the system, that was first proposed, in the neighborhood of $800 million?

Mr. MCCARTER. $793 million.

Senator BIBLE. Well, my memory was not too far off. When you get into the larger system than the basic system, you would then look to these jurisdictions for financial help.

Mr. QUENSTEDT. That is correct, sir.

SCHEDULE OF REPAYMENT OF FUNDING FOR SYSTEM

Senator BIBLE. Again, and I realize this is a most difficult question to answer—you have got a lot of imponderables in this equation, it seems to me—when is it anticipated that the basic system will pay out?

Mr. QUENSTEDT. May I ask Mr. Herman, the Director of the Office of Planning and Finance, to respond to that question?

Mr. HERMAN. We hope that all debt from the system will be repaid by the year 2010.

Senator BIBLE. 2010 is your target date to repay all debt against the basic system.

Mr. HERMAN. Yes, sir.

SUBCOMMITTEE RECESS

Senator BIBLE. That is your target date.

I have no further questions.

I do want to compliment you for the very excellent showing you have made today.

We will be in recess until 10 o'clock tomorrow morning, when we will hear Members of Congress on various items in the Interior Department appropriations bill.

(Whereupon, at 11:20 a.m., Monday, March 14, 1966, the hearings were recessed until tomorrow, Tuesday, March 15, 1966, at 10 a.m.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1967

TUESDAY, MARCH 15, 1966

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in room 1223, New Senate Office Building, Hon. Carl Hayden, chairman, presiding.

Present: Chairman Hayden and Senator Proxmire.

DEPARTMENT OF THE INTERIOR

NONDEPARTMENTAL WITNESSES

STATEMENT OF HON. GEORGE D. AIKEN, A U.S. SENATOR FROM THE STATE OF VERMONT

FOREST SERVICE LABORATORY, BURLINGTON, VT.

Chairman HAYDEN. The subcommittee will be in order. We will be glad to hear you, Senator Aiken.

Senator AIKEN. I have a 3-page statement, Mr. Chairman, which I will read or submit for the record, just as you prefer.

Chairman HAYDEN. As you please.

Senator AIKEN. I have three other committees meeting at 10 o'clock. If you don't mind I will just submit this material for the record. I also want to submit a couple of telegrams in support of the Forest Service laboratory at Burlington, Vt.

MAPLE PRODUCTION RESEARCH

This information relates to a maple production research laboratory being operated in conjunction with the University of Vermont by the U.S. Forest Service. Apparently they have made some real progress up to now but are in very cramped quarters in the Federal Building at Burlington, so I will submit these two telegrams, one from Dr. Shannon McCurne, president of the University of Vermont, and one from Dr. Thomas Dowe, dean of the college of agriculture——

Chairman HAYDEN. They will be included in the record.

Senator AIKEN (continuing). Which show the willingness of the university and the desires of the university to cooperate with the Forest Service.

I also have the maple statistics for the United States showing the need for putting some of our millions of idle maple trees to work to supply a good market.

I have also a report from the silviculture and sugarbush laboratory. This is from the Forest Service; another progress report on maple sap investigations at Burlington, Vt., Northeastern Forest Experiment Station, and I would like to submit all these documents for the record.

Chairman HAYDEN. I am sure the committee will be very much interested in them.

Senator AIKEN. I think it is a very worthwhile industry. We have only about 7,000 producers at present in about 13 States and our production has dropped off.

PREPARED STATEMENT

We are now importing a good share of our requirements from Canada where they maintain their production, but we are making real progress in improving the industry and that is why I am here this morning, to give you all these documents.

Thank you.

Chairman HAYDEN. Thank you for your appearance.

(The statement follows:)

In 1964 and 1965 I came before your subcommittee and presented arguments in support of a maple production research program, under the direction of the Forest Service, in my home State of Vermont, at Burlington.

The first year you accepted my request for $180,000 on a recurring basis to expand this program and the full Senate concurred. House conferees subsequently agreed to go along with $90,000.

In 1965 I requested the additional $90,000 needed and this amount was appropriated. Today I have again come to you to request a modest additional sum of $40,000 to pay the cost of the architectural design and plans for a new Forest Service laboratory to be situated on 12 acres of ground on the campus of the University of Vermont. I understand the present total estimated cost is $500,000.

I wish to emphasize that this appropriation is more in the nature of an investment rather than an expenditure. It is a project of national importance and is a proposal of benefit to farms in 13 or 14 States that produce maple products. In the order of their production volumes these States include Vermont, New York, Ohio, Pennsylvania, Wisconsin, Michigan, Massachusetts, New Hampshire, Maryland, Maine, Minnesota, Indiana, and West Virginia.

American maple producers are gravely concerned over the decline of production in this country and a corresponding increase in imports from Canada which now total more than 16 million pounds. In terms of percentage of U.S. consumption, Canada's imports have risen from 9 to 55 percent since 1919.

Ironically, there never was a time when we had better market opportunities for maple products than we have right now, but it will take firm promotional effort and extensive production and market utilization research to develop and supply new markets in the United States. However, I am confident our producers in the U.S. Maple Belt can do the job if they are assured of continued Federal cooperation in the research fields I have mentioned.

The University of Vermont, which has entered into a long-range lease of its land to the Forest Service for this project, has given me strong indications of its support for the new laboratory. This laboratory is critically needed because present quarters in a downtown office building in Burlington are totally inadequate.

Evidence of this support is contained in communications from the president of the University of Vermont, Dr. Shannon McCune, and the dean of the University of Vermont College of Agriculture, Dr. Thomas W. Dowe, which I submit for inclusion in the record.

Representatives of the maple producers in a number of States as well as the national association have consistently supported this project so I will not burden you with additional testimony from them.

For a research project of this kind, strong cooperation is vital. It is for this reason that the establishment of the new Forest Service Laboratory on the university campus is most important. The research facilities of the college of agriculture will always be at the disposal of the Forest Service and the latter, in turn, will always stand ready to use its resources for important university research.

Only yesterday I was told, for example, that in the last year the university has been working on a project of its own concerning the fundamentals of maple sap flow. In this research they have had constant support from Forest Service experts. I also understand that the cooperative efforts of this Federal agency and State university will make available additional teaching and research aids for agricultural students at the university.

Mr. Chairman, I request you to include in the record at this point a report on the progress of these studies to date which was provided for me by the Forest Service, as well as a brief description of the new Laboratory.

TELEGRAMS IN SUPPORT OF FOREST SERVICE LABORATORY

The University of Vermont gives strong support to locating the Forest Service Research Laboratory on the University of Vermont campus. This has been made tangible by the action of the board of trustees which has made available a suitable building site. The university teaching and research programs, and the plant sciences and the research program to be conducted by the Forest Service Laboratory will be mutually supporting and of great benefit to Vermont and its neighboring States.

SHANNON MCCUNE,
President, University of Vermont.

The University of Vermont is definitely interested in the Forest Service Research Laboratory to be located on this campus. The trustees have made a building site available. The Forest Service research programs and our research and teaching programs will be complementary. We plan to intergrate them as completely as possible. Laboratory space will be available to graduate students working in plant sciences. The University of Vermont has established a 4-year forestry program. The Forest Service Research Laboratory will provide support to the program.

THOMAS W. DOWE,
Dean, College of Agriculture, University of Vermont.

MAPLE STATISTICS FROM USDA

Today there are about 7,000 domestic maple sirup producers.

From 1916 to 1919: U.S. production per year about 52 million pounds.

From 1961 to 1965: Average U.S. production 15 million pounds. Vermont and New York each produce about one-third the total U.S. production. The United States produces a third of the total world output and most of the remainder is from Canada.

Canada's production is 32 million pounds, just about the same as in the 1920's. Imports from Canada, less than 5 million pounds, 1916–19; now more than 16 million pounds.

SILVICULTURE AND SUGARBUSH LABORATORY, BURLINGTON, VT.

The maple products industry contributes substantially to incomes of rural residents in many of the Northern States east of the Great Plains. It provides a source of income during that time of the year when he farm workload is low. More efficient production is a key factor in strengthening the industry. Increasing the sugar content of sap produced, improving yields per tree, and developing new techniques of sap extraction are important in reducing productions costs. Research on these problms is now underway at Burlington, Vt., and is providing technology for further development of the maple products industry.

A new laboratory is needed to provide adequate space and facilities to carry out the present research program. Such facilities would allow the scientists to

supplement field studies with fundamental research on sap flow in maple trees. They would permit necessary laboratory analyses related to sap collection and extraction studies to inheritance of sap yield and sugar content, and to requirements for growing maple seedlings and vegetatively propagating superior maple stock.

The campus of the University of Vermont is an ideal location for this Laboratory which would make cooperative facilities readily available to Forest Service scientists and would supplement University needs. It would enhance coordinated effort with resulting cross-fertilization of ideas leading to quicker and better answers to maple sap problems. Closer association would materially increase the active and very productive cooperation which now exists.

A 12-acre site for such an installation has been made available under long-term lease by the university. Present quarters were not designed for biological research; they are inadequate for needed studies.

The estimated construction cost for this Laboratory is $500,000. Architectural design and plans for the Laboratory, needed in advance of construction funds, are estimated at $40,000.

REPORT OF PROGRESS, MAPLE SAP INVESTIGATIONS AT BURLINGTON, VT., NORTHEASTERN FOREST EXPERIMENT STATION

MAPLE SAP PRODUCTION TECHNIQUES

Eleven new studies on sap production have been installed or are in readiness for this spring's sap run. Brief descriptions of the studies and results to date follow:

1. *Off-season tapping of sugar maple.*—This study, initiated in October 1964, had as its objectives the following: (1) Is fall tapping possible in northern Vermont? (2) Will the direction of slope of sugarbush affect yield? (3) Will cardinal direction of tapping face affect yield? (4) Will fall tapping affect spring yields from trees tapped in the following spring?

Information obtained from the 1964–65 results indicates that sap can be obtained under weather conditions prevalent during the fall; however, the volume is approximately one-third of normal spring yields. The total sugar yield (a reflection of both volume and sugar concentration) is less in the fall than in the normal spring. During the fall, highest yields are obtained from south- and east-facing slopes. No difference was observed among tapping faces regarding yields. Spring yields from trees which had been tapped the previous fall were approximately one-third lower than from trees tapped only in the spring season. This study is being continued.

2. *Chemical effects on sap flow.*—This small, exploratory study investigates the effects of two chemicals, sulfuric acid and sodium hydroxide, in varying concentration on sap yields. Preliminary analyses indicate increases in sap yields up to 50 percent may be obtained from tapholes treated with weak solutions of both compounds. Enlargement of portions of this study is planned for 1966.

3. *A study of the effect of bole temperature on sap flow.*—Through use of a black plastic mulching material, the effects of wrapping tree trunks on sap flow from tapholes located in the same was investigated. In theory, it was believed wrapping would increase the amount of solar radiation absorbed, and thus favorably affect sap flow. Yields from the wrapped trees were somewhat lower than from nonwrapped trees. However, this difference was not significant. It is suspected an insulating effect was obtained by wrapping. Modification of the treatment, using a black coating compound, which will be applied directly to the bole, is planned for the 1966 season.

4. *Study of taphole healing.*—A study of the effect of various chemicals; i.e., traumatic acid, 2,4-dichlorophenoxy acid, 2,4,5-trichlorophenoxy acetic acid, and indole 3 acetic acid, on the healing of tapholes. The objective is increased rate of healing in order to allow earlier retapping in approximately the same position.

5. *Eradication of taphole markers on sugar maple tapholes.*—A taphole marker was developed to enable quick location of old tapholes to prevent tapping into previously damaged wood with resultant decrease in yield. The efficiency of the sugarbush worker is being evaluated as well as any detrimental effects of the marker on taphole healing.

6. *Effects of absorption of solar radiation and ambient temperatures by spouts on sap yields of sugar maple.*—This study is investigating possible differences in

the yield of sap from trees tapped with black and white spouts of plastic. This is related in turn to differences in radiation absorbtivity for white and black spouts and differences in thawing rates, possibly leading to increased sap yields.

7. *A case history study of the relation of sugarbush microclimate and soil moisture to sap flow.*—In this study, the relationship of various environmental factors on sap flow will be investigated. Profiles will be obtained for soil moisture, humidity, barometric pressures, radiation, wind speed and direction, and temperatures as related to sap flow and pressures. A complete understanding of these factors is essential to effectively evaluate results of research in which sap yield is a primary variable.

8. *Chemical stimulation on sap flow.*—This is a study of the effect of three concentrations of sulphuric acid on sap flow. It is a followup of previous exploratory work that indicated a positive effect of sulphric acid on sap yield.

9. *Comparison of vented and unvented tubing systems.*—A study designed to compare the sap yields of vented and nonvented tubing systems. This study will attempt to eliminate outside sources of variation and provide results that should be statistically conclusive. Venting is a very controversial subject among both users of tubing and researchers. Considerable sap losses through venting have been observed.

10. *Exploratory study to devise methods of testing sap sweetness in young sugar maple.*—A study designed to determine conditions favorable for sap flow in small seedlings, and to develop a method of collecting sap from small seedlings for sweetness determination. An approved technique is essential to future progress in sweet tree selection in the nursery and in the field.

11. *Effects of age of wood on sap yields in sugar maple.*—A study to determine the relationship between the age of wood and sap yields. Regression-correlation techniques will be used in the analysis. Taphole depth is also a controversial subject, and an accurate scientific assessment of this subject is important.

PRODUCTION OF SUPERIOR SUGAR MAPLES

In order to better understand the range of variability within the species, a rangewide provenance study was initiated last spring in which seed from 32 different origins separated by as much as 2,000 miles was collected and planted.

Presently we are in the middle of a selection program to locate superior sugar-producing wild trees for use as parental stock in a future breeding program to develop new strains of sweet maples.

The selection program began in 1962 with an exploratory study to aid in working out selection technique and criteria. In 1963, the selection program was expanded into Maine, New Hampshire, and New York through the organization of selection committees in each of these States. Simultaneously, a committee was organized in Vermont expanding the program in this State also. State forestry and extension organizations pledged their cooperation in providing personnel to further the selection work in their respective States. In 1964, the program was expanded into Massachusetts through the cooperation of State forestry and extension organizations.

In the winter of 1964, the program was expanded further to include the State of Pennsylvania and selection work was increased from two counties participating to eight counties.

In the sugaring season of 1965, cooperating agencies in 6 States were providing approximately 70 men for work on the selection program. All field personnel received training instructions from the Burlington unit.

Results of the selection program to date, excluding the exploratory work done in 1962, may be summarized as follows:

Year	Bushes tested	Trees tested	Trees selected
1963	60	3,335	59
1964	92	8,253	152
1965	98	8,066	91
Total	250	19,654	302

In 1966, selection work will be accelerated in those parts of the northeast where areas of stands have shown the greatest between tree variability in sweetness. This year will also mark the beginning of final screening of selections that have been made to date.

Studies of the reproductive behavior of sugar maple have shown the correct period at which to pollinate female flowers, and the degree of crossbreeding compatibility of individual trees toward one another. Inbreeding as well as other possible means of seed and fruit production have been studied and are now well understood. Suitable techniques have been worked out for climbing and pollinating sugarbush trees.

SUGAR MAPLE ESTABLISHMENT

At the time of the expansion of maple research in fiscal year 1964, the hardwood artificial regeneration research underway at the Northeastern Station was reoriented to concentrate on sugar maple problems which would support the studies directly concerned with the new program in sap production and extraction and the sugar maple breeding program.

Seed production, collection, and handling.—Studies are underway to develop satisfactory seed storage techniques. Results to date have allowed us to store seed for at least 2 years (a total of 3 years) beyond that which has been generally accepted as the storage life of sugar maple seed. This study is continuing and will cover a 5-year period.

Other seed studies include date of collection and methods of stratification and germination. Results indicate that seed collection can start as early as the middle of September and continue until seed fall. A highly reliable stratification technique has been worked out which permitted us to proceed with other aspects of seed handling, such as viability testing and sowing rates in the nursery.

Nursery procedures.—Nursery studies currently involve season of seed sowing and root pruning. Fall sowing has proven superior to spring sowing, resulting in earlier and more complete germination and greater height growth. Periodic examination of seedlings in the root pruning study have indicated that pruning tends to stimulate a more fibrous and compact root system. The practical advantages will be less damage to lateral roots during lifting and a much more easily planted seedling.

We now have sufficent information on seed to initiate a more comprehensive nursery research program than presently exists. Many aspects of nursery culture need to be investigated. Not all can be solved simultaneously and our approach will be to deal with the major problems separately. Investigations within the next year will include tests of seedbed covering materials, shade requirements, and possible fertilization trials. Continuing efforts will be aimed at producing a physiologically superior seedling that will have the utmost advantage for surival and fast, early growth after planting.

Vegetative propagation.—Some work had been in progress on a sexual propagation of sugar maple since 1958 on a limited scale. Past efforts had been concerned with clonal effects on rooting ability and overwintering storage treatment. A study initiated in 1964 was further concerned with overwintering. However, only very limited success was obtained from the four conditions used.

Further studies were installed in 1965 to determine the effect of date of maple twig cutting collection on rooting ability. The primary objective was to obtain roots on cuttings earlier, and thereby to increase overwintering survival percentages. It appears cuttings may be successfully collected and rooted 4 to 5 weeks earlier than formerly practiced. Overwintering survival is currently being followed.

A major factor and probably the most important for successful rooting of sugar maple cuttings is a properly controlled rooting environment. Plans are underway to improve rooting environmental conditions through the use of plastic greenhouses, where both temperature and relative humidity will be subject to control. This should enhance rooting percentages and produce healthier cuttings.

A further study is underway to test the effects of dormant feeding (nutrients and sugar) on rooted cuttings as a means of improving overwintering survival.

Seeding and planting.—Two field planting studies are now underway. These involve a comparison of method of site preparation and protection, and a comparison of direct seeding versus planting. It is much too early to draw conclusions, but in the first study it is evident that deer browsing and rabbit damage will have to be controlled if planting is to be successful. Early survival has been excellent. Given reasonable care in lifting and transport, there is every indication that sugar maple seedlings are easily planted.

A study is underway to test the effect of combinations of three soil moisture levels and three soil nutrient levels on the growth of sugar maple seedlings over a 3-year period. It is a joint cooperative study with the Department of Forestry

of the University of Vermont and the Vermont Agricultural Experiment Station. The regeneration phase of stand development is probably the most critical period in the history of the stand. A knowledge of the effect nutrients and moisture on the growth of seedlings is basic to securing the establishment of sugar maple.

STATEMENT OF HON. J. CALEB BOGGS, A U.S. SENATOR FROM THE STATE OF DELAWARE

Water Problems of Delmarva Peninsula

Chairman Hayden. We will now hear from Senator Boggs.

Senator Boggs. Good morning, Mr. Chairman.

Chairman Hayden. Good morning.

Senator Boggs. Mr. Chairman, I want to thank you for this opportunity to appear before you and the committee this morning. I appreciate your kindness and courtesy.

As many of the members of this committee know, the Northeastern part of the United States has suffered from drought conditions for the past 4 years and this drought has increased in severity.

Because of the seriousness of the situation, in May of last year I wrote a letter to the head of the Geological Survey in the Department of the Interior.

I expressed my concern regarding the local water problems which appeared to be emerging with the rapid growth of the Delmarva Peninsula, and I have here a little map showing this Delmarva Peninsula, Mr. Chairman.

Chairman Hayden. The map cannot be included in the record, but we are very glad to have it.

Senator Boggs. Yes, for your convenience.

I pointed out in that letter that the long coastline invited the invasion of sea water into the fresh water bodies and that I felt it was necessary that water supplies be developed and managed to (*a*) provide knowledge on the availability of fresh water in our streams and underground systems; and (*b*) determine the water sources that may already be invaded by salt water.

I call to the attention of the members of the subcommittee the map which I have provided which shows the Delmarva Peninsula comprising 89 percent of the land area in my State, the entire Eastern Shore of Maryland, which is nine counties, and the northern part of Virginia down to Cape Charles.

As the subcommittee members can see, that area is completely surrounded by salt water—it is really an island, Mr. Chairman.

A lot of folks don't realize that because of the Delaware and Chesapeake Canal which cuts across and makes it an island, and with the Atlantic Ocean and Delaware Bay on one side, the Delaware and Chesapeake Canal which cuts across and makes it an island, and with the Bay.

This greatly increases the possibility for salt water encroachment in fresh water sources in the peninsula.

Additionally, Mr. Chairman, I pointed out in my letter to Mr. Nolan that because of the continued rapid growth of the peninsula, I felt that it would be necessary to include in any survey of this type water-use estimates and trends.

On June 16 of last year, Mr. Nolan replied to my letter and set forth the scope that they envisioned for a general survey of this type and included in his letter a cost estimate of approximately $100,000 per year for 5 years.

REQUEST FOR HYDROLOGIC SURVEY

In August of last year I sent a letter to the Secretary of the Interior jointly signed by my colleagues, Senator Williams of Delaware and Senators Brewster and Tydings of Maryland, requesting the Secretary to give consideration to the inclusion in the Department's fiscal year 1967 budget a request for moneys for a hydrologic survey of the Delmarva Peninsula.

In further justification for my request, I cited the Water Resources Council report dated July 21, 1965, in which the Council indicated that another year of the severe drought could be anticipated and that one of the actions that should be taken was an inventory of ground water available with emphasis on more critical areas and on potential salt water contamination.

In September last the Assistant Secretary of the Interior replied to my letter and said that the Department supported the need for a study of this type. However, he indicated that agency budgets for fiscal year 1967 would be given critical reveiew and might allow for little or no increased activity.

SUPPORT FOR SURVEY

It is for these reasons, Mr. Chairman, that I come before you this morning to request this committee to consider appropriating $100,000 in the fiscal year 1967 appropriation bill for the beginning of a hydrologic survey of the Delmarva Peninsula. I am joined in this request, I am happy to say, by my colleagues Senator Williams of Delaware and Senators Brewster and Tydings of Maryland.

In addition to the Department of the Interior's support, as I have referred to, I have also received resolutions from the Delaware River Basin Commission and the Delmarva Advisory Council supporting this study and I understand it also has the support of the Governors of the three States involved—Delaware, Maryland, and Virginia.

CURRENT DROUGHT CONDITIONS

Also, Mr. Chairman, I have just received a release from the Secretary of the Interior covering the Water Resources Council Report to the President on the current drought situation.

The report, according to the release, indicates that extremely severe drought conditions persisted over a 100,000 square mile area at mid-February. The most marked change has been a southwesterly extension of severe drought into southern New Jersey, all of Maryland and Delaware, nearly half of Virginia, and the northeast portion of West Virginia.

This is exactly the area, Mr. Chairman, the Delmarva Peninsula, that would be aided by a survey of the type I propose.

PENINSULA UNDERGROUND RESERVOIRS

If the peninsula area is to continue to grow—and we have great hopes for that growth, Mr. Chairman—it is imperative that we undertake a survey of the type envisioned in this request in order that we may identify the extent and location of major underground reservoirs in the peninsula, show to what degree both the surface and ground water sources are replenished by nature and show the rates at which water may be withdrawn from these reservoirs without depletion and without intrusion by salt water from the bay or ocean.

I am requesting, Mr. Chairman, that these funds be solely Federal funds because of the nature of the survey and the fact that there are three States involved in the peninsula.

I do not believe that the existing State cooperative program would lend itself to a survey of the type envisioned.

Again, Mr. Chairman, I wish to express my appreciation to you and to the members of the committee for permitting me to testify on this important subject this morning and I would sincerely hope that the committee would give favorable consideration to my request.

Chairman HAYDEN. You made a very interesting statement. The committee will give it consideration.

Senator BOGGS. Thank you, Mr. Chairman.

STATEMENT OF HON. PHILIP A. HART, A U.S. SENATOR FROM THE STATE OF MICHIGAN

FUNDS TO IMPLEMENT ANADROMOUS FISH LAW

Chairman HAYDEN. Senator Hart.

Senator HART. Good morning, Mr. Chairman.

Mr. Chairman, you are kind to let me come.

Chairman HAYDEN. If you have a statement you want to file we will insert it in the record.

Senator HART. If I may, and I would like to comment on just two of the several items that are in it.

Chairman HAYDEN. That may be done.

Senator HART. The first is to urge you to increase the funds to implement the anadromous fish law, and the story that goes with that, I think, is interesting.

This law authorizes $5 million a year for 5 years for the conservation and development of the Nation's anadromous fish and the fish in the Great Lakes that ascend streams to spawn.

GREAT LAKES FISHING

You are thoroughly familiar with our past troubles with fish in the Great Lakes.

First it was the lamprey, which, thanks in large part to your understanding and help, we have got a handhold on, and then we had the botulism scare. Now we have a new destructive force, the alewife.

This is a fish that came in from the salt water and moved from obscurity in 1955 to a threat of greater magnitude than the sea lamprey today. These are small fish, tiny, worth about a cent and a half a pound. They have increased 50 times from 1962 to 1964.

There were an estimated 400 billion pounds produced in Lakes Michigan and Huron alone last year and it is still skyrocketing. Probably over 80 percent of all fish by weight in the upper three lakes is now alewife. Of the eight species of our chubs, seven are gone and the last one is in trouble.

The yellow perch is down in Lake Michigan from 2 million in 1964 to 400,000 in 1965. In sheer density of numbers the alewife is displacing all other fish. It feeds on the young of all fish, including our young trout. The result is that the alewife is snatching the rewards of our victory over the sea lamprey, the victory of all who worked so hard to eliminate the lamprey as a threat.

STEELHEAD

The Michigan Conservation Department people see at the moment just one possibility of solving the latest problem. The steelhead, our major anadromous species, which we brought in about 90 years ago from streams tributary to the Pacific, is prospering. Why?

Because it goes upstream to spawn. It prospers as the lamprey predations decline. It feeds on the alewife. It prospers in the security its young enjoy in the upstream sanctuaries away from the alewife.

Michigan has the facilities and funds to release only some 2 million steelhead. We have food supply and space for 40 million. We need fish passageways, counting weirs, egg-taking facilities, land to build them on, improvement of spawning areas, construction of additional fish hatchery facilities, etc. and this anadromous fish bill would provide us with substantial help along with matching 50–50 State funds.

I hope, Mr. Chairman, that in view of what is really a surprising development in the Great Lakes Basin, you can see the justification for this request.

Chairman HAYDEN. You have stated a very serious problem.

Senator HART. Thank you, Mr. Chairman.

DEVELOPMENT OF RECREATION FACILITIES

Senator HART. Secondly, there is an acquisition that was added to the Huron-Manistee National Forest, thanks to you, which we now know as the Lake Michigan Recreation Area (formerly the Porter-Mulder tract).

As you will see, the development plans which the community assumed would be reliable and could be counted on have been trimmed drastically by the proposed appropriation and there is bitter disappointment in the communities adjacent to the area, and I think for very understandable reasons. I hope your committee will see fit to increase the development of recreational facilities item by at least $180,000 so that that amount would be available for the Lake Michigan area.

Research funds for the forest engineering laboratory at Houghton: I bring a picture to show you the results of your decision to help us build the Forest Service laboratory up in the Upper Peninsula. You more than anyone have helped us get in and it will be, we hope, open at the end of this year. It will serve the whole upper Great

Lakes region, and it will be just another memorial to your thoughtfulness. In my statement I bring you a request that $300,000 be appropriated in fiscal 1967 for forest engineering research at Houghton. And finally, Mr. Chairman, I include a request for appropriation of at least $4.1 million under Public Law 89-309, the Commercial Fisheries Research and Development Act of 1964.

Thank you.

PREPARED STATEMENT

Chairman HAYDEN. Thank you for your appearance.

Senator HART. Thank you.

(The statement follows:)

Mr. Chairman, I come before you today seeking your interest and support for four items of importance to my area of the country. I say "my area of the country" advisedly, because the potential benefits would benefit not only Michigan but the entire Great Lakes area.

FUNDS TO IMPLEMENT ANADROMOUS FISH LAW

This law (Public Law 89-304) authorizes $5 million a year for 5 years for the conservation, development and enhancement of the Nation's anadromous fish, and the fish in the Great Lakes that ascend streams to spawn.

You are thoroughly familiar with our past troubles with fish in the Great Lakes: first the lamprey, then the botulism scare. Now we have a new destructive force, the alewife.

This invader from salt water has moved from obscurity in 1955 to a threat of greater magnitude than the sea lamprey today. These small fish, worth only 1 to 1½ cents per pound, have increased 50-fold from 1962 to 1964. An estimated 400 million pounds were produced in Lakes Michigan and Huron last year and the population is still skyrocketing. Probably over 80 percent of all fish by weight in the upper three lakes is now alewife. Of eight species of chub, seven are gone, the last one is in trouble. The yellow perch is down in Lake Michigan from 2,000,000 in 1964 to 400,000 in 1965. In sheer density of numbers the alewife is displacing all other fish. It is predacious on the young of all fish probably including young lake trout.

The alewife is snatching the rewards of victory over the sea lamprey from all who have worked so hard and spent so much to eliminate it.

Our Michigan Conservation Department people see at present just one possibility of solving this latest problem. The steelhead, our only major anadromous species—imported some 90 years ago from streams tributary to the Pacific Ocean—is prospering. It prospers as sea lamprey predations decline, prospers on the abundance of alewife as food, prospers in the security its young enjoy in the upstream sanctuaries away from the swarming alewife.

Michigan has the facilities and funds to release only some 2 million steelhead and salmon—we are on a shoestring. We have food supply and space for 40 million. Our people have other anadromous species in sight—the Chinook salmon, the striped bass, the Masu salmon.

We will need fish passageways, counting weirs, egg-taking facilities, and land to build them on; improved fishing areas and access sites; improvement of spawning areas; construction of additional fish hatchery facilities; land acquisition for spawning area protection; expanded inventories and evaluation programs on the Great Lakes and their tributary streams. This, the anadromous fish bill will help us provide, along with State funds.

May I earnestly request your favorable action in providing the $5 million authorized for fiscal 1967 to implement this act.

Indeed, the committee may wish to consider the desirability of starting this program in the current fiscal year (1966) with a supplemental appropriation item.

DEVELOPMENT OF RECREATIONAL FACILITIES

Back in 1962, Federal funds were provided at my request to purchase within the boundaries of the Huron-Manistee National Forest a strip of shoreline known as the Porter-Mulder tract, now called the Lake Michigan Recreation Area.

The local officials agreed to this purchase, in the expectation that development of the area for recreation purposes would proceed according to schedule with consequent economic benefits. Actually, the schedule has not been met.

The mere $20,000 which is expected to be available under the proposed 1967 budget item will permit completing for camping the 50 family units for which the loop roads will be constructed from fiscal year 1966 funds. Also, about a mile of road and a parking area to serve proposed picnicking is planned for construction in fiscal year 1967.

To complete full development of this area, $1.6 million is needed. But some of the most urgent and high-priority needs could be met if we had $180,000 in addition to the $20,000 which is expected to go into the area from regular funds. These additional funds would permit the Forest Service to complete a pressure water system, flush toilets and sanitation system, and additional camping or picnicking family units to provide for a total capacity of 250 families, or at least 150 more families than would be accommodated if the extra funds were not forthcoming. There is even a possibility that more family units than 150 could be completed, depending on the cost of the water system and sanitation facilities.

There is a high demand for recreation facilities in this area and I hope your committee will see fit to increase the item for development so that at least $180,000 would be available for the Lake Michigan Recreation Area.

Research Funds for the Forest Engineering Laboratory at Houghton

Thanks to your understanding of the desirability of such a facility in this area, construction of this Laboratory is expected to begin when the frost is off and we hope to see it virtually completed this calendar year. Meanwhile, some engineering research work is going on in temporary quarters.

An increase in Forest Service research effort in the amount of $300,000 annually would permit an effective attack on the solution of the engineering problems in the harvesting and rehabilitation of forest resources in the northern forest regions.

Of this sum, approximately $120,000 is planned for grants and cooperative aid programs. Michigan Technological University would be one of the prime grantees and cooperators in this work. Proposals have already been submitted to the Forest Service by this university for off-road mobility studies of felling and skidding equipment whose objectives are to reduce logging costs.

The remaining moneys would be used to employ 4 to 5 scientists and 8 to 10 supporting personnel as well as to purchase and maintain laboratory and field equipment necessary to carry out the research program.

Specific areas of study, as now planned, would include time studies and cost analyses of present logging systems versus innovated systems, development of systems for producing pulp chips in the woods, studies of high-pressure compaction of chips for transport, methods for removal of bark from pulpwood chips, and additional studies of off-road mobility.

Forest products rank with mining as a prime factor in the economy of the Northern Lake States. While the supplies of timber have increased markedly, the systems of forestry operations in the northern hardwood forest remain inefficient and outdated.

The provision of these $300,000 could, we believe, result in possible savings in harvesting and rehabilitation costs of many millions of dollars annually. Your cooperation and that of the committee is earnestly requested.

Funds To Implement Public Law 89-309, the Commercial Fisheries Research and Development Act of 1964

The allocation to the States under section 4(a) of the act amounts to $2.6 million for fiscal year 1967, compared to $4.1 million for fiscal 1966. Michigan's share, therefore, would be reduced from the present $25,300 to $13,700.

Such a reduction would seriously damage our efforts in conducting our existing project 4-2-R-1, surveillance of lake trout restoration in Michigan waters of Lake Michigan. Plans and budgets have been predicated on the availability of at least $25,300 for fiscal years 1966, 1967, 1968, and 1969. Any reduction will make it very difficult for Michigan to fulfill her obligations to the program to restore lake trout in Lake Michigan. With nearly 60 percent of Lake Michigan lying within Michigan's jurisdiction, Michigan must assume a major portion of this effort. In passing, it should be noted that Wisconsin's efforts on Lake Michigan will also be affected by the proposed reduction.

In submitting projects to the Bureau of Commercial Fisheries under section 4(a) of the act, the Michigan Department of Conservation selected surveillance of lake trout restoration as having the highest priority. Given sufficient financial support, numerous other projects should be pursued. For example, there is great need to examine the status of whitefish stocks in northern Lakes Michigan and Huron. Again, a project to monitor the year-class strength of various commercial species would permit reasonaby accurate forecasts which in turn would benefit the commercial fishing industry.

May I therefore request appropriations at least equal to those for fiscal 1966 in implementing the commercial fisheries research program.

Thank you, Mr. Chairman.

STATEMENT OF HON. GORDON ALLOTT, A U.S. SENATOR FROM THE STATE OF COLORADO

Alpine Snow and Avalanche Control Research

Chairman Hayden. Senator Allott?

Senator Allott. Thank you, Mr. Chairman.

You may recall that I wrote you on the subject of alpine snow and avalanche control research, requesting consideration of an increase in funding for this work.

Your reply indicated that you had included my letter in the record of hearings, which I appreciate. I would simply like to affirm, at this time, my belief in the importance of that work.

Predator Control

Two other items in the bill before your committee prompt me to appear today, Mr. Chairman. The first is funding for predator control work carried on under the Bureau of Sport Fisheries and Wildlife.

I might make a comment here, which is one that I think will cause a lot of people a great deal of surprise, which is that in Colorado last year we lost 15,815 head of sheep to wildlife predators—12,000 to coyotes, 1,300 to bear, 1,500 to bobcats, 568 to dogs, 139 to lions, which will surprise some of our eastern friends, I am sure, and the most surprising thing to our eastern friends will be that we lost 155 to eagles.

Last year, as you will doubtless recall, the budget proposed a cut of $350,000 under the prior year's level in this work. This committee included funding to the prior year's level, the full Appropriations Committee concurred, and the Senate approved. Nevertheless, the item was reduced to the budget level in conference.

This year I am informed the budget proposes a continuation of last year's level of effort, adjusted for pay increases. I understand that your committee will be hearing witnesses from the sheep industry on this subject.

They will doubtless spell out the importance of increased funding, but I would like to submit for the record a table sent me by Paul W. Swisher, executive secretary of the Colorado Wool Growers Association.

Mr. Swisher is a former commissioner of agriculture for Colorado and very knowledgeable. In his letter to me, Mr. Swisher says:

The sheepmen of Colorado are faced with a serious problem of increasing losses from predators. We urge you to help us get restored the cut in appropriations for predator control under the Bureau of Sport Fisheries and Wildlife which was made last year. Due to the cut in appropriations, Wildlife Services in Colorado was cut $22,000, which curtailed the predator control work in our

State to such an extent that all the sheepmen I have talked to have informed me their losses from predators increases this past year. Some of the sheepmen informed me that they were selling out as they could not continue due to the increasing losses from predators.

Enclosed is a report of losses from predators which was obtained by questionnaire mailed in September to over 2,000 sheepmen in our State. The greater part of these losses reported were from sheep producers who operate in the mountain regions of our State. However, this past year there have been many cattlemen in the plains region of the State requesting protection from coyote where they were having losses of calves.

In our State the predator control work is conducted through a cooperative program financed by money allocated to the Colorado Wildlife Services from the appropriations made by Congress to the Bureau of Sport Fisheries and Wildlife, money obtained from a 20-mill tax on all sheep in the State, game, fish, and parks department and assessments made by members of the local woolgrower associations. These local assessments vary from 5 to 80 cents per head. The sheepmen of Colorado are planning to request the legislature next January to increase the mill levy from 20 to 40 mills to help prevent further losses in the sheep population in our State.

SHEEP PREDATOR LOSS REPORT, 1965

I ask that the table prepared by Mr. Swisher be inserted in the record at this point.

(The table follows:)

Association	Number of reports	Number of sheep	Coyotes	Bears	Bobcats	Dogs	Lions	Eagles
Conejos-Costilla	14	11,458	224	54	0	73	0	0
Gunnison	3	2,865	121	27	34	0	0	0
Mesa	12	9,357	458	130	50	13	19	39
Montezuma-Dolores	4	2,920	51	19	35	4	0	0
Rio Blanco	21	32,520	2,564	184	382	4	48	62
Rio Grande-Alamosa	34	11,000	161	7	25	120	0	0
Routt-Moffat	27	71,010	4,479	282	591	18	28	1
Saguache	15	8,420	111	9	0	18	18	0
Arkansas Valley	4	3,230	28	2	0	4	0	0
Elbert-Lincoln	7	1,929	88	3	3	6	0	0
Colorado River	10	9,709	347	62	41	52	2	6
Consolidated	7	9,075	205	58	35	18	0	0
Eagle-Pitkin	9	9,940	420	11	53	32	2	6
Western Slope	24	32,803	947	159	106	125	0	0
Middle Park	6	3,095	353	36	114	0	12	0
Spanish Peaks	2	380	39	0	0	0	0	0
North East	8	22,483	246	0	0	32	0	0
South East-Otero-Kiowa	6	4,159	46	0	0	0	0	0
North Park	6	9,600	572	78	8	4	0	20
San Miguel	8	25,690	445	166	54	25	0	21
San Juan	12	7,360	128	60	42	20	10	0
Total	239	289,003	12,033	1,347	1,573	568	139	155

NOTE.—On Jan. 1, 1965, the stock sheep on farms in Colorado was reported at 1,106,000. If we use this figure, then the loss from predators in Colorado would amount, if we anticipated a normal lamb crop, to approximately $1,200,000 to the sheepmen of our State. The report above shows that only 26.3 percent of the sheep were reported on the questionnaires which were mailed out. From this report, the loss from all predators was 15,815 or approximately 5.5 percent of the sheep reported. The loss from coyotes was approximately 4.2 percent.

FOX AND COYOTE CONTROL

Senator ALLOTT. Mr. Chairman, just one more point on this subject of predator control.

As you know, the conference report on this bill, while cutting the appropriation, indicated that the available funds should be channeled primarily to fox and coyote control.

Nevertheless, losses of sheep in Colorado from coyotes continued to mount. I again ask your help in restoring funds to the Bureau of Sports Fisheries and Wildlife for this program.

I also ask, Mr. Chairman, that a letter from Mr. John P. Orcutt, Colorado Commissioner of Agriculture, be included at this point in the record.

(The letter follows:)

COLORADO DEPARTMENT OF AGRICULTURE,
Denver, Colo., February 18, 1966.

HON. GORDON ALLOTT,
U.S. Senator,
Old Senate Building,
Washington, D.C.

DEAR GORDON: For many years, the State department of agriculture has conducted a cooperative program with the Fish and Wildlife Service, U.S. Department of Interior, for the control of predator animals. This program is especially beneficial in the protection of sheep, poultry, turkeys, and calves.

At the present time, this program is financed in three parts:

1. A State levy of 20 mills is imposed upon sheep.
2. Sheepmen contribute funds through their local Wool Growers Association.
3. The Federal Government appropriate and allocate moneys for this purpose.

As you know, the sheep industry in Colorado amounts to approximately $40 million. Last year we received a loss which exceeds $1,200,000 from sheep killed by coyotes, bears, bobcats, dogs, and lions. Other losses were sustained on poultry and other livestock. These losses, no doubt, are similar in other Western States.

In spite of the importance of the livestock industry in Colorado, as well as the losses incurring from predator animals, the Federal appropriation for this control program was reduced last year. Colorado consequently received a reduction of $22,000 in Federal moneys for this purpose. We have been informed recently that further reductions have been recommended. The sheepmen and livestock people cannot afford a continuation of these losses from predators. I do not feel that the States are prepared, on this short notice, to carry more of the burden than they are now carrying.

We would certainly appreciate your help in assuring adequate funds for this project.

Sincerely,

JOHN P. ORCUTT, *Commissioner.*

WILDLIFE AND FISHERY RESEARCH UNITS

Senator ALLOTT. The second item in the bill before you which I would like to speak about is support of the wildlife and fishery oresearch units.

We have at Colorado State University topnotch units in both fishery and wildlife research, and I have received information which I feel makes a very strong case for increasing the level of Federal funding to $40,000 for each of those units in view of the great importance of wildlife conservation today.

FISHERY UNIT

Let me speak first of the fishery unit. The Colorado unit was activated in April 1963. In the 3 years it has been operating, nine students have received M.S. or Ph. D. degrees through the unit.

This nine represents 45 percent of the total 20 degrees awarded through all fishery unit programs in the United States since the program was started. There are currently 10 graduate students studying under auspices of the unit.

One vacancy exists, and the university has 43 applications on hand for that one vacancy. I am advised that demand for personnel with advanced training in fishery work is very strong.

The Colorado Game, Fish, and Parks Department and Colorado State University both contribute substantially to the operation of this unit, and the $10,000 increase in Federal funding which I ask would further strengthen the contribution which the unit can make in its field.

Wildlife Unit

Federal support of the wildlife unit is about half the support provided the fihery unit. In the current fiscal year, $15,300 is contributed by the Federal Government. Colorado State University contributes the equivalent of $23,800 in tuition waivers, equipment, supplies, and staff services. The Colorado Game, Fish, and Parks Department supplies $14,000 in direct funding plus an estimated $14,000 in supporting services and equipment.

The budget before you, contemplates an increase of $200 in the Federal contribution. I ask that the committee add another $24,500 to that, to raise the total funding to the level of $40,000.

The enrollment of graduate students in this unit is presently 12. There is only one unit leader, the present funding being inadequate to provide an assistant leader.

This, of course, spreads the leader's time very thin over the direction of the students, and yet there are on hand 193 applications from students wanting to take graduate work in the unit. The increase I ask would add an assistant leader and support an increased number of qualified graduate students.

Digest of Information

Mr. Chairman, I asked the president of CSU to provide me with fact sheets on each of the units of which I have spoken, and I ask that those sheets be inserted in the record.

Chairman Hayden. That may be done.

(The information follows:)

Colorado Cooperative Fishery Unit

Cooperative fishery units were authorized by Public Law 86-686 that was approved September 6, 1960.

Colorado fishery unit was activated April 1963.

Funding—	
Federal Government	$30,000
Colorado Game, Fish, and Parks Department	$14,000
Colorado State University (increase requested: $10,000 for a total of $40,000 Federal contribution)	$10,000
Number of graduates of the Colorado fishery unit: Ph. D. and master degree	9
Number of students currently in unit	10
Number of new students that will be accepted for fall 1966	1
Number of applications for graduate study in fisheries at Colorado State University received by mid-February 1966	43

Since the Colorado unit was activated in 1963, Federal civil service salary increases have been approximately 16 percent. Annual increment would increase the total increase for salaries of the unit leader and assistant to over 20 percent. Thus, the base salary utilizes nearly all the Federal contribution with little remaining for travel, local administrative costs, student stipends, or research expenses. Of the $30,000 Federal contribution, $2,000 is removed at various levels in the Bureau of Sport Fisheries and Wildlife leaving $28,000 available to the unit.

The demand for fishery personnel with advanced degrees and experience is tremendous. Federal and State agencies, and universities are continuously searching for aquatic biologists. Announcements of job openings provide students with a wide choice of positions. Colleagues telephone from across the country to ask if the unit has a student that will be graduating soon who will meet their needs. With the continued rise in importance of outdoor recreation, this demand for fishery biologists should continue for a considerable number of years.

The 20 cooperative fishery units in the United States have graduated a total of approximately 20 biologists with advanced degrees. Nine of these have been graduates of the Colorado cooperative fishery unit. The Colorado unit, with 10 students currently enrolled, has the largest number of students of any fishery unit. At Colorado State University there have been 17 degrees awarded in fisheries in the past 10 years. Of this number, nine have been graduates of the fishery unit. Thus, we can see that the Colorado unit is assuming a major role in the education of fishery biologists both on a national scale when compared to other fishery units, and at Colorado State when compared with the advanced degrees awarded in fisheries from this university.

Ten of the existing 20 cooperative fishery units are financed with $40,000 from the Federal Government. The Colorado unit is receiving only $30,000. Because of the civil service salary increases and the major role that this unit is fulfilling in providing fishery biologists, an increase in the Federal contribution is necessary. Many qualified student applicants are available and the demand for fishery biologists is far greater than the supply.

Colorado cooperative wildlife research unit

Year	BSFW funding	Number of unit students
1964–65	$14,500	5
1965–66	15,300	12
1966–67 (expected)	15,500	(?)

During 1965 a total of 141 applications were received by the Colorado cooperative wildlife research unit. This is believed to be more than 5 times the demand of any of the other 18 wildlife research units. Unit funds were adequate to hire only four students in 1965. The other eight students presently supervised by the unit, are supported by "outside" contract funds.

To date (Mar. 1, 1966), a total of 193 graduate applications have been received and reviewed.

The wildlife research unit is now operating at a 30-percent student-adviser overload. Unit capacity can be brought in line to 16 graduate students only with Bureau of Sport Fisheries and Wildlife financing at the $40,000 level.

The main "push" should be for wildlife unit funding at $40,000 so as to be comparable with the fishery units and the Ohio wildlife unit. Specifically, this would entail appointment of an assistant wildlife unit leader with supporting expense funds.

Colorado State University, wildlife graduate growth

	Wildlife management	Conservation department total
1962–63	14	(?)
1963–64	15	42
1964–65	22	49
1965–66	45	75
1966–67 (estimate)	70	115

Current financial support

Wildlife Management Institute: $1,000 per year.

Colorado State University: $23,800 per year (tuition, equipment, supplies, and staff services).

Colorado Game, Fish, and Parks Department: $14,000 per year plus estimated $14,000 in supporting services and equipment.

Bureau of Sport Fisheries and Wildlife: $15,300 per year.

Present positions of graduates of the Colorado cooperative fishery unit

Unit leader	Georgia cooperative fishery unit.
Assistant leader	VPI cooperative fishery unit.
Water quality biologist	Missouri.
Regional fishery biologist	Texas.
Fishery biologist	Division of River Basins, Bureau of Sport Fisheries and Wildlife.
District biologist	Michigan.
Fish hatchery biologist	Region 2, Bureau of Sport Fisheries and Wildlife.
Research biologist	Colorado.
Graduate student	University of Idaho.

WILDLIFE RESEARCH UNIT FUNDING AND STAFFING

Senator ALLOTT. I have also received from Mr. Laurence E. Riordan, assistant director of research, Colorado Department of Game, Fish, and Parks, a copy of a resolution adopted at the 55th Annual Convention of the International Association of Game, Fish & Conservation Commissioners. I ask that this resolution be inserted in the record at this point.

(The resolution follows:)

RESOLUTION NO. 1, WILDLIFE RESEARCH UNIT FUNDING AND STAFFING

Resolutions Adopted at the 55th Annual Convention of the International Association of Game, Fish & Conservation Commissioners at Portland, Oreg., September 21, 1965

Whereas the wildlife research units were first established in 1935 and since that time have contributed significantly to wildlife research, wildlife management, and the training of professional personnel; and

Whereas the fishery research units were first established in 1962 and were patterned in most respects after the successful wildlife research units; and

Whereas the fishery research units have been staffed with assistant leaders who are Federal employees, and provided with several thousand dollars in operating funds annually; and

Whereas, the wildlife research units have not been staffed with assistant leaders who are Federal employees, nor provided adequate operating funds: Now, therefore, be it

Resolved, That the International Association of Game, Fish & Conservation Commissioners urges the U.S. Fish and Wildlife Service to include in its budget request adequate Federal financing for the wildlife research units, so as to provide staffing and operating funds equal to those of the fishery research units.

STATEMENT OF HON. FRANK E. MOSS, A U.S. SENATOR FROM THE STATE OF UTAH

INTERMOUNTAIN BROWSE LABORATORY, UTAH

Chairman HAYDEN. We will now hear from Senator Moss.

Senator MOSS. Mr. Chairman, I have a prepared statement that I had asked to be filed and included in the record.

Chairman HAYDEN. That may be done.

Senator Moss. I will comment just very briefly.

I appreciate as always your great courtesy in hearing me and the other Senators at the beginning of these hearings and I appreciate the attention you give to what we say because I am sure that it is very helpful to us to have you consider our individual problems and give them your sympathetic attention.

I am asking for increases in the appropriations or for funds to be written in for several specific projects that are in my State. They are relatively modest in amount, but of great importance.

My first request relates to the Intermountain Browse Laboratory which I hope will be located on the Brigham Young University campus at Provo. The school has made land available and there is a building there, but what we need to do is get some equipment for the Browse Laboratory.

Browse is awfully important to us not only for domestic livestock, but big game, and until we know more about it and do more experimentation we are going to continue to decline in our population in our mountains and our ranges, and this is an ideal location for the Laboratory.

Our friends from Idaho and other intermountain States support this Laboratory and I am asking for a relatively modest amount of $37,000 to get started

FOREST SERVICE RESEARCH LABORATORY AT UTAH STATE UNIVERSITY

I also am requesting that $200,000 be restored for the Forest Service Research Laboratory at Utah State University in Logan.

This research also has to do with the range, but it is directed more to the grazing of domestic livestock, to inventory and identify damaging diseases and insect pests, and evaluate their impact on recreational areas and browse ranges and determine how recreation use contributes to insect disease problems, to determine the biological and ecological features of the more important insects and diseases, and develop effective control of the measures for those diseases.

TROUT DISEASE LABORATORY, SPRINGVILLE, UTAH

Another item that is of great importance, and it underlines the growing use of our western lands for recreational purposes, is the need for a trout disease laboratory which would be established in Springville, which is a national fish hatchery now.

The reason that we need this laboratory and this control on diseases of fish is that we found that we get an epidemic started of some sort by the way we now hatch fish and take them all over and plant them in various places. Such an epidemic can spread very rapidly and be very damaging to our recreational area unless we have close control. The Bureau of Sport Fisheries proposes to locate this laboratory and control work at Springville.

I think this is important because literally millions of our people have as a recreational pursuit the fishing in our great new lakes that we have created out there and our many mountain streams that we have.

The amount here again is relatively modest, $56,000, but very important, I think, in this regard.

OURAY WILDLIFE REFUGE AND COOPERATIVE FISHERY UNIT AT UTAH STATE UNIVERSITY

I have two other requests. The amount for the Ouray Wildlife Refuge, should be increased by $125,000, and I think the need is documented well here. I am hoping also that the Cooperative Fishery Unit that has been established at Utah State University can be funded at the same level as the units established later.

The first units got $30,000 annually. The later ones got $40,000. We think all units ought to be the same. We just want to get up to $40,000 on that annual appropriation.

I appreciate this time very much, Mr. Chairman. I know that you will give my requests careful consideration.

PREPARED STATEMENT

Chairman HAYDEN. Thank you very much for your appearance.

Senator Moss. Thank you.

(The statement follows:)

It is, as always, a pleasure to appear before this subcommittee. I have found here through the years a sympathetic and understanding audience for Utah problems.

The total budget requests for the Department of the Interior for the fiscal year 1967 show an increase, although it is a small one, over the amounts appropriated for these same agencies for the present fiscal year. The requests for fiscal 1967 total $845,680,000, as compared to the $822,066,777 appropriated for the fiscal year 1966, an increase of about $20 million.

Total requests for Forest Service programs for the fiscal year 1967 are $330,298,000, while the amounts appropriated for these programs in the fiscal year 1966 was $322,998,000, a program increase of $5,774,000. Most of this increase is, however, for Appalachia.

I am gratified that the budget requests for these resource development programs are at least at the same level as the current year—that they were not cut as some other domestic programs have been. However, I seriously question whether the requests are high enough in view of our rapidly multiplying population and the increasing demands of the American people upon our natural resources.

Many of the items in the Interior Department appropriation bill relate directly, or indirectly, to the protection and development of our so-called renewable resources—our soil, our grass, our timber, our grazing lands, our scenic beauties, and our great out of doors. Once decimated, these resources cannot be replaced. This generation, therefore, has the serious responsibility of preserving for generations to come the natural resources that are every American's heritage.

For these reasons, I feel that the appropriation requests before this subcommittee are of particular importance, and I am convinced that we cannot be guilty of shortsightedness or neglect in funding them.

I realize that the war in Vietnam is taking a great slice of our available funds and I recognize the problem faced by the President and his advisers in stretching our financial resources to meet all of our needs both at home and abroad. But I feel we must not lose sight of the fact that our natural bounty is not limitless and that our forests and our prairies will not endure forever unless we foresee and forestall their destruction. I am sure that this subcommittee is as determined as I to protect our natural heritage, and will recommend realistic appropriation levels for programs covered by this bill.

I should like to tell you why I feel certain appropriation requests should be increased, and why funds should be written in to cover new activities and projects.

FOREST SERVICE

Intermountain browse laboratory

I ask that the appropriation bill be amended to provide $37,000 to the Forest Service for planning and architectural design of the first stage of an intermountain browse laboratory to be located at Brigham Young University in Provo,

Utah. Total cost of the laboratory will be about $800,000, with the first stage costing $460,000. This will come in later appropriations.

I appeared in behalf of funds for this laboratory last session, but my request was not granted. I am trying again this session, because I feel it is absolutely essential that we strengthen the attack on western range and wildlife habitat research.

The Forest Service is already conducting limited studies in livestock range-management and associated wildlife habitat in the intermountain region in a rented bulding in Provo, but there are no laboratory facilities, and the space now occupied is completely inadequate and unsuited to the job that should be done. A much more extensive research program is needed. Long continued use of approximately 160 million acres of dry land ranges, particularly by the Intermountain livestock industry, has resulted in widespread depletion. This is affecting both our livestock industry and our big game herds. In 1961 one-half of the big game harvest of the 11 Western States and about one-fourth of that in the contiguous 48 States, was in the territory. Active restoration of browse in critical areas is essential to maintain even the present game herds in severe winters. Sustained research using modern facilities and equipment is needed to determine more precisely the basic requirements and characteristics of important forage species and the best grazing management systems for maintaining production of forage and rehabilitating deteriorated ranges.

Provo is the ideal location for such an expanded research program. Brigham Young University has already made a site available for a laboratory on its campus. This would provide close association between Forest Service scientific personnel and the scientists at Brigham Young University and at the University of Utah which is only 40 miles away in Salt Lake City. Both universities have strong interests and research in genetics, physiology and ecology of native vegetation, have close proximity to major shrub types, and have long-term ecological records over a wide range of altitude and environmental conditions.

There is tremendous interest in the area in the location of an Intermountain Browse Laboratory at Provo. I ask unanimous consent to enter into the record of the hearings letters I have received from Verl G. Dixon, Mayor of Provo, Luke Clegg and Ray Murdock, Provo City Commissioners; from Professor Vasco M. Tanner of Brigham Young University; and from Mr. John E. Phelps, Acting Director of the Utah Department of Fish and Game:

PROVO CITY CORP.,
Provo, Utah, February 1, 1966.

HON. FRANK E. MOSS,
U.S. Senate, Washington, D.C.

DEAR SENATOR MOSS: We in central Utah have a strong interest in the research programs of the Forest Service's intermountain station dealing with wildlife and related resources of our range and forest lands. These resources are extremely important to the recreational opportunities that are part of our way of life, and also to the tourist and livestock industries which are vital to our State economy.

We are intensely interested in a challenging research project on browse improvement that the Forest Service plans to headquarter at Provo, Utah, with major supplemental field work and facilities located near Ephraim, Utah. This farsighted and imaginative research would seek to develop superior strains of native range and forest shrubs, or browse, through selection and breeding. Promising plants from foreign countries also will be sought and tested for their adaptation and value to our conditions and needs. In approach, this research would be comparable to what has been done for pasture grasses and other crops with phenomenal results.

This research on shrubs has exciting possibilities, since it will virtually pioneer in an unexplored field. In spite of the importance of shrubs to us in the West, there is nothing like this genetic approach underway anywhere in the Nation. Its nearest counterparts are the three forest genetics laboratories of the Forest Service.

Such research is exceptionally important because it could provide superior shrubs for improving the habitat of various kinds of wildlife, for renovating and screening outdoor recreation areas, and for stabilizing and beautifying roadsides and other scars on our natural landscapes. Thus, it could contribute materially to improved recreational opportunities and the beautification being emphasized by President Johnson.

We think this important work should be initiated without delay. An efficient start can be made while awaiting construction of the needed office-laboratory facilities. An increase of $150,000 in research funds would get a productive program underway.

In addition to the browse improvement project we have just mentioned, the intermountain station presently has two research projects headquartered at Provo. One deals with desert and sagebrush range, and the other with wildlife-livestock relations.

Early development of modern laboratory and office facilities at Provo is essential to efficient conduct of the present and planned research program. A choice site for the planned range and wildlife habitat laboratory has been given to the Federal Government under 50-year lease by Brigham Young University. This reflects the university's high regard for the research program and its benefits to the university. We believe it is equally beneficial to the city of Provo, the State of Utah, and the intermountain West.

The estimated total cost of needed facilities is $800,000, but construction can be in two steps, with the first costing $460,000. Approximately $37,000 in planning funds for the first step is urgently needed so that construction of the laboratory can proceed as soon as possible.

The expansion of browse research and the construction of necessary facilities would be extremely beneficial and meaningful to Utah and the West. We commend it to your attention and hope that you will find it possible to seek appropriation of funds for the research program and for planning the laboratory.

Very sincerely yours,

PROVO CITY COMMISSION,
VERL G. DIXON, *Mayor*,
LUKE CLEGG, *Commissioner*.
RAY MURDOCK, *Commissioner*.

JANUARY 8, 1966.

Senator FRANK E. MOSS,
Senate Office Building, Washington, D.C.

DEAR SENATOR MOSS: First let me extend to you, your wife and family our sincere wishes for a good New Year. We hope that you and your family have good health and that the activities in the Senate this coming year will be enjoyable and rewarding.

I have recently been asked to discuss with you the possibilities of getting a Forest Research Laboratory established here at the BYU. It would be a branch of the Ephraim station. This program has been discussed for some 2 or 3 years. The university officials have expressed a desire to have it established here and have made provisions for granting a 49-year lease on a tract of land for the establishment of a laboratory-office on the campus.

You are well aware of this project, I am sure, and know that if such a project is brought to fruition, there will need to be expended for building and equipment from $400,000 to $500,000. The initial step would require about $150,000 for the research program and $35,000 for planning the first stage of a laboratory and all facilities.

This is a much needed project since the research work will be concerned with a shrub improvement and revegetation research program in this intermountain region. Shrubs are a most important group of plants here in Utah since they are the main source of browse for big game animals as well as livestock. They are especially used by game in the fall and winter months. Heavy grazing, and in many cases overgrazing, has brought about a diminution of our native shrubs. Research work on breeding new vigorous types or establishing new types will be one of the major fields of research.

At the present time, there is a strong movement on the part of State, public lands, and forest officials to carry forward a united and cooperative program to increase the carrying capacity of the grazing lands in this State. The research laboratory for a trained staff of forest officials is greatly needed at this time and we would like to have it located in Provo. The BYU scientists could render needed help and cooperation in carrying forward a program as suggested above.

I would greatly appreciate it if you would express your feelings as to your support of this program. I would like very much to have a personal interview with you about this program if you are going to be in the State within the next few weeks or months; also there are a few matters that we could discuss that cannot be dealt with in a letter.

I am enjoying my work with the State park and recreation personnel as well as with the Governor. I think he is doing a splendid job and that Utah will soon benefit from tourism. I want to express my thanks and appreciation to you for the many things you are doing for the West and the State of Utah.

Sincerely yours,

VASCO M. TANNER, *Professor.*

STATE OF UTAH DEPARTMENT OF FISH AND GAME,
Salt Lake City, Utah, February 1, 1966.

Senator FRANK E. MOSS,
New Senate Office Building, Washington, D.C.

DEAR SENATOR MOSS: The Utah Department of Fish and Game is vitally interested in expanded research concerning restoration of browse ranges for big game, and protection of these ranges against insects and disease. You may recall previous correspondence from our late director, Harold Crane, who strongly advocated such research as the logical approach for meeting hunting demands in Utah. We have been losing out-of-State hunters the past 2 years, and the income they bring with them. Local hunters are dissatisfied with their hunting success.

Utah has the potential for producing much more big game. The key lies in improving their range. Our ability to do so will be of major importance in enhancing Utah's recreational opportunities.

Browse from shrubs is the major diet of deer. Desirable kinds of shrubs have almost disappeared from many critical game ranges because of past overgrazing by livestock and big game, and from other causes, including insects. To reverse this downward trend the game department has taken aggressive action to bring deer herds into balance with the capacity of their ranges. We are also attempting to improve these ranges by seeding browse and other plants. Within the last few years, 64,000 acres of critical deer winter range have been seeded very successfully.

This success, unparalleled in the West, is due primarily to a small research program in which the department has been cooperating with the Forest Service's Intermountain Station during the last 10 years. We are proud of what we have been able to do, and I would like to show you some examples when you have a few spare hours during one of your trips back to Utah. I am sure you, too, will be pleased.

We of the game department are enthusiastic about the potentials of this positive approach to habitat improvement. But we urgently need help in developing better browse plants adapted to the various soil and site conditions encountered on range and forest lands. Our results and observations indicate great opportunities, though selection and breeding, for developing superior strains of native and introduced browse species—strins with high productivity, palatability, nutritional value, resistance to disease and insects, drought tolerance, or other desirable traits. We also need more research to develop better methods for efficiently producing and processing the seed of selected browse species, and establishing them on game ranges.

Because similar research is also needed by our neighboring States, there is an outstanding opportunity to make Utah the center of browse improvement research for the entire West. I would like to see established a western browse improvement laboratory in Utah similar to the three forest genetics institutes now being maintained by the Forest Service. This would be of tremendous advantage to us, as well as to our neighbors.

Utah is an ideal location for such browse research. We can truly be called a browse State since shrubs dominate the natural vegetation. We have both northern and southern types of browse and are centrally located in respect to the Western States. Our past research and development program, though limited has given us a start in developing a valuable background for a productive research effort. Furthermore, at the Forest Service's Great Basin experimental area near Ephraim, we have a unique opportunity with a whole range of vegetation types, from the desert shrub zone in the valley bottom to the subalpine zone above 10,000 feet, readily accessible.

Two items are necessary to achieve this essential browse improvement research; first, additional funds for the Forest Service to expand their research at Provo, with major field testing at the Great Basin experimental area near

Ephraim; second, funds for planning the laboratory, office, and greenhouse facilities at Provo.

We also urgently need research to learn how to protect our browse plants from insects and disease. Many shrubs that produce nutritious food for big game and livestock have been virtually decimated by the aroga moth, tent caterpillars, and other insects, and by diseases such as rusts. At present we know of no way to combat these pests. We believe research could show the way. A joint research effort between the Forest Service's Intermountain Forest and Range Experiment Station and Utah State University would produce results of great benefit to us all. We know the Forest Service research organization to be vitally interest in this field and to be responsible and capable. Utah State University offers adequate facilities and a qualified staff to cooperatively attack this problem.

The research I have briefly described, with office and laboratory facilities, would materially aid us in the development and conservation of our wildlife resources. It would also be of major benefit in enhancing Utah's recreational opportunities. We are most anxious to see these programs initiated, and respectfully solicit your support of them. We understand that the initial program expansion for browse improvement research would require approximately $150,000 additional appropriations; planning for the $460,000 initial stage of the office laboratory at Provo, $37,000; and the insect and disease research, $100,000.

I would greatly appreciate your consideration on this matter.

Sincerely yours,

JOHN E. PHELPS, *Acting Director.*

Woody plant diseases and insects of outdoor recreation areas and game and livestock ranges

I ask also that $200,000 be added to step up two Forest Service research projects now being carried out by the Intermountain Forest and Range Experiment Station in cooperation with the Utah State University at Logan, Utah. The funds would be divided equally—$100,000 each—between recreation research and insect and disease research. Both types of research are now inadequately financed to pursue their goals vigorously. The additional money is necessary to increase them to the devolpment level envisioned by the national forestry research program transmitted to the Congress by Secretary Freeman in April of 1964.

Reports of insect or disease damage to outdoor recreation areas and game or livestock browse plants are being received with increasing frequency. Additional research is needed, specifically directed to the following problems:

1. Inventory and identify damaging disease and insect pests of browse plants.
2. Evaluate their impact on management of recreational areas and browse ranges.
3. Determine how recreation use contributes to insect and disease problems of woody vegetation in recreation areas.
4. Determine the biological and ecological features of the more important insects and diseases attacking woody vegetation in recreation areas and on browse ranges.
5. Develop effective control measures for disease and insect pests in keeping with the special nature of these areas.

There is an excellent opportunity to step up present programs to undertake the needed research at Logan. Utah State University has considerable strength in insect and disease research and is particularly interested in developing a cooperative research program along the above lines.

FISH AND WILDLIFE SERVICE

Trout disease laboratory

During the past few years, trout fishing waters in the intermountain area have been greatly expanded through the creation of many new fresh water lakes at reclamation dams, and, as a result, fish are being produced in Federal, State, and private fish hatcheries in far greater quantities than ever before. There is urgent need in the area of a trout disease laboratory. The logical site for the

location of such a laboratory is the national fish hatchery at Springville, Utah, recently renovated through funds provided by this subcommittee, the best geographical location to serve trout hatcheries in Utah, Idaho, western Colorado, New Mexico, Arizona, Nevada, part of California, part of Montana, and Wyoming.

I therefore ask today, Mr. Chairman, that $56,000 be written into the budget of the Fish and Wildlife Service by this subcommittee for the establishment of a diagnostic unit at the national fish hatchery at Springville, Utah.

Two factors in the production of trout have changed the needs of the scientific diagnosis of fish disease. The first is that fish production is being carried on now on a much larger basis than ever before. The second is that the large-scale movement of fish and fish eggs throughout hatchery systems and across State boundaries has produced a vehicle for the rapid, widespread distribution of fish disease.

To produce the large numbers and pounds of fish required for resource management and recreational fishing, population densities must far exceed natural situations. The environment is favorable for outbreaks of serious diseases, resulting in losses to recreational resources, private enterprise, and local economics. The best course of action to prevent the spread of fish diseases is a program of constant vigilance and control carried out at fish hatcheries across the country.

The Springville hatchery has adequate facilities to house a unit staffed and equipped to identify causes of fish mortalities in the intermountain area, and to provide on site diagnostic services in this region of high fish hatchery production.

The annual operation and maintenance requirements of such a unit would be as follows:

1 unit leader, GS–12	$11,420
1 assistant unit leader, GS–11	9,630
1 laboratory technician, GS–7	6,740
1 clerk-typist, GS–4	4,990
Total salaries	32,780
Travel supplies and incidentals	13,220
Vehicular and laboratory equipment	10,000
Total	56,000

Springville has wide support in Utah as the location for the Trout Disease Laboratory. I ask permission to enter into the record of the hearings several typical letters I have received from local trout producers:

U.S. TROUT FARMERS ASSOCIATION,
Sandy, Utah, February 4, 1966.

Hon. FRANK E. MOSS,
U.S. Senator,
New Senate Office Building, Washington, D.C.

DEAR SENATOR MOSS: It has been called to my attention that the U.S. Fish and Wildlife Service is contemplating the establishment of a trout disease laboratory somewhere in the West. If this is fact, perhaps it is something that we should investigate at an early date with the idea of locating this laboratory at Springville, Utah, in connection with the present U.S. Fish and Wildlife Service hatchery in that area.

There are many advantages to be gained for the entire intermountain West if such a laboratory were located at Springville. This laboratory could serve to good advantage trout farmers of Utah, Wyoming, Montana, Idaho, west Colorado, New Mexico, Arizona, Nevada, and many parts of California.

An existing laboratory in Washington State adequately serves the Northwest. It has been necessary for commercial troutgrowers in Utah and other intermountain States to present their problems to the laboratory in Washington State. Because of the greater distance involved, this has often presented problems that have been costly to such commercial growers.

I believe too, that the various State fish and game agencies in the intermountain area would welcome a centrally located laboratory, which could be at Springville, Utah.

I shall appreciate your investigation and a report on this to me at your earliest convenience.

In the meantime, if I can furnish you with any additional information, please feel free to call upon me.

Sincerely,

CLAY M. ROBINSON, *Executive Manager.*

CLEAR VIEW TROUT FARM,
Heber, Utah.

Hon. FRANK E. MOSS,
U.S. Senate,
Washington, D.C.

MY DEAR SENATOR: We understand that the U.S. Fish and Wildlife Service is considering establishing a trout disease laboratory somewhere in the Western United States. If this is true, we hope that serious consideration will be given to locating the laboratory here in Utah at Springville, in connection with the present U.S. Fish and Wildlife Service hatchery.

Mr. Vernon Bressler, biologist for the U.S. Fish and Wildlife Service at Springville, has been very cooperative with the commercial trout producers in this area. We feel that he is a very capable biologist and that if such a laboratory were established at Springville, he could competently handle its operation. Because of the lack of a laboratory at the present time, it is necessary that diagnosis for trout diseases be sent to the laboratory which is located in the State of Washington and which, of course, causes considerable delay.

We urge that if funds are to be appropriated for laboratory use, that every effort be made to expand the present facilities at Springville, so that diagnosis of trout diseases for commercial trout producers may be made there under the able directorship of Mr. Bressler, as previously mentioned.

As a commercial trout producer since 1929, I urge your support in this very important matter.

Sincerely,

W. ROY HULL, *Manager.*

FORD FISHERIES,
Richfield, Utah, February 9, 1966.

Hon. FRANK E. MOSS,
U.S. Senator,
New Senate Office Building,
Washington, D.C.

DEAR SENATOR MOSS: There is word going around that the Fish and Wildlife Service is going to build a trout disease laboratory in the intermountain region and I think Springville, Utah, is the ideal location for such a laboratory.

I do not have to point out to you that Springville, Utah, is in the exact geographical center of the region the laboratory would serve. People from the laboratory would have to travel to points in Idaho, Montana, Wyoming, Colorado, New Mexico, Arizona, and Nevada and samples would be sent from these points to the laboratory. Roads, railways, and airlines all converge at Salt Lake City from these points.

The Federal hatchery at Springville, Utah, is ideal, because the facilities needed are already there and newly built. Work is just finishing on a new disease laboratory and hatchery.

As a private trout farmer I need the laboratory at Springville to provide technical help I cannot get anywhere else. I appreciate the help you have given me in the past and know you will do everything you can to obtain this laboratory at Springville.

Very truly yours,

CLAIR FORD.

Cooperative fishery unit at Utah State University

The cooperative fishery unit at Utah State University is seriously crippled because of the low level of its annual appropriation. The Logan unit was the first of 30 such units established in the country. This was in 1962, and the annual appropriation was set at $30,000. Nine other early units were also funded at this level. But the 10 units founded later were all funded at $40,000 annually.

All have equally important research projects underway, but the early units are greatly hampered in their work because of lack of funds.

I am therefore requesting that the annual appropriation of the Utah unit, and of all other early units, be increased from $30,000 to $40,000, so that all units will be financed at the same level. In fact, I feel that $50,000 for each of these units each year would not be unrealistic.

It is a painful waste of talent to have nationally known scientists operating under a budget which is so small that they not only cannot finance graduate student work, but that they must abandon their own research projects. But this is what is happening at the Utah fisheries unit. At my request, Dr. William F. Sigler, head of the Department of Fish and Wildlife Resources at Utah State University, asked Dr. Donald R. Franklin, unit leader of the Utah cooperative fishery unit, to prepare a detailed memo on his work and on its effect if funds are not increased. I asked that this memo be entered into the record of the hearings, because it makes a far better case for the increase than I could:

UTAH STATE UNIVERSITY,
DEPARTMENT OF WILDLIFE RESOURCES,
Logan, Utah, January 24, 1966.

Memorandum to: William F. Sigler.
From: Donald R. Franklin.
Subject: Effect of continued support at $30,000 per annum on research program of the Utah cooperative fishery unit.

Your memo of January 17 requested that I outline in detail the effects of continued support at a level of only $30,000 per year.

We are presently involved in two major research programs, and wish to begin a third. These are the Green River research program, the quality and fitness of hatchery fish, and the effects of herbicides on aquatic ecosystems.

1. *Green River research program.*—Prior to and following the chemical eradication of fish above the Flaming Gorge Dam, a controversy of national proportions arose over the issue as to whether or not waters in which there are rare and indigenous fish should be chemically treated. To date this controversy has not been resolved. The cooperative fishery unit has been studying the changes as caused by Flaming Gorge Dam, both above and below the dam, the recreational use being made of the reservoir, and the status and welfare of the rare and indigenous fish above and below the dam. This research now involves three discreet studies (1) the fate of the threatened fish, (2) the recreational problems and the future of the Flaming Gorge area, (3) the changes as affected by the impoundment which information will be needed to evaluate the impact of future dams.

We wish to initiate two additional studies for which there is an immediate need. These are (1) the distribution and status of the threatened species in the Colorado River system, and (2) a study which would establish an ecological benchmark or baseline before Gray's Canyon Dam is built and before the central Utah project is completed. Such a study would provide a good reference to determine the impact of future construction on the aquatic ecosystem.

In addition, present studies on the recreational use at the reservoir should be extended until the pattern of recreational use is stabilized. This will require at least 6 years of additional study.

2. *The quality and fitness of hatchery fish.*—The quality of hatchery fish is becoming of increasing interest and importance to a number of people in Utah for the following reasons: (1) the Bureau of Sport Fisheries and Wildlife has been authorized to build a Federal hatchery at Jones Hole to stock the Flaming Gorge area, (2) the Utah Hoover Commission has suggested that possibly the Utah Fish and Game Department should consider purchasing rainbow trout for planting from commercial hatcheries, if they can be bought at a lower price than the State can raise them, (3) the increased demands of both State and Federal agencies for more stocking of trout plus continually increasing costs of production demands utilization of the most economical methods of producing acceptable fish, (4) the increase of the widespread and hazardous disease in rainbow trout, infectious pancreatic neucrosis (IPN) has pointed to the problem that both private, State, and Federal agencies must in the near future produce IPN free trout and trout eggs.

The Utah Cooperative Fishery Unit does not propose to study IPN, but it is generally recognized that fish which have been prestressed by a disease are considerably less able to survive in the wild. It, therefore, becomes apparent

that a strain of trout is needed which can survive both the rigors of the environment and the hazards of undetected or nonpreventable disease.

The Utah unit now has two studies actively underway on this problem, and more will be undertaken when the results of this research are known.

3. Herbicides in the aquatic environment.

The Utah unit has been requested to expand its research program into the area of the effect of herbicides on the aquatic ecosystem.

The recent Presidential Panel report entitled "Restoring the Quality of our Environment" emphasizes the importance and urgency of further evaluation of the use and eventual fate of pesticides in our environment. In line with the National, State, and local concern exemplified in this report, we are proposing to study the effect and eventual fate of 2–4,D in an aquatic ecosystem. This herbicide is widely used for sagebrush control here in the West and there is no information on the effect of this herbicide at the ecosystem level.

Needless to say, none of these studies can be initiated or continued without an increase in funding, since our present level is sufficient for salaries and overhead costs only.

UTAH COOPERATIVE FISHERY UNIT,
DONALD R. FRANKLIN, *Unit Leader.*

The Bureau of Sport Fisheries and Wildlife supports my request that all cooperative fishery units be financed at the same level, and recommends at this time that the amount be set at $40,000 annually. I ask that a letter to this effect, from Deputy Director A. V. Tunison be placed in the record also.

DEPARTMENT OF THE INTERIOR,
FISH AND WILDLIFE SERVICE,
BUREAU OF SPORT FISHERIES AND WILDLIFE,
Washington, D.C., January 17, 1966.

Hon. FRANK E. MOSS,
U.S. Senate,
Washington, D.C.

DEAR SENATOR MOSS: In your letter of January 10, you asked for full information on the cooperative fishery unit program in order to support a request for an increase in funds before the Senate Subcommittee for Interior Appropriations. Your interest in the fishery units and your intention to obtain needed funds are greatly appreciated. It was your initiative in obtaining authorization and funds for the first fishery unit established at Utah State University in 1962, that set the precedent which 19 other States have followed in obtaining units. We are highly pleased with the accomplishments of the Utah fishery unit, and the support we have received from officials of Utah State University. Studies on the fisheries of the Green River, conducted under difficult and hazardous conditions, have been productive, as have laboratory studies on fish behavior and other subjects.

The original appropriation of $30,000 to the Utah unit, which has been continued annually, meets only salaries and the most essential expenses of the leader and assistant leader. Many costs related to the research and training effort have risen substantially so that we are no longer able to support graduate students engaged in research and training, looking toward advanced degrees in fishery science. We consider the support of graduate students an important key to the success of the unit program.

Although all the cooperative fishery units receive financial support from the State fish and game departments, this support is limited by conditions within the States. We also seek outside support and have benefited from grants from the Sport Fishing Institute, the Sport Fishery Research Foundation, the Office of Water Resources Research, and other agencies. We intend to explore various means of increasing financial support to graduate students but cannot expect this to replace the Federal contribution to the program.

We support the proposal that all cooperative fishery units be financed at the same level, in respect to Federal funding, and that at the present time, this should be $40,000 per year. This amount is necessary to assure effective operation and help realize the goals set for the units in training and research. This basic requirement was first realized in connection with the 1965 fiscal year appropriation when $40,000 was requested and received for a new fishery unit at the

University of Arizona. Since then, two of the older units (Georgia and North Carolina) have obtained increases in their annual budgets by congressional action and seven new units established in fiscal year 1966 received $40,000 each. In summary, 10 units receive $30,000 annually and 10 receive $40,000. For your information, a list of the existing units and funds provided each for the current year, is enclosed.

The success of the program is attested by the number of students that are presently taking courses and receiving instruction from the unit leaders. This amounts to about 350 students of which 87 are candidates for advanced degrees. Last year, which was the first year that students entering the program completed their work, 11 received advanced degrees. These have now found employment with State and Federal agencies in fields of fishery research and management. The demand for trained fishery scientists continues to increase.

A copy of the annual report for 1964, the latest available report describing the activities of the several units, is enclosed for your information. We will be pleased to supply any additional information that can be provided on the fishery unit program.

Sincerely yours,

A. V. TUNISON, *Deputy Director.*

Units financed at the annual level of $30,000

Unit location:	*Fiscal year authorized*
Utah State University, Logan, Utah	1962
Colorado State University, Fort Collins, Colo	1963
Louisiana State University, Baton Rouge, La	1963
University of Maine, Orono, Maine	1963
University of Missouri, Columbia, Mo	1963
University of Idaho, Moscow, Idaho	1964
University of Massachusetts, Amherst, Mass	1964
Montana State College, Bozeman, Mont	1964
Cornell University, Ithaca, N.Y	1964
Pennsylvania State University	1964

Units financed at the annual level of $40,000

Unit location:	*Fiscal year authorized*
University of Georgia, Athens, Ga	1963
North Carolina State University, Raleigh, N.C	1963
University of Arizona, Tucson, Ariz	1965
University of Hawaii, Honolulu, Hawaii	1966
Iowa State University, Ames, Iowa	1966
Ohio State University, Columbus, Ohio	1966
Oklahoma State University, Stillwater, Okla	1966
Oregon State University, Corvallis, Oreg	1966
South Dakota State University, Brookings, S. Dak	1966
Virginia Polytechnic Institute, Blacksburg, Va	1966

Ouray Wildlife Refuge

The budget request for the Ouray National Wildlife Refuge for the fiscal year 1967 is only $75,000. This is not enough to do what should be done at this time if we are to provide enough nesting area to reverse the decline in our waterfowl population in Utah. I ask that an additional $125,000 be appropriated.

The $75,000 requested will be used for a continuation of water-control facilities for the refuge. An estimated $20,000 will be used for dikes, levees, and drains, $35,000 for canals and ditches, and $20,000 for water-control structures.

The Bureau of Sport Fisheries and Wildlife has informed me that an additional $125,000 could be used to good advantage in fiscal 1967, and if used in conjunction with the $75,000 presently in the budget would complete about 85 percent of the development planned for the Shepard Bottoms. This would make one more marsh to be used as a nesting area.

Last session, at my request, both this subcommittee and the Subcommittee on Deficiencies and Supplementals approved a $125,000 supplemental request for the Ouray refuge, but the funds were lost in conference. I hope that this subcommittee will again recommend an additional $125,000, and that we will be able to hold it.

UINTAH AND OURAY WILDLIFE RESOURCES MANAGEMENT

For the past several years the Ute Indian Tribe has been actively involved in improving management of the wildlife on the Uintah and Ouray Reservation. Members have worked closely with the Bureau of Sport Fisheries and Wildlife on a fishery management program, with gratifying results.

Tribal leaders had hoped this year to get some help on big-game management, since there is special concern in Utah about the depletion of our deer herds. The President's budget makes provision for $100,000 to be used for wildlife-enhancement work, but this figure will be distributed among five regional offices and the Washington office to employ one person in each location, and I am advised by the Albuquerque regional office that little time can be devoted by its employees to the Uintah and Ouray project.

I am further advised that it would require $20,000 annually to provide the necessary level of assistance on these lands. I therefore ask that the budget item of $100,000 for wildlife enhancement be increased by $20,000, and that this amount be earmarked for technical help to the Ute Indian tribe in the management of big-game herds on the Uintah and Ouray agency lands.

In conclusion, may I say that generally I support the requests for the activities of the Department of the Interior and the Forest Service under consideration by this subcommittee. I hope the requests will not be reduced—as I have pointed out, natural-resources development is an area in which I feel we must appropriate adequate funds each year—otherwise we will not fulfill the responsibilities of our stewardship of these resources both for those who depend on them for their livelihood and for recreation now, but for generations to come.

STATEMENTS OF HON. LEE METCALF AND HON. MIKE MANSFIELD, U.S. SENATORS FROM THE STATE OF MONTANA

FOREST SERVICE IN MONTANA

Chairman HAYDEN. We will now hear from Senator Metcalf.

Senator METCALF. Thank you very much, Mr. Chairman.

This a joint statement on behalf of Senator Mansfield and me in support of the budget requests for Interior Department and related agencies, including the Forest Service, for fiscal 1967.

We are both very grateful for the opportunity to appear before this committee to state our problems for the most important appropriation matters that come to the State of Montana.

We also seek significant additional investment in the conservation, wise management, orderly development and highest possible use of our basic natural resources.

We support the budget request for $22.5 million for the Forest Service in Montana this year. And in the statement we emphasize the importance of control of insects, diseases, and parasites, which retard the growth of mature trees and kill seedlings and saplings in our national forests.

DEVELOPMENT PROGRAM FOR NATIONAL FORESTS

We call your attention to "The Development Program for the National Forests," sent to Congress by President Kennedy in 1961. That program covered all the renewable resources of the national forest system, including water, timber, recreation, forage, and wildlife habitat.

It included specific proposals for the next 10 years and long-range proposals to the year 2000.

As President Kennedy said:

> The accomplishments under this program over the next 10 years will largely determine whether these important public lands will contribute by the year 2000 their fair share to a greatly expanded national economy.

REQUEST FOR INCREASE IN 1967 DEVELOPMENT PROGRAM BUDGET

A chart which is part of our prepared statement shows a budget request of $273.8 million for this program in fiscal 1967.

This is less than 60 percent of the planned level for the program. We feel that an increase is essential. Homes, agriculture, and industry depend on water flowing from national forest watersheds; thousands earn their livelihood harvesting or processing timber grown on national forests; millions of livestock graze on these ranges, and the recreation areas of our national forests are a magnet which attract millions of tourists each year.

In view of the demands on the Federal budget, it may be that the appropriation for development of the national forests cannot be brought up to the planned level of $468 million, but we feel that consideration should be given to at least an additional $15 million.

With increased interest in this Nation's wilderness has come the realization that we know relatively little about these areas. Wise management is based on knowledge of the relationship among plants and animals in a wilderness area.

WILDERNESS RESEARCH PROJECT AT UNIVERSITY OF MONTANA

Knowledge requires research. Senator Mansfield and I urge establishment of a wilderness recreation research project at the University of Montana in Missoula and the appropriation of $300,000 to provide critically needed information which would be applicable throughout the West.

BUREAU OF LAND MANAGEMENT

We support the budget request for the Bureau of Land Management. But we note the need for additional investment resulting from the comparatively recent realization that the vast area of public domain managed by the BLM has recreation and wildlife resources which may at least equal in value the traditional primary concerns of BLM management, livestock, and timber production.

Public Law 88–607, the Classification and Multiple Use Act, directed BLM to manage the public lands for multiple use and sustained yield.

A major, and rapidly increasing use is recreation, including fish and wildlife production. At present, only about 1 percent of the Bureau's effort in public land administration is directed to wildlife (41 man-years out of a total of 3,915).

It thus is obvious that the Bureau does not have the personnel required to meet its responsibility for recreation. Appropriation of an additional $690,000 for fiscal year 1967 would permit the Bureau to make a significant start in the direction of fish and wildlife and recreation development in the West.

In the words of BLM officials, the proposed budget of nearly $2 million in Montana next year provides for "acceptable" levels of management and conservation "consistent with overall administrative goals and requirements."

RANGELANDS AND CAMPGROUNDS

However, Senator Mansfield and I call the committee's attention to another $660,000 worth of high-priority work in Montana. It includes

treating frail and deteriorating rangelands, installing basic facilities in areas now being used by the public as campgrounds without facilities essential to basic sanitation and protection.

Water Research

When President Johnson signed the Water Resources Research Act of 1964, he said it "fills a vital need." In Montana, we are in full accord with that statement, and we are working hard on the water problems of our State and region.

Using funds provided under the act, water research is going forward at three units of our higher education system—at the University of Montana in Missoula, Montana State University at Bozeman, and Montana College of Mineral Science & Technology at Butte.

Continuation of this cooperative program at at least its present level would fill a vital need. Senator Mansfield and I hope the committee will appropriate $3 million, the full amount authorized for matching grants to the States, instead of the $2 million requested.

National Park System Budget

We support the budget requests for the national park system, and significant improvements to handle the increase in visitors to Yellowstone and Glacier National Parks and the Big Hole National Battlefield in Montana.

Cooperative Wildlife and Fishery Units

When I testified in 1964, I called the committee's attention to the need for a small addition to the funds for the 31-year-old cooperative wildlife research units, now functioning efficiently in 18 States, among them Montana, and from which have been graduated between one-third and one-half of this Nation's technically trained manpower in this important field.

The cooperative fishery units, established in 1961, have about three times the Federal support that the wildlife units do. So the heads of the wildlife units have to spend a major part of their time raising money wherever they can find it, or working with inadequate budgets.

In 1964, the Interior Department proposed that each wildlife unit have an assistant leader, as the fishery units do. The Department cited four units where the workload was especially heavy—in Arizona, Montana, Maine, and Missouri—and suggested that the additional position at these four units be funded first.

The Budget Bureau did not go along. I hope the committee will see fit to start funding the assistant leader positions, which already are authorized. An appropriation of $40,000 would take care of the four with the heaviest workload.

Tourism Industry

Tourism is one of Montana's major industries. Basic to that industry are our fishing streams. The increase in tourists has overtaxed our national fish hatcheries, which have been modernized over a period of years.

A major tourist area of Montana is served by the hatchery at Creston, which urgently needs expansion at an estimated cost of $254,000.

Earlier this year, Senator Mansfield asked your staff to get a report from the Department on this hatchery. If it has been received, I ask that it be incorporated in my prepared statement.

INDIAN HEALTH AND SANITATION AND LAW AND ORDER ON RESERVATIONS

We also suppport the budget request for Indian health and sanitation facilities on Montana's Indian reservations. In addition, we have a request for an item not in the budget. It is for law and order on the reservations.

I understand that at on time the Federal Government paid the total cost. Following a cut in appropriations 18 or 19 years ago, the tribes were asked to assume part of the cost temporarily.

On some reservations, the Federal Government now pays the entire cost of law and order. I understand this is the case on the Shoshone Reservation in Wyoming, the Pine Ridge, Standing Rock, and Rosebud Sioux in South Dakota.

This is true on only one reservation in Montana, the Rocky Boy, which probably has the most severe poverty problem in our State. The Blackfeet pay $45,000 a year, the Crows $62,000, Fort Belknap $2,000, Fort Peck $35,000 and Northern Cheyenne $33,000.

The Indian tribes in Montana and other States are making laudable attempts to develop their lands and educate their youngsters. Law and order is a Federal function on Montana reservations and it is appropriate that the Federal Government pay for it. This would free tribal funds for economic development and education programs.

PREPARED STATEMENTS

Mr. Chairman, that concludes my summary statement. I ask unanimous consent to file a larger statement for the record.

Chairman HAYDEN. That may be done.

Senator METCALF. I am very grateful to the committee for hearing us on these important matters.

(The statements follow:)

FOREST SERVICE

We support the budget request for investment during the next fiscal year in the renewable natural resources managed by the Forest Service. At this point, Mr. Chairman, I include a table breaking down the almost $22.5 million which the Forest Service will so invest in Montana if this budget is adopted as submitted:

DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
Washington, D.C., February 18, 1966.

Hon. LEE METCALF,
U.S. Senate.

DEAR SENATOR METCALF: Ed Cliff has asked that I reply to your inquiry of February 11, 1966.

Following are the estimated amounts to be expended in the State of Montana by the Forest Service under the fiscal year 1967 budget.

	Estimated 1967
Forest protection and utilization:	
Forest land management:	
National forest protection and management (includes advance from "Cooperative range improvements")	$9,109,800
Water resource development related activities	434,000
Fighting forest fires	([1])
Insect and disease control	640,700
Forest research	1,197,400
State and private forestry cooperation	238,400
Subtotal, forest protection and utilization	11,620,300
Forest roads and trails (includes transfer from "Roads and trails, for States.")	5,739,900
Assistance to States for tree planting	16,700
Expenses, brush disposal	1,167,600
Restoration of forest lands and improvements	3,000
Payments to States, national forests fund	1,188,300
Watershed planning	4,200
Resource conservation and development program	15,000
Trust funds	2,737,800
Total	22,492,800

[1] Expenditures of emergency firefighting funds cannot be forecast with any degree of accuracy. Emergency funds would be made available for fighting forest fires depending on the seriousness of the fire situation.

INSECT AND DISEASE CONTROL

The importance of the "Insect and disease control" item is emphasized by a news story, headlined "Insects Playing Havoc in Montana Timber Stands," in the February 20 issue of the Great Falls, Mont., Tribune. I ask unanimous consent to include that article at this point in the record:

[From the Great Falls Tribune, Feb. 20, 1966]

INSECTS PLAYING HAVOC IN MONTANA TIMBER STANDS

MISSOULA, MONT.—Six million acres of timber in the national forests of eastern Washington, northern Idaho, Montana, and parts of the Dakotas have become infested with insects, Northern Region Forester Neal M. Rahm said here Thursday.

The most dramatic offender is the larch casebearer, which now has attacked more than 2½ million acres of tamarack. It first was detected in 1953 near St. Maries, Idaho, but now retards growth of larch timber from Idaho's Lochsa River on the south to Libby and Missoula, Mont., on the east, and Republic, Wash., on the west.

Fifteen varieties of insects are causing most of the damage, Rahm said.

The spruce budworm has infested some 2.3 million acres of timberland in Idaho and Montana. This insect does heavy damage to Douglas-fir and true fir stands.

DWARF MISTLETOE PARASITE

Another great and growing threat to our national forests is the dwarf mistletoe parasite, which retards growth of mature trees and kills seedlings and saplings in the forests of Idaho, Montana, and Washington. Of the 15 million acres of commercial forest in Montana, Idaho, and Washington, dwarf mistletoe infests an estimated 9 million acres.

As evidence of support for increased research in the control of this parasite, which may reduce timber growth by up to 75 percent, I submit correspondence and a resolution from the North Idaho-Montana Forest Pest Action Council and Chief Edward P. Cliff of the Forest Service:

ST. REGIS PAPER CO.,
Libby, Mont., January 20, 1966.

Hon. LEE METCALF,
U.S. Senate, Washington, D.C.

DEAR SENATOR METCALF: The North Idaho-Montana Forest Pest Action Council, an organization of interested persons representing lumbering, livestock, recrea-

tion, forestry schools, and forest management agencies, at a December 3, 1965, meeting, made the attached recommendation on the serious threat of the dwarf mistletoe disease in our national forests to Chief Forester Edward Cliff.

The council directed me, as chairman, to forward our recommendation to the Chief of the Forest Service and members of our congressional delegation to ask for their assistance in supporting this recommendation and to bring about control of this serious forest pest.

Your attention and assistance is greatly appreciated.

Sincerely,

MARK SCHOKNECHT,
Chairman, North Idaho-Montana Forest, Pest Action Council.

RECOMMENDATIONS OF THE NORTH IDAHO-MONTANA FOREST PEST ACTION COUNCIL, DECEMBER 1965

The forest disease, dwarf mistletoe, is causing serious growth losses in the forests of Idaho, Montana, and Washington. There are no firm estimates of overall total losses resulting from this insidious disease, but on 15 million acres of commercial forest land in national forests in Idaho, Montana, and eastern Washington there is an estimated 9 million acres infected. Depending upon such factors as the degree of infection and the age of the tree, the growth losses could be as high as 75 percent. Trees in the seedling and sapling stage often suffer mortality.

Our knowledge of this disease and its control is limited, yet dwarf mistletoe continues to increase and silently feed on our forests upon which we are so dependent for water, wood, wildlife, and recreation.

Therefore, the North Idaho-Montana Forest Pest Action Council recommends that the Chief of the Forest Service be urged to increase the staff and appropriations for (1) the Division of State and Private Forestry at Missoula, Mont., for the purpose of developing dwarf mistletoe survey techniques and methods to define the probblem; and (2) the Moscow, Idaho, Forest Research Center to conduct basic and applied research on dwarf mistletoe on the prime important species of the inland empire, Douglas-fir, and western larch, to develop control techniques of this insidious forest disease.

DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
Washington, D.C., February 4, 1966.

Hon. LEE METCALF,
U.S. Senate.

DEAR SENATOR METCALF: This is in reply to your January 27 letter, enclosing a letter and resolution pertaining to dwarf mistletoe control and research, sent to you by Mr. Mark Schoknecht, Libby, Mont.

The Forest Service received the same material directly from Mr. Schoknecht, with a request for a reply. A copy of our reply to him is enclosed. We believe it presents the information you have requested with the exception of an answer to the specific question you asked regarding the budget.

Of the $255,000 currently expended westwide annually for dwarf mistletoe surveys and control, $55,000 goes to work on national forests in Idaho and Montana. Unfortunately, the urgent demands on insect and disease control appropriations to check virulent outbreaks of the quicker killing bark beetles on the Targhee and Teton National Forests in Idaho and Wyoming prevent increasing expenditures for dwarf mistletoe surveys and control at this time. We hope to break the backbone of these outbreaks soon. If so, and other unforeseen higher priority demands on such funds do not develop, we will be in a position to increase dwarf mistletoe survey and control activities in Idaho and Montana in fiscal year 1967.

We appreciate your interest in the dwarf mistletoe problem. Should you need more information about it, please call on us.

Sincerely yours,

By EDWARD P. CLIFF, *Chief.*
HAMILTON K. PYLES.

DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
Washington, D.C., February 4, 1966.

Mr. MARK SCHOKNECHT,
Chairman, North Idaho-Montana Forest Pest Action Council, St. Regis Paper Co., Libby, Mont.

DEAR MR. SCHOKNECHT: This is in reply to your letter of January 20, transmitting the North Idaho-Montana Forest Pest Action Council's recommendation on dwarf mistletoe research and control.

Your council's recommendation pleases us. Not so many years ago, forest pathologists were having difficulty convincing practicing foresters that dwarf mistletoe was an important forest pest. Fortunately, in the last few years, western foresters and forest land managers have started to recognize its potential as a growth-reduction agent and tree killer. The result has been a great deal more interest and support for control and research, but as yet we have not been able to increase the research effort.

Currently, the Forest Service is devoting annually about 5 man-years of research to the dwarf mistletoe problem. Although slightly less than 1 man-year of this effort is put in on the problem in Idaho and Montana, much of that done in other regions is applicable westwide. Practical control methods now in use were developed by this project. We hope to increase our research program. Survey and control effort has increased in all western regions during the last 4 years. At present, approximately $255,000 of funds appropriated for insect and disease control per year are spent for (1) surveys to determine the incidence of the parasite prior to sales, reforestation, and timber-stand improvement, and (2) for direct control where cost-benefit ratios are favorable. Most of the direct control activity has thus far been in ponderosa pine stands, since cost-benefits ratios for this species appear to be most favorable. Nevertheless, some direct control has been and is being done in Douglas-fir larch, and lodgepole pine types. For example, the Sleeping Child burn in Montana is being cleared of residual infected trees to insure a future stand of lodgepole pine free of the parasite. In addition to accomplishments with direct control exepnditures, substantial control benefits are derived from timber-stand improvement work accomplishment with appropriated funds and on sale areas with K–V funds.

More important than the direct control effort is the recognition that the dwarf-mistletoe problem is a facet of timber management that must not be overlooked in future harvesting, reforestation, and stand improvement activities. We are convinced that the best and most economical method of control on commercial land is through modifying these practices to the extent that we end up with a regenerated forest free of the pest. There are existing conditions, such as cut-over lands and burns, where a few residual infected trees threaten to infect young trees coming up under them. This is where most of the direct control effort is now going. More direct control is needed and more will go to it if and when quicker killing pests with which we are now plagued free available funds for that purpose. Such an approach leaves out recreational areas and infected pole stands, such as some stands of larch and of other susceptible species that came in following the 1910 burn. An increased research effort should lead to the development of new control methods through chemical or biological means, which might be done in time to provide a measure of direct control to infected pole stands. In any event, this research must be done if we finally obtain adequate direct control measures. With present control methods available to us, all we can do is salvage what we can from them through commercial sales, and make sure that the new stands that replace the infected ones are kept free of the parasite.

Thank you for your interest and support for dwarf-mistletoe research and control. We plan major expansion of dwarf-mistletoe research when the budgetary item permits. The parasite poses a problem throughout western forests, but not an insurmountable one. Fortunately, it is not a quick killer, thus permitting a studied approach to control, which we believe can and should be largely accomplished through timber management manipulation on commercial forest land. Obviously, in national parks and other recreational areas, some direct prevention or control method will ultimately be required.

Sincerely yours,

EDWARD P. CLIFF, *Chief.*
By GEORGE M. JEMISON.

EQUIPMENT DEVELOPMENT LABORATORY, MISSOULA

Although it is a comparatively small item, the budget for fiscal 1967 includes $85,000 to plan for the Forest Service's Equipment Development Laboratory in Missoula.

Equipment developed in large part to protect and maintain our national forest resources already is making a significant contribution to our economy. It includes the bulldozer, walkie-talkie, infrared photography, heat-sensing instruments, and the disposable sleeping bag. When the laboratory is in full operation we can expect further development.

NATIONAL FORESTS DEVELOPMENT PROGRAM

On September 21, 1961, President Kennedy sent to the Congress his proposals for "a development program for the national forests." It covered all the renewable resources of the national forest system—water, timber, recreation, forage, and wildlife habitat. It included both specific proposals for the next 10 years and long-range proposals to the year 2000. As was pointed out in that report, "the accomplishments under this program over the next 10 years will largely determine whether these vastly important public lands will contribute by the year 2000 their fair share to a greatly expanded national economy."

With that in mind, I call the attention of the committee to the following table on the status of financing this far-reaching program, so important to the economy of Montana (see p. 1108).

NATIONAL FOREST SYSTEMS BUDGET

As the committee will note, the fiscal year 1967 budget estimate for development of the national forest system is almost $274 million, less than 60 percent of the planned level for the program. The committee may wish to go further into this.

I feel deeply that this program will mean greater use, fuller enjoyment, and expanded wealth from these vital renewable natural resources for all the American people.

As laid out, national forest resources would be more fully used, the public forests would become more productive, and would continue to produce for all time, each resource in harmony with the others. Such multipurpose use is essential. Homes, agriculture, and industry depend on water flowing from national forest watersheds; thousands earn their livelihood harvesting or processing timber grown on national forests; millions of livestock graze on national forest ranges, and the campgrounds and recreation areas of our national forests are a magnet which attract millions of tourists each year.

Also, it must be noted that on a relative basis, rural poverty is almost double that in the metropolitan areas which get the headlines. In many areas of our Nation, there is a strong correlation between forest land and rural poverty. Much of this land has remained forested because it was not suitable for farming. In many rural areas the major opportunity for development rests with the management of our public forests. Improvement here would dovetail with this administration's war on poverty.

WILDERNESS RESEARCH CENTER, MISSOULA

In recent years there has been a great deal of attention given to the need for preserving our wilderness. There are several major wilderness areas in Montana. As the members of the committee know, these areas are undeveloped and left in their natural state. However, the maintenance of the wilderness is not without its problems. The modern man and his environment have had their effect. There is a definite need for a better understanding of wilderness ecology. This can be accomplished with better management and use through research.

The Forest Service has given some consideration to the establishment of a wilderness recreation research project at Missoula, Mont. While this proposal is not included in the budget now being considered by the subcommittee, it is something both Senator Mansfield and I feel should be added to their program for fiscal year 1967. It is our understanding that such a research center would require $300,000.

The purposes of such a research center are outlined in a report Senator Mansfield and I received from the Forest Service. I ask that Senator Mansfield's letter and one from President Orville Gray of the Montana Wilderness Association be made a part of the record at this point.

U.S. DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
Washington, D.C., February 17, 1966.

Hon. MIKE MANSFIELD,
U.S. Senate.

DEAR SENATOR MANSFIELD: Chief Cliff has asked me to reply to your February 10 request in regard to the February 2 inquiry of Mr. Orville Gray, president of the Montana Wilderness Association, and the February 3 inquiry of Mr. Samuel J. Chapman, director of the Montana State Planning Board.

One of the most critical problems in the entire field of forest recreation is the need for a sound understanding of wilderness ecology and the associated impacts of man to help guide wilderness management and use. Wilderness areas are dynamic. They do not "stand still." Uncontrolled and poorly understood, the forces of nature can often impair or destroy the very purpose for which a wilderness is set aside. The 7 million acres of national forests wilderness and primitive areas and 3½ million acres of national parks in Montana and adjacent parts of Idaho and Wyoming pose a unique and difficult challenge to resource managers—a task of managing these areas to retain or restore their primeval character.

When feasible we expect to begin research in the future on this important wilderness management problem. As mentioned in Mr. Gray's letter, funding needed to establish the authorized wilderness recreation research project at Missoula and obtain critically needed information is $300,000. The fiscal year 1967 budget now before Congress does not include funds for this research.

The research problems span a wide variety of tasks which will call for the coordinated effort of several scientific disciplines. Vast forest fires, a major ecological force, have been sharply reduced in the past 40 years. Elk, once an edge-of-the-plains animal, are now a major denizen in several wilderness areas. Exotic pests such as the larch casebearer and white pine blister rust are new factors in ecological succession. And man, himself, and his animals are often deteriorating forces. Just what are the maximum levels of use in which wilderness values can be maintained? What management techniques are required to bring about a balance between wildlife and their habitat?

In brief, research is needed on (1) the ecology of principal plant and animal types, (2) manipulation of plant cover compatible with the wilderness concept, (3) methods to minimize the impacts of human use, and (4) techniques for maintaining a proper balance of wildlife with the environment.

The results of this research will have application throughout much of the Western United States.

Mr. Gray's and Mr. Chapman's letters are returned herewith.

Sincerely yours,

EDWARD P. CLIFF, *Chief,*
By GEORGE M. JEMISON.

THE MONTANA WILDERNESS ASSOCIATION,
Great Falls, Mont., February 2, 1966.

Hon. LEE METCALF,
U.S. Senate,
Washington, D.C.

DEAR SENATOR METCALF: I understand that there is a possibility of inclusion in the present appropriation bill in Congress an appropriation for the establishment of a "wilderness research center" in Missoula. I do not have the exact details of this proposal, but I understand it would be administered by the Forest Service but would also work in conjunction with the Forestry School of the University. I do not know the amount of money involved but believe it is somewhere in the neighborhood of $300,000.

On behalf of our organization, I would like to urge your support of this measure. We believe that this would be very beneficial to Montana and the Forest Service throughout the United States and the wilderness concept in general. There are many things concerning the administration of wilderness areas that are not known at this time and can probably only be determined by a scientific and professional study, such as this center envisages. Since the amount of land that might someday be added to the wilderness system is very

limited, we feel it is of utmost importance that the land that is in the system be used to the most advantageous way.

With best personal regards, I remain,

Yours very truly,

ORVILLE GRAY, *President.*

BUREAU OF LAND MANAGEMENT

Until recently, BLM Resource Management has been concerned primarily with livestock and timber production. Wildlife resources have sometimes benefited incidentally in these programs, but they have also suffered because they have not been accorded adequate management consideration. Public Law 88-607, the Classification and Multiple Use Act, directed BLM to manage the public lands to be retained in Federal ownership for multiple use and sustained yield. One of these uses is fish and wildlife production and utilization. At the present time, only about 1 percent of the Bureau's effort in public land administration is directed to wildlife—41 man-years out of a total of 3,915. It is obvious that the Bureau does not have the personnel required to carry out wildlife responsibilities, particularly at the district level.

Preliminary surveys of the most important wildlife and fishery habitat on the public lands in the contiguous 48 States indicates that there are 42 million acres of significant big game habitat; 20 million acres of upland game habitat, and 470,000 acres with habitat values for waterfowl. These lands should be classified for retention and have top priority for BLM wildlife habitat management and improvement efforts. There are also more than 15,000 small impoundments that have existing or potential wildlife and fishery values and more than 5,300 miles of important fishing streams that should receive more wildlife management emphasis.

Right now these areas provide a yearlong or seasonal home for nearly 2 million big game animals, including deer, antelope, elk, jabelina, and bighorn sheep; also large populations of moose, mountain goat, bear, turkey, and large carnivores. These animals make a significant contribution to the total annual game harvest, but because hunting pressures are on the increase, wildlife production should also be increased. Indeed, increased wildlife numbers will only result from increased effectiveness of wildlife hagitat management and improvement. Yet out of an annual expenditure of $54 million for management of resources only $421,000 or 0.008 percent is expended directly on wildlife.

Much of the small game hunting in the West occurs on BLM-managed public lands and depends on continued production of game birds such as grouse, chukar partridge, quail, and doves; and small mammals such as rabbits and squirrels.

While these lands provided an estimated 9.2 million days of sport hunting and 5.5 million days of sport fishing in 1965, hunting demand is increasing at the rate of 3 percent per year, and fishing demand is increasing at the rate of 5 percent per year. The public lands must play an important part in meeting this growing requirement for wildlife-oriented recreation.

Increasing urbanization and competition from other resource uses continue to decrease the amount and quality of valuable wildlife lands. The present level of effort being devoted to wildlife by the Bureau makes it impossible to maintain the quality of habitat necessary for existing and future wildlife populations.

Expansion of the wildlife program embracing both management and improvement of existing wildlife habitat in cooperation with the States is necessary if the wildlife heritage of the public lands is to be maintained.

Alaska

The public lands in Alaska contain 80 million acres of important and unique habitat for 667,000 big game species including caribou, moose, mountain sheep, brown bear, black bear, grizzlies, and mountain goats. They also contain more than 6 million acres of waterfowl habitat and 75,000 miles of fishing streams. However, most of the big game herds are hunted either lightly or not at all due to the lack of access. The same is true of fishing. Most of the fishing streams and hunting areas are inaccessible to vehicles. The encroachment of civilization is making itself felt, however, resulting in changes in migration routes and ranges for big game. Information on the new areas of use and the condition of the vegetation in concentration areas is needed to provide the basis for the management of these game ranges. The Alaska Fish and Game Department is willing to cooperate in these studies.

The beginning of a renewed reindeer-livestock industry in the western part of the State for the benefit of the native Eskimos and Indians will require substantially more knowledge of the forage requirements of reindeer and caribou, the degree of competition between the two, and a system of determining range use condition and trend. Preferred caribou and reindeer forage such as lichens are extremely slow growing and once overused are not available for many years.

Short access roads leading from main highways should be constructed and abandoned mining roads should be repaired to provide access to hunting areas and fishing waters. The amount of $60,000 and 2 man-years is needed to provide the information and supervision to begin this program.

Wildlife water development

Many areas of the public lands have sufficient vegetative food and cover to support larger populations of both big and small game but are lacking one life-giving factor—water. Scarce or nonexistent water supplies form the barrier to expanded wildlife populations. The provision of year-round water sources is possible by construction of water catchments designed to collect and store rain and snow water. Such devices have been successfully used to extend ranges of both big game and small game species from the arid Southwest up through the Plains States. Water developments of this type are needed in the States of Montana, Arizona, California, Nevada, New Mexico, Utah, and Wyoming.

The existing small water impoundments which have been constructed primarily as sources of livestock water have received much use by wildlife. Such waters have been a factor in improving habitat for big game and increasing the production of waterfowl in the northern Plains States. Discusions with Albert Day, formerly the Director of the Fish and Wildlife Service, who is completing a study for BLM, indicates an extremely important waterfowl production potential is present in the small reservoirs on the public lands in Montana and South Dakota. Indications are that these stockwater ponds are now helping to provide waterfowl production in Montana which is almost equal to that of North Dakota, South Dakota, and western Minnesota combined. Improvement of the nesting cover adjacent to these BLM water developments can increase waterfowl production for hunting in the central and Mississippi flyways. Such habitat improvement adjacent to existing water developments is needed in Montana, Wyoming, Colorado, South Dakota, Idaho, and Oregon.

The creation of waterfowl production areas by the blasting of small potholes in boglands is applicable to BLM-administered lands in northern Minnesota. This would provide additional waterfowl habitat in the Mississippi flyway which has suffered drastic losses of waterfowl habitat due to drainage of marshlands and potholes.

Food and cover development

Some of the deer winter ranges in Utah, Idaho, Colorado, Arizona, and New Mexico is in an advanced state of deterioration. Past overuse by both big game and domestic livestock has reduced the capacity of these ranges to provide the needs of game animals. Increased big game harvest and shifting livestock use from wildlife concentration areas have relieved current grazing pressure on these ranges, but natural recovery is extremely slow, especially in areas of sparse rainfall. Studies in Utah have shown a twentyfold increase in available big game forage within 2 years after removal of low value juniper and pinyon pine cover followed by reseeding of grasses and shrubs. Such treatment is needed on the 14,500 acres of deer winter range which is in the most critical condition as soon as possible.

In summary, the planning, supervision, and management of these projects and associated wildlife habitat would require $690,000 and 23 man-years for fiscal year 1967. This planning will be done cooperatively with the State wildlife agencies to insure that the greatest benefits to wildlife will occur.

BLM IN MONTANA

The BLM budget for fiscal 1967 provides for investment of $1,983,000 in Montana, of which $1,219,000 is for soil and watershed conservation, $436,000 for range management, $189,000 for forest management and $139,000 for protection. The conservation item includes $68,000 for the Makotapi project in South Dakota and $37,000 for the Little Beaver project in North Dakota.

In the opinion of Bureau officials, the proposed budget provides for "acceptable" levels of management and conservation "consistent with overall administration goals and requirements."

However, we call the committee's attention to another $660,000 worth of work with a high priority in Montana. That investment breaks down into two categories, $360,000 for resource management, conservation, and protection, and $300,000 for construction. The former includes—

$280,000 for soil and watershed conservation—to treat frail and deteriorating rangelands, including a cooperative research project with the Forest Service on rehabilitation and management of frail lands; to build water development projects and protective fencing principally to improve wildlife habitat.

$35,000 for range management—to provide more extensive management in conjunction with watershed conservation work on critical areas in Montana with particular emphasis on wildlife management.

$25,000 for protection—to strengthen fire control activities in high-hazard areas.

$20,000 for land classification and mineral examination—to accelerate land classification work under the Classification and Multiple Use Act.

Two-thirds of the construction item, or $200,000, is needed to install basic campground facilities—tables, toilets, water, fireplaces, and garbage disposal facilities—at sites now being used by the public without facilities essential to basic sanitation and protection. Included in this estimate are 40 units and a boat ramp at the Ruby Reservoir site, and development of the Little Rockies recreation complex.

The other $100,000 would replace the present inadequate rented space occupied by the Malta district office with a building on land owned by the Bureau.

The increases we support would require an additional 14 man-years of employment in Montana.

Water Resources Research

When President Johnson approved the Water Resources Research Act of 1964, he said that it "fills a vital need." In Montana, we are fully in accord with that evaluation by the President, and under the terms of that act, we are working energetically on the water problems of our State and region.

The Research Act provides for support in each State of a research institute that is the center for scientific and engineering competence on water problems. The Montana center is composed of our three institutions of higher education: the Montana State University at Bozeman, the University of Montana at Missoula, and the Montana College of Mineral Science and Technology at Butte.

Through the center, these institutions are now carrying on a joint program of water resources research and training presently consisting of 10 research projects in the several scientific disciplines. It includes research in surface and ground water hydrology, ater quality, water-soil-plant relations, and in the economic and social science aspects of water problems.

Continuance of this joint program will be of great value to the State and the region. Senator Mansfield and I hope that the committee will provide appropriations for the full amount authorized by law, $87,500 for the water resources research institute in each of the 50 States and Puerto Rico, plus $3 million for matching grants, instead of the $2 million requested.

NATIONAL PARK SERVICE

We support the budget requests for key units of the national park system in Montana, although we question whether certain investment items are sufficient in view of the importance of these units to Montana's tourist industry, which is increasingly important to the economy of our State.

Yellowstone, this Nation's oldest and largest national park, attracted a record 2,062,500 visitors last year—the first year during which visits exceeded the 2 million mark. It is proposed that in fiscal year 1967 we invest $5,989,600 in Yellowstone, an increase of $19,300 over the current year. Just over half the total is for construction—of roads, trails, buildings and utilities to accommodate the increase in visitors.

Major items (those involving investment of at least $200,000) include construction of Old Faithful bypass and parking facilities, and work on park highways from Arnica Creek to Bridge Bay, from the east entrance to Sylvan Pass, and campground roads and parking at Bridge Bay. The provision of management and protection is $1,101,400 up $63,100 from the total for that purpose this year.

This past year, the total of visits to Glacier rose to 847,100, a record exceeded only in 1962 under the influence of the Seattle World's Fair. During the year

beginning July 1, it is proposed that we invest substantially less in Glacier than we did this year. The fiscal year 1967 proposal is for $1,783,458, compared with $2,644,375 this year. The reduction is chiefly due to a cut in construction. The management and protection item shows a tiny increase of $3,650, to a total of $561,850. Major construction items include tunnel enlargement on Going-to-the-Sun Highway, walks and trails at Logan Pass, and extension of facilities at St. Mary campground.

We also support the construction scheduled for the Big Hole National Battlefield in fiscal 1967, including access roads and parking, a visitor center, service building, and employee apartments.

Fish and Wildlife Service

When I testified in 1964 and in 1965, I called the committee's attention to the need for a small addition to the funds for the 31-year-old cooperative wildlife research unit program. The cooperative fishery units, established in 1961, have about three times the Federal support that the wildlife units do. The heads of the wildlife units have to spend an undue amount raising funds wherever they can scrounge them, or functioning with sharply limited budgets.

In 1964 the Department of the Interior proposed that each wildlife unit have an assistant unit leader, as the fishery units do. The Department suggested that this increase, which would amount eventually to a $100,000 annual salary increase, be made over a 5-year period.

The Department cited four units where the workload was especially acute—in Arizona, Montana, Maine, and Missouri—and suggested that the additional position at those four units be funded first. The Budget Bureau did not go along and as a consequence the only wildlife unit which has received additional Federal assistance is in Ohio.

I would like to include for the record some details about the value and financing of the cooperative wildlife research units. I hope that the committee will see fit to start funding the already authorized assistant leader position in these units. Approximately $40,000 would provide for four positions.

Supplemental Statement by Senator Metcalf on Cooperative Wildlife Research Units

The first eight cooperative wildlife research units were established in 1935. During the 31 years the program has existed, 21 States have participated and 18 States currently have actively functioning units. Continuing operation of the units in an increasing number of States since 1935 attests the general satisfaction with which the program is regarded by the four contracting and supporting agencies, the State game and fish departments and the land-grant universities of the participating States, the Bureau of Sport Fisheries and Wildlife, and the Wildlife Management Institute.

Accomplishments of the units are as follows:

1. Graduation of approximately 4,500 men in game management at universities having wildlife research units, of which about 1,200 were trained at the graduate level. These 4,500 men represent one-third to one-half of the technically trained manpower in the wildlife profession.
2. Several thousand scientific and technical articles, including 20 books, on wildlife ecology and management. The total represents a material part of the literature in this field.
3. Findings from unit-sponsored research support game-management programs in participating States, and are used to some degree in nearly every State and Federal agency having wildlife responsibilities. The program has provided a continuing source of information for guiding wildlife management in the United States since about 1940.

In supporting the wildlife research units, the contracting agencies provide funds, goods, and services, the average dollar value of which is about $56,000 annually per unit. Of this amount, about 72 percent is being contributed by the States; and for some units the State contribution is more. Increase in the Bureau's contribution has been limited very largely to salary increases received by the unit leaders, who are Federal wildlife biologists. The States' support has increased from the original minimum of $12,000 per unit to the present

average of about $40,000 per unit per year. The Bureau contribution is now about $15,000 per unit per year.

This disparity in Federal support has resulted in three developments, each having a deleterious effect on the cooperative wildlife research unit program:

1. Lack of qualified supervisory personnel for manning wildlife training staffs at unit universities. This shortage is especially acute in research supervision and training. One additional Federal biologist at each of the units would improve this situation materially by relieving the unit leader of routine administrative duties; and it would add effectiveness in training, and quality in staff-graduate student research.

2. Shortage of research funds compels unit leaders to spend valuable time preparing requests to Federal and other granting agencies in seeking outside funds. Although about 65 fund sources have been tapped, most for small amounts, a disproportionate amount of the leaders' time is being used, at the expense of the research program. A minimum research fund of $10,000 annually per unit is required to alleviate this situation.

3. Establishment of the needed cooperative fishery units in 20 States, beginning in 1961, with about three times the Federal support given the wildlife units, has created a morale situation in the latter, and is reflecting unfavorably against the Bureau. These two very similar types of units, so differentially supported by the parent agency, are often side by side in the same university department. Here, the contrast—personnel-, equipment-, and fund-wise, is both conspicuous and depressing.

State conservation departments participating in the program are likewise sensitive and concerned about unequal support of the two types of units. As a reflection of this feeling and with tacit approval of the participating universities, the following resolution was adopted at the 55th Annual Convention of the International Association of Game, Fish, and Conservation Commissioners at Portland, Oreg., on September 21, 1965:

RESOLUTION 1, WILDLIFE RESEARCH UNIT FUNDING AND STAFFING

Whereas the wildlife research units were first established in 1935 and since that time have contributed significantly to wildlife research, wildlife management, and the training of professional personnel; and

Whereas the fishery research units were first established in 1961 and were patterned in most respects after the successful wildlife research units; and

Whereas the fishery research units have been staffed with assistant leaders who are Federal employees, and provided with several thousand dollars in operating funds annually; and

Whereas the wildlife research units have not been staffed with assistant leaders who are Federal employees, nor provided adequate operating funds: Now, therefore, be it

Resolved, That the International Association of Game, Fish & Conservation Commissioners urges the U.S. Fish and Wildlife Service to include in its budget request adequate Federal financing for the wildlife research units, so as to provide staffing and operating funds equal to those of the fishery research units.

For all of these reasons, it is urged that the subcommittee consider equal financing of the two very similar programs named herein, and that the Bureau of Sport Fisheries and Wildlife be provided with the necessary funds for this purpose. It is understood that the Bureau proposed attainment of this goal gradually because of the costs involved. This gradual approach, it was estimated, would require $100,000 a year for a period of 5 years. It would provide assistant unit leaders at four units annually and raise the Federal contribution for each to $40,000, the identical amount and the same staffing now obtaining for the cooperative fishery units.

Except for the Ohio unit, where funds were added by the Congress last year, no action has been initiated in this regard.

CRESTON NATIONAL FISH HATCHERY

Mr. Chairman, during the past several years the Congress has accepted this committee's recommendation in behalf of an orderly modernization and improvement of the national fish hatcheries in the State of Montana. Most of the units are now nearly adequate except that facilities are not large enough to meet the greatly increased demands. As you know, the Treasure State has some of the

finest fishing rivers and streams in the Nation. With the increased travel and recreation development it has been impossible for fish hatcheries to keep up with the stocking of these fishing waters.

It is my understanding that the Creston national hatchery in western Montana can be developed to expand its production without too much difficulty. Estimates indicate that an appropriation of $254,000 for the next fiscal year would provide the necessary expansion at Creston. Earlier in the year, my colleague, Senator Mansfield asked the staff of your subcommittee to seek a statement and justification from the Department of the Interior. If the committee has this statement, I ask that it be incorporated at this point in my statement.

An orderly and planned expansion of these hatcheries will avoid a crash program at some future date and will maintain one of the State's major sport and tourist attractions. We ask that the subcommittee recommend the appropriation of these additional funds.

BUREAU OF INDIAN AFFAIRS

Senator Mansfield and I support the budget requests for construction of Indian health facilities, including $88,000 in planning funds for the replacement hospital at Harlem for the Fort Belknap Reservation, $19,000 for planning the alteration and expansion of the Browning hospital for the Blackfeet Reservation, $29,500 for conversion of a health station to a health center at Box Elder for the Rocky Boy's Reservation, $150,000 for community water supply and sewerage facilities at Lame Deer for the Northern Cheyene Reservation, $125,000 for community water supply facilities at Crow Agency for the Crow Reservation, and budgeted requests for personnel quarters on five of the reservations.

We have one request for unbudgeted funds for the Bureau of Indian Affairs. This concerns joint Federal-tribal payments for law and order. I understand that up until 18 or 19 years ago the Federal Government paid the entire law and order cost. Then, because of a cut in appropriations, the tribes were asked to pick up part of the cost temporarily.

On some reservations the Federal Government now does pay the entire cost of law and order. I understand that this is true for the Shoshone Reservation in Wyoming, for the Pine Ridge, Standing Rock, and Rosebud Sioux tribes in South Dakota. On only one Montana reservation—the Rocky Boy, which probably has the most severe poverty problem in our State—does the Federal Government pay the entire cost of law and order. The Blackfeet tribe pays $45,000, the Crows $62,000, the Fort Belknap $2,000, Fort Peck $35,000, and Northern Cheyenne $33,000.

The Indian tribes in Montana and in a number of other States are making laudable attempts to develop their reservations and to provide education funds for the youngsters. Law and order is a Federal function on the six reservations I have named, and it is appropriate that the Federal Government pay the cost, which would amount to approximately $177,000. This would free tribal funds for economic development and education programs, and I hope that the committee will approve the request.

The budget also suggests a reduction in the funds for Indian extension work. Perhaps the extension work can be handled as well by another agency. I won't argue that point. The important thing is to see that, in an administrative shuffle, farmers who happen to also be Indians are not denied convenient access to extension services available to non-Indians, and I hope that attention will be given to this matter.

Black Lake Dam

Recent floods in Montana washed out a dam important to the Flatead irrigation project on the Flathead Indian Reservation in Montana.

Black Lake Dam was on the upper reaches of the main fork of the Jocko River. The irrigated area around Arlee include some 9,300 acres, dependent on the streamflow of the river from about August 1 each year to the end of the irrigation season, about September 15. At this time of year, the streamflow is inadequate to supply the needed water. Black Lake Dam will add approximately 5,500 acre-feet of storage available during this low-water period. It is estimated that the storage from this dam would increase the yield per acre about $6 per year. Of the 9,400 acres which would benefit, approximately one-third or 3,252 acres is in Indian ownership.

The administration did not request funds to replace this barrier; but the House voted $100,000 in this fiscal year to plan and begin work on this $265,000

project. This appropriation has yet to be released, pending negotiation of a repayment contract. But we are advised that the landowners are willing to assume the construction costs. Since agreement is near, we urge that this committee appropriate the additional $165,000 needed to complete this project.

The work proposed for the fiscal year 1966 is as follows:

Clearing damsite	$1,100
Stripping	3,500
Excavation, reused	4,900
Borrow	21,800
Drain fill material	5,900
River outlet, structure, and valves	58,300
Contingencies	4,500
Total	100,000

To complete the entire replacement program, the following additional work features could be accomplished in 1967 if funds were available:

Small summit dam, spillway, and diversion	$54,000
Impervious borrow	27,000
Sand and gravel facing	6,000
Riprap facing	24,000
Drain pipe	3,200
Gravel road on top dam	900
Overhead and contingencies	28,500
Increase in construction cost index	21,400
Total	165,000

The work programed for the fiscal year 1966 represents mainly foundation preparations and the initiation of the construction of preliminary features. Completion of the replacement program is contingent upon obtaining additional funds.

STATEMENT OF HON. WALLACE F. BENNETT, A U.S. SENATOR FROM THE STATE OF UTAH

Request for Assistance

Chairman Hayden. We will now hear from Senator Bennett.

Senator Bennett. Mr. Chairman, like the other witnesses, I have a rather long statement which I would like to submit for the record. I think I have the record for the shortest verbal statement in the history of the committee.

A couple of years ago I used one word, "please," but this time the problem is more serious so I will use two.

Help, please.

Prepared Statement

Chairman Hayden. Your statement will be included in full in the record.

Senator Bennett. Thank you.

(The statement follows:)

Ouray National Wildlife Refuge

Mr. Chairman, I appreciate the opportunity to testify before this distinguished subcommittee in support of funds for worthy Utah projects. In general, I support the budget request; however, there are some items to which I would like to direct the subcommittee's attention.

The fiscal year 1967 budget includes $75,000 for the Ouray National Wildlife Refuge in Utah. A total $20,000 of this is for dikes, levees, and drains; $35,000 is for canals and ditches and $20,000 is for water control structures. However, an

additional $125,000 is needed to keep the development plan on schedule. Officials need $20,000 of this for additional water control structures; $98,000 for dikes and canals; and $7,000 for clearing of brush. This additional $125,000 would bring the Shepherd Bottoms area to 85 percent completion.

It is hoped that the Ouray refuge can be developed over a 5-year period at an estimated cost of $1,300,000.

To explain the need of this program, I would like to go into a brief history of the Ouray refuge.

It was established on November 20, 1960, by former Secretary of the Interior Fred A. Seaton. Thereafter the Bureau of Sports Fisheries and Wildlife proceeded to acquire the necessary acreage and to prepare a master development plan. The plan was completed in July 1962 but because of some delays in the land acquisition program, the Bureau was not ready to begin developing the refuge until fiscal year 1964 when the committee at my request added funds to initiate construction. The committee approved $250,000, which was cut to $133,000 by the conferees. In fiscal year 1965 an additional sum of $115,000 was requested and appropriated. The total of the two appropriations was $248,000, or approximately the amount necessary for the first year's program; and thus, after a year's additional delay, development work was finally initiated in fiscal year 1965. The fiscal year 1966 budget included $95,000—$60,000 for water control facility development and $35,000 for one residence and two storage buildings.

The Ouray National Wildlife Refuge is located in Uintah County, Utah, 26 miles southwest of Vernal and 1 mile north of the small Indian village of Ouray, and extends north along either side of the Green River for 7½ miles. It is technically located in the Pacific flyway, but is a mere 30 airline-miles from Colorado and the central flyway.

The refuge will provide habitat conditions capable of producing at least 1,000 geese each year with sufficient food to maintain a peak population of 3,000 during migration and an annual use-day population of 400,000. Moreover, it is expected the refuge will produce 13,000 ducks each year and provide food for peak populations of 75,000 ducks during fall migration with overall duck use-days totaling $4,250,000. The refuge will offset the loss of Canada goose production areas as a result of Flaming Gorge Reservoir.

In addition to its importance as a prime waterfowl production area and a resting and feeding area for migratory birds, the refuge will protect and maintain the upland game birds, big game, and fur-bearing populations that now use the area. Ultimately it also will provide hunting as well as recreation facilities for the enjoyment of the public. Social and economic benefits will thus accrue to nearby communities.

In view of the urgent need for early development of the Ouray Wildlife Refuge, I strongly urge the committee to include the addition of $125,000 in the Interior appropriations bill. This will keep this important project within the required construction timetable.

Predatory Animal Control

I would also like to bring to the subcommittee's attention the predatory animal control program under the Department of the Interior.

In Utah, livestock operators have experienced an extreme increase in predator loss in recent years. The sheepmen themselves have increased their efforts monetarily and otherwise in an attempt to supplement the control measures carried on by the Fish and Wildlife Service. It is important to the livestock economy to maintain a strong and well-managed predator control program.

The fact that Utah State Legislature increased the tax on sheep for predatory animal control work from 45 mills to 65 mills in 1965 is evidence that the sheepmen are willing to carry their share of the load.

There is also a State levy of 2 mills on cattle and 10 mills on turkeys for predator control work. Thus, this program is also of vital significance to them.

At the same time, however, the fiscal year 1966 budget decreased the predator control program by 20 percent, which indicated the Federal Government is falling down on its share. I think it significant to point out that about 75 percent of the predator control work in Utah is on Federal lands.

The $350,000 cut last year took place in the West and it is our ranchers who felt the direct adverse affects. The budget for fiscal year 1967 includes only a small increase to take care of the Federal portion. Utah received $115,500 in 1966 and will receive $116,000 in fiscal 1967.

The program, as now conducted, is in cooperation with the Utah Department of Agriculture, the State fish and game commission, grazing district advisory boards, county commissioners, municipalities, woolgrower associations and individuals. These cooperators furnish more than half of the total cost of the program. The State contribution for fiscal year 1967 will be $185,000 and the Bureau of Sport Fisheries and Wildlife will contribute $116,000 for a total of $301,000.

In view of the great importance of a strong and well-managed predator control program to the livestock economy, I respectfully request the committee to restore the $350,000 that was cut from this important program in fiscal year 1966.

Forest Service

RECREATION AND INSECT AND DISEASE RESEARCH

I would also like to discuss several items under the forestry research program. The programs described are included in "A National Forestry Research Program" which the Secretary of Agriculture sent to Congress in April 1964.

The Intermountain Forest and Range Experiment Station of the U.S. Forest Service has several of its projects headquartered at Logan, Utah, in cooperation with Utah State University.

The recreation research project at Logan is unique, in that it is specifically directed to stimulate graduate training and research in outdoor recreation at the university. It is one of four such units in the United States. This and a closely allied recreation research project at Ogden, Utah, have been seeking to learn how much use recreational areas can stand, the type of land management and recreational area development measures which will prevent or offset wear, and how to rehabilitate badly worn campgrounds.

There was no major emphasis in the budget for fiscal 1967 for this program. An additional $100,000 is needed to staff adequately the Logan and Ogden offices. This would add an additional scientist at Logan and two at Ogden. This would also be within the planned long-range program and would add materially to the research strength of Utah's recreation opportunities.

This is a new field with a comparatively small program. At present there are only 18 scientists nationwide working on recreational research. The studies in this vital area of conservation came about because of problems that arose when recreation areas became so heavily used that they were worn out in a summer. By the wise use of planning the value of the recreation areas can be maintained for the enjoyment of all.

A closely related new project is research on woody plant disease and insects of recreation areas and game ranges. We need to learn what these insects and diseases are, their impact, how recreational use encourages damage, and how to control them. This project will be the first such effort in the West.

Reports of insect or disease damage to outdoor recreation areas and game or livestock browse plants are being received with increasing frequency. Shrubs and trees are of major importance for browse on many big game and livestock ranges as well as for the shade, beauty, and screening they provide in outdoor recreation areas.

Damage or loss through insect and disease attacks has serious impacts on recreational values of intensively developed outdoor recreation areas in national forests, national parks, and other areas. Here investments may run as high as $15,000 per acre, and the annual investment by the Federal Government alone in high-use recreation areas is estimated at between $5 and $10 million in the intermountain West. Extensive damage on big game or livestock ranges is of serious consequence to the highly important animal populations dependent on them.

Many shrubs that produce nutritious food for big game and livestock have been virtually decimated by the aroga moth, tent caterpillars, and other insects, and by diseases such as rusts. At present we know of no quick and easy way to combat these pests, but we believe that a joint research effort between the Forest Service's Intermountain Forest and Range Experiment Station and Utah State University would produce results of great benefit to all.

To implement adequately this needed disease and insect research program will require $100,000. I respectfully request that the committee add the necessary funds to the appropriations bill.

WATERSHED AND RANGE MANAGEMENT RESEARCH, LOGAN, UTAH

The 10-year forestry research program calls for $875,000 for watershed and range management research. The amount in the fiscal year 1967 budget is $274,000, which is the same amount provided in fiscal year 1966. An additional $125,000 could be used efficiently in fiscal year 1967.

The Great Basin States rely upon water from upland watershed for their irrigation, industries, and communities. During low-water periods, water supplies are now insufficient and increased future demands will aggravate the problem. Also, flash floods originating in upland watersheds plague this area. The $125,000 is needed to develop techniques for increasing water yields from the upland watershed of the Great Basin and to find ways of rehabilitating range watersheds.

The increase would provide for a balanced research effort on plant-soil-water-use interrelationships in the Great Basin. This would lead to solutions of the water supply, flood, and sedimentation problems. Other studies could be initiated on the management of watershed vegetation and snowpack to improve water yields, especially during periods of low flow.

Studies are also necessary to find how grazing use can be modified and how ranges subjected to overgrazing or wildfire can be restored so that flood runoff and erosion can be minimized while still increasing forage production.

This increase will fully utilize the space in the Forestry Sciences Laboratory at Logan which represents the first stage of the planned construction at this location.

COOPERATIVE WILDLIFE RESEARCH UNIT

The Department of Wildlife Resources at Utah State University has had a cooperative wildlife research unit for the past 30 years. The unit is supported primarily by the land-grant university, the Fish and Game Department, and the Bureau of Sport Fisheries and Wildlife. A fourth cooperator, the Wildlife Management Institute, annually contributes $1,000 or more to each of the 18 units.

Evidence of a satisfactory progress in the program lies in the fact that both the university and the Fish and Game Department in each participating State have voluntarily increased their contributions over the years to where they now provide 65 to 85 percent of the basic annual unit budget. The contributions of the Bureau, provided by the Congress, have been limited essentially to the salary and minor expenses of the unit leaders, now averaging annually about $15,000 per unit. The Bureau is thus in the embarrassing position of falling behind in its support of the cooperative wildlife research unit program.

Since there is an ever-increasing need for highly trained men in the area of wildlife resources, an expansion of the present program at Utah State University is urgently needed. By increasing the Federal contribution from $15,000 to $40,000 per year a second trained man could be added to utilize more efficiently this research unit.

BROWSE LABORATORY, PROVO, UTAH

I would again like to bring to the committee's attention another planned Forest Service research facility in Utah—a range and wildlife habitat laboratory to be constructed on the Brigham Young University campus at Provo, Utah. The university has give the Federal Government a 50-year lease for a building site on the south side of the campus. Unfortunately, no funds were included in the President's fiscal 1967 budget for this worthy project.

Utah is an ideal location for browse research. We can be truly called a browse State, since shrubs dominate the natural vegetation. We have both northern and southern types of browse, and are centrally located in respect to the Western States. Our past research and development program, while limited, has given us a start in developing a valuable background for a productive research effort.

In addition, at the Forest Service's Great Basin experimental area near Ephraim, Utah, we have a unique opportunity with a whole range of vegetation types, from the desert shrub zone in the valley bottom to the subalpine zone above 10,000 feet, readily accessible.

This farsighted and imaginative research would seek to develop superior strains of native range and forest shrubs, or browse, through selection and breeding. Promising plants from foreign countries will be sought and tested for their adaptation and value to our conditions and needs. This research would be comparable to what has been done for pasture grasses and other crops with phe-

nomenal results. This research on shrubs has exciting possibilities, since it will virtually pioneer an unexplored field. In spite of the importance of shrubs to the West, there is nothing like this genetic approach underway anywhere in the country. Its nearest counterparts are the three forest genetics laboratories of the Forest Service.

I should also like to point out to the committee the importance of expanded research to restore browse ranges for big game, and the protection of these ranges against insects and diseases. Utah has been losing out-of-State hunters the past 2 years, and the income they bring with them. Local hunters are dissatisfied with their hunting success. Utah has the potential for producing much more big game. The key lies in improving their range.

Browse from shrubs is the major diet of deer. Desirable kinds of shrubs have almost disappeared from many critical ranges because of past overgrazing by livestock and big game, and from other causes, including insects. To reverse this downward trend the Utah State Fish and Game Department has taken action to bring deer herds into balance with the capacity of their ranges. They are also attempting to improve these ranges by seeding browse and other plants. Within the last few years, 64,000 acres of critical deer winter range have been seeded.

This success, unparalleled in the West, is due primarily to a small research program in which the Department has been cooperating with the Forest Service's Intermountain Station during the last 10 years.

Help is urgently needed in developing better browse plants adapted to the various soil and site conditions encountered on range and forest lands. There are great opportunities, through selection and breeding, for developing superior strains of native and introduced browse species—strains with high productivity, palatability, nutritional value, resistance to disease and insects, drought tolerance, or other desirable traits. More research is also needed to develop better methods for efficiently producing and processing the seed of selected browse species, and establishing them on game ranges.

We would like to see this important work initiated without delay. An efficient start can be made while awaiting construction of the needed office-laboratory facilities. An increase of $150,000 in research funds would get a productive program underway. In addition to the browse improvement project I have mentioned, the Intermountain Station presently has two research project headquartered at Provo dealing with desert and sagebrush range, and with wildlife-livestock relations.

Early development of modern laboratory and office facilities at Provo is essential to efficient conduct of the present and planned research program. The estimated total cost of needed facilities is $800,000 but construction can be in two steps, with the first costing $460,000. Approximately $37,000 in planning funds for the first step is urgently needed so that construction of the laboratory can proceed as soon as possible. I respectfully request that the committee authorize these additional funds.

Our need would not be so urgent, and we could be satisfied with the present slow pace of research in these three fields if outdoor recreation were not literally exploding and our problems multiplying at more or less the same rate.

SPRINGVILLE FISH HATCHERY

I would also like to bring to the attention of the subcommittee the need for an additional $56,000 for a diagnostic service unit at the U.S. National Fish Hatchery in Springville, Utah.

Private and State hatchery operators occasionally request technical assistance from personnel at the national fish hatcheries when they run into disease problems that they cannot handle themselves. I understand it is the policy within the Bureau to provide this assistance to the extent possible within their limited means and tight personnel ceilings.

The hatchery biologist at Springville, Utah, has the responsibility for servicing all national trout hatcheries in the States of Utah, Wyoming, Colorado, and Arizona. This leaves him little time to devote to problems at private or State hatcheries, although he continues to do all he can in this area.

Mindful of the need for disease diagnostic services to Federal, State, and private hatcheries throughout the country the Bureau of Sports Fisheries and Wildlife has plans for staffing and equipping to provide more services of this type in its long-range program. As a part of this program, it has proposed a diagnostic service unit with a staff of four to be located at the Springville Na-

tional Fish Hatchery. The hatchery has recently undergone a rehabilitation program and the construction program is now completed with space available to house the proposed diagnostic service unit. Therefore, the unit could be activated with only a minimum of additional cost.

The $56,000 for operations and maintenance would include $32,780 for four additional staff members; $13,220 for travel, supplies and incidentals; and $10,000 for automotive and lab equipment.

The Springville diagnostic unit would then be able to extend to State and private hatcheries more adequate service than present circumstances will permit.

Thank you, Mr. Chairman.

STATEMENT OF HON. ROBERT W. KASTENMEIER, A U.S. REPRESENTATIVE FROM THE STATE OF WISCONSIN

FOREST PRODUTS LABORATORY, MADISON, WIS.

Chairman HAYDEN. Congressman Kastenmeier, we will be glad to hear from you now.

Representative KASTENMEIER. Mr. Chairman, with your consent I also have a statement from Senator Gaylord Nelson which he would like to have made a part of the record in connection with the presentation I make.

Chairman HAYDEN. That may be done.

(The statement follows:)

STATEMENT BY HON. GAYLORD NELSON, A U.S. SENATOR FROM THE STATE OF WISCONSIN

Mr. Chairman, I am appearing here to urge that additional funds be appropriated for the U.S. Forest Products Laboratory at Madison, Wis., which is the Nation's No. 1 research center in the use of timber and other wood products. It is most urgent that a program of expansion at the Laboratory, which was carefully developed some years ago, be permitted to continue so that we achieve the maximum benefits from this unique research institution.

The expansion of research facilities at the Laboratory was carefully planned by the Forest Service and the Department of Agriculture. The expansion plan was outlined in a report which was approved by the Bureau of the Budget and transmitted to the Congress by the Secretary of Agriculture on April 15, 1964.

The last session of Congress approriated $3,800,000 to build new laboratory facilities for pulp and paper research and for wood chemistry research. However, the construction costs were so high that the vital wood chemistry laboratory-office building had to be dropped.

As a result, the Laboratory now needs $1,190,000 in new appropriations for the actual construction of the wood chemistry building. Plans and specifications have already been drawn and construction could begin almost immediately.

When the present construction is completed, much of the Forest Products Laboratory work being done in the original, 33-year-old laboratory building will be transferred to the new building. The old building will require extensive remodeling because of the heavy machinery, ventilating ducts, utility lines, and other equipment which will be torn out of it. The estimated cost to draw plans and specifications for the remodeling of the original building is $190,000.

Thus, it is very important that the Laboratory receive $1,190,000 to build the new wood chemistry building and $190,000 to plan the remodeling of the original building so that the remodeling and expansion of the Laboratory can proceed in an orderly and efficient manner. If we do not make these sums available promptly, there is a real danger that much of this construction space will sit idle and the full potential of the Forest Products Laboratory will not be realized in the next few years.

I am sure I do not need this committee the vital role which the U.S. Forest Products Laboratory has played in our national economy. This Laboratory, because of its great accomplishments in the past, has the unanimous support of the leading firms in the timber and wood products industry. This is one

governmental program which returns many dollars in direct benefits for every dollar invested in it. The Congress and the administration are fully committed to carrying out the proposed expansion of the Laboratory, and it is simply good business to do it now. It will cost more to do it later, and we will not benefit from its expanded program of research until we complete this carefully planned project.

The Laboratory has an unusually timely contribution to make in two of our regions which have suffered from special economic problems—Appalachia and the upper Great Lakes region. The Laboratory already is at work as a part of the Appalachia program, seeking to find new uses for low-grade forest products and new ways to enable depressed forested areas to become economically self-sufficient. The President has just established an Upper Great Lakes Regional Commission to plan the economic development of northern Wisconsin, Minnesota, and Michigan. The Forest Products Laboratory will play a key role in this upper Great Lakes project, and the Congress should enable it to do the full job that it has been planned and designated to do.

EXPANSION PROGRAM

Representative KASTENMEIER. Mr. Chairman, I, too, would like to submit my entire statement for the record, although I would like to abbreviate it somewhat in my presentation to you, sir.

Chairman HAYDEN. Certainly.

Representative KASTENMEIER. I appreciate the opportunity to appear here today in support of the Forest Products Laboratory and to extend my thanks and the thanks of the Laboratory for your support and that of your committee in the past, and in recent years that of Senator Proxmire, in particular.

I would like to give you a status report on the present expansion program at the Laboratory as well as on the future needs there.

We, in Wisconsin and Madison, are proud of the achievements of the laboratory and, of course, are anxious that it be permitted to continue its good work.

Mr. Chairman, before I get into consideration of the needs of the Laboratory, I would like to point out a very important relationship that the committee may or may not have considered in connection with the Laboratory.

Many times in the past the research of the Laboratory has been shown to have been benefited the economy of areas in which our timber resources are located. It is important then to consider where these resources are in connection with our economically depressed areas.

RELATIONSHIP BETWEEN NATIONAL FOREST AREAS AND POVERTY OR DEPRESSED AREAS

With your permission, Mr. Chairman, I have a map which indicates those areas of the United States eligible for redevelopment area program assistance. These are commonly known as poverty or depressed areas.

It is significant in looking at these areas that when one matches the Nation's forest areas to them they overlap to an incredible degree.

This is certainly true in Appalachia, the Lake States, the Southeastern States, the Ozarks, in the Southwest, and in the Northwest and in Minnesota and northern Wisconsin.

Potential of Research Laboratory

This, of course, dramatizes the role that the Laboratory can and has played in the past because these forested areas are a source of timber, much of which is of low quality and not suitable for normal commercial production of wood products, accounting in part for the depressed economic condition of these areas.

The intensive research program conducted at the Lab—and supported here in Congress—can and has developed new products, new chemicals, new industries, and new jobs for these areas throughout the United States. More can be done with our support in the future.

It is for this reason I appear here today to detail some of the conditions which exist at the Laboratory which itself is in the middle of an expansion program.

Wood Chemistry Laboratory

In 1964, $3.8 million was appropriated for the Laboratory with the expectation that this would provide for the construction of a wood-fiber-products wing and a wood-chemistry wing.

This action was taken by your committee and the Congress in 1964. By the time the bids could actually be let, the costs of construction had risen and the wood-chemistry wing, unfortunately, was eliminated.

The wood-fiber-products wing, however, now is well underway. We have a picture to illustrate the progress that is being made on this wing as of 60 days ago.

One reason I point that out, Mr. Chairman, is that last year when the same request was up, at least on my side of Capitol Hill, there was some reluctance to proceed because construction had not get begun at that time. As you can see, it is now well underway and the wood-fiber-products wing will be completed by early next year.

This division of the Laboratory will move out of the present main building into this new building by next spring, and we have several pictures to show what problems will remain in the existing building.

This is a picture illustrating the floor of the wood-products plant. All these platforms, pipes, and foundations must be moved and the area extensively rebuilt.

Here is another picture showing the second and third floors of this pilot plant, and the structural modifications are also going to be necessary here. We have another picture showing the ground floor of the present wood-fiber-products plant. The heavy equipment will have to be moved and this ready for use as a functional receiving, shipping, and stockroom as planned.

Remodeling Main Laboratory Building

It can be readily seen from these pictures that when the wood-fiber-products section of the existing building does move into the new building, it is going to leave a significant portion of the present building vacant and unusable. This is an economic waste which I think the Congress ought not tolerate.

The committee can avoid this and accomplish a great deal more in the old main building by including $190,000 planning money in this

year's Forest Service appropriations for the Laboratory for remodeling in the main building.

Another problem was created for the lab when the wood-chemistry wing was dropped from the present expansion because the center building was designed to service both the wood fiber products and wood-chemistry units. Now it will not function at peak efficiency because part of the wood-chemistry section for which it was designed, will not be added until additional money is appropriated to complete the wood-chemistry portion of the expansion program.

1967 Budget Request

Chairman Hayden. There is no budget estimate for it?

Representative Kastenmeier. This is not included in this year's budget, Mr. Chairman. However, it is estimated that the cost of adding the wood-chemistry wing would be $1,190,000.

Neither this nor the planning money $190,000 is in the budget, so there are two items, $1,190,000 for completion of the wood-chemistry wing and $190,000 for planning the remodeling of the main building, which will be largely changed by virtue of the vacating of part of the old building when the present construction is completed.

Plans have been and are available for the construction of the chemistry wing, Mr. Chairman.

These are the two things for which I appear today to bring the committee up to date.

Your committee did in its wisdom approve the planning funds last year, and I know your committee is well aware of this. So I don't appear here this morning asking for something the committee is not aware of so much as to bring your committee up to date, Mr. Chairman.

Recommended Full Funding of Forest Service Budget Request

Senator Proxmire. I would like to say, Mr. Chairman, I think this is one of the finest presentations I have ever seen, very brief, but the map is a real inspiration. I think that shows a spectacular situation, a real opportunity for forest products development to contribute greatly to the very areas of the country which need development most urgently. I was startled when I saw that map, not only because it covers the northern part of our State so well, but it also covers virtually every other part of the country where you have depressed areas.

I think that that is an extremely strong argument for going ahead with the full funding that the Forest Service has indicated we have a strong case for.

Prevention of Economic and Water Pollution

I would also like to say that when the Forest Service was here they conceded that the construction of the wood-chemistry building would enable us to make very significant progress in developing ways to prevent pollution economically.

We know that we have been asked by the President and we are going to have legislation before us over the next very few years that is going to cost literally billions and billions of dollars to prevent pollution.

A very small investment here can just from the standpoint of saving dollars and cents be an excellent investment in preventing water pollution which we know does come from the action of pulp and paper mills.

This research can mean big savings for the taxpayer. It can mean prompt progress in cleansing our waterways.

I think this is a very strong argument for providing the entire—what is it, Congressman Kastenmeier; $1,190,000?

PAPER AND PULP INDUSTRY INVESTMENT IN WISCONSIN

Representative KASTENMEIER. Yes.

May I say, in conjunction with what Senator Proxmire has said, in Wisconsin alone the paper and pulp industry has invested $43 million in solving water pollution problems. I was going to allude to that as well and I subscribe completely to what you have said in terms of the contribution the wood-chemistry lab can make to solving water pollution problems in the public interest.

Senator PROXMIRE. This is a part, of course, that has been eliminated and which we would like to restore.

PREPARED STATEMENT

Representative KASTENMEIER. I thank the committee, Mr. Chairman.

Chairman HAYDEN. Thank you for your appearance.

(The statement follows:)

I appreciate the opportunity to appear here today and in view of the fine support this committee has given Forest Products Laboratory, I take this opportunity to extend my thanks and the thanks of the Laboratory for your past support. At the same time, I would like to give you a status report on the present expansion program as well as on the future needs of the Laboratory. Madison and the State of Wisconsin are justly proud of the achievements of the Laboratory and I count myself fortunate to be able to number among my constituents such distinguished and dedicated public servants as Dr. Ed Locke, Director of the Laboratory, his able assistant, Gordon Logan, and their entire staff. I won't burden you or this record at this time with a recitation of the achievements of this Laboratory. I know other witnesses will follow who will give you strong testimony as to the Laboratory's accomplishments.

Before I get to a consideration of the immediate needs of the Laboratory, I would like to point out a relationship that you might not have considered in connection with the Laboratory. The research conducted at the Forest Products Laboratory has been shown many times to benefit the economy of the areas in which our Nation's timber resources are located. It is important then to consider where these timber resources are in relation to our economically depressed areas. I have had a map prepared showing the areas of the United States found to be eligible for Federal redevelopment area program assistance—which might be characterized as our poverty or depressed areas. It is significant, therefore, that the Nation's forested areas overlap these poverty areas to a remarkable degree—in Appalachia, the Lake States, the Ozarks, and certain areas in the South and Southwest.

These forested areas are a source of timber, much of which is of low quality and not suitable for normal commercial production of wood products, accounting in part for the depressed economic condition of these areas. Here is where this national laboraotry can play and has played an important national role. The intensive research program conducted at the Laboratory—and supported here in Congress—can and has developed new products, new chemicals, new industries, and new jobs for these economically depressed areas throughout the United States. More can be done with our support in the future.

PLANNED EXPANSION

It is for this reason that I appear here today to detail some of the conditions which exist at the Laboratory which itself is in the midst of an expansion program. In 1964, $3.8 million was appropriated for the Laboratory with the expectation this would provide for the construction of a wood-fiber-products wing and a wood-chemistry wing. In fact, the plans were drawn to accomplish this, but by the time the bids could be let, the costs of construction has risen and the wood-chemistry wing had to be eliminated.

PRESENT CONSTRUCTION

The wood-fiber-products wing, however, now is well underway. These pictures, taken within the last month, show the progress that has been made. I am advised by people at the Laboratory that construction is on schedule and the wood-fiber-products wing will be completed by early next year.

This division of the Laboratory will then move out of its present space into the new building by next spring at the latest.

These pictures show the present wood-fiber-products section in the existing building.

1. This is the floor of the wood-fiber-products plant. Platforms, pipes, and foundations must be removed and the area extensively rebuilt before this area can be used for the solid-wood-products division which will take over the area.

2. This shows the third and second floors of the wood-fiber-products pilot plant showing a large floor opening for specialized research equipment. Structural modifications of many such areas will be required before they can be used for other essential research activities.

3. This shows the ground floor of the present wood-fiber-products pilot plant. Heavy equipment will be moved under the current contract, but pipes, piers and foundations must be removed to ready this area for use as a functional receiving, shipping, and stock room as is planned.

It can be readily seen from these pictures that when the wood-fiber-products section of the existing building moves into the new buildings, it will leave a significant portion of the present building vacant and unusable. This section of the present building—a Federal installation—will stand vacant, an economic waste industry would not tolerate and one which Congress and this committee can avoid by including $190,000 planning money in this year's Forest Service apporpriations for the Laboratory.

One other problem was created for the Laboratory when the wood-chemistry wing was dropped from the present expansion of the Laboratory. As planned, the expansion specifically included both the wood-fiber-products and wood-chemistry sections because they utilize common laboratory facilities. Until the wood-chemistry-section building can be added to this new complex, the two sections will not operate at peak efficiency—a further waste of Federal research facilities and efforts.

Let me comment briefly on the importance of wood-chemistry research. Not only is research to create new chemicals from wood involved here, but the question of water pollution is a very serious one, particularly for such industries as the paper industry which use wood and wood products. And it is a question with which the Federal Government is increasingly concerned. As evidence of the size of the water pollution problem, paper companies in Wisconsin alone have invested over $43 million in antipollution equipment and research. The wood-chemistry section of the Forest Products Laboratory offers the Federal Government the most immediate means of attacking these problems from the public interest standpoint.

We have within our reach a means of greatly strengthening the needed research in this area by providing the modern tools needed by the Forest Products Laboratory. The new research facilities for the divisions working in this area; namely, the divisions of wood-fiber products and wood-chemistry research, were designed as an integrated unit for attacking problems of this type. Typically the solution of research problems such as those being considered involve basic chemical research, experimentation on a laboratory pilot-plant scale, and finally adaption of process by industry for production. The wood-fiber-products facilities now under construction will be available in the spring of 1967. To complete this research facility and thus realize the full potential of the unit will require the construction of the wood-chemistry laboratory for which plans and

specifications are already available. The construction cost is estimated at $1,190,000.

The Forest Products Laboratory, therefore, faces an immediate need for a total of $1,380,000 for planning and constructing urgently needed research facilities. Of this amount, $1,190,000 is for construction of the wood-chemistry laboratory for which plans and specifications are available. The remainder, $190,000, is for developing plans and specifications for a modernization of the present building to make use of the space soon to be vacated. As most of you know, this planning money was sought last year. The need for these funds was recognized last year by your committee and the funds were included in the Senate appropriations bill. They were not included in the House bill and, unfortunately, were eliminated in conference. Further delay in appropriating these funds will extend the period of time vitally needed research space in the existing building will stand empty. The pressure of the costs of the war in Vietnam should not be allowed to curtail research so essential to the healthy growth of our national economy. Both needs are urgent and of equal importance, and I respectfully urge you to include them both in this year's appropriations. The alternative is a significant waste of Federal resources—involving a serious delay in research, research which has been shown to be so extremely important to our local and national economics over the year. Your consideration of their needs will be appreciated by us in Wisconsin—and by many others throughout the Nation who benefit day by day from the research conducted in this National Forest Products Laboratory.

STATEMENT OF HON. CARL T. CURTIS, A U.S. SENATOR FROM THE STATE OF NEBRASKA

Forest Service Laboratory in Nebraska

Chairman HAYDEN. We will now hear Senator Curtis.

Senator CURTIS. Chairman Hayden and Senator Proxmire, I am here today to speak in reference to the Forestry Service for the Great Plains States, and particularly in reference to our needs for a laboratory in the State of Nebraska.

Nebraska is known as the tree planter State. If you visit Statuary Hall or a portion down below you will find that one of Nebraska's statues is to J. Sterling Morton, one of the early Secretaries of Agriculture, who is the author of Arbor Day, the most universally observed holiday in the world.

The prairie country of the Great Plains had few trees on it when it was settled. Nebraskans value trees and all Nebraskans have been tree planters.

Most of the trees that have been planted in Nebraska have been planted by private individuals to improve their own property. I hope that such will always be our principal way of increasing the number of trees.

Forestry Research and Experimentation

Research and experimentation in the field of forestry is clearly a function of Government. It cannot be carried on by individual citizens or individual landowners.

Mr. Chairman, at this point in my remarks I would like to have printed in the record two letters addressed to the chairman of this committee, one from Dean Frolik, of the college of agriculture, and one from Chancellor Hardin, of the University of Nebraska.

Chairman HAYDEN. That may be done.

(The letters follow:)

LETTER FROM E. F. FROLIK, DEAN, COLLEGE OF AGRICULTURE & HOME ECONOMICS

UNIVERSITY OF NEBRASKA,
COLLEGE OF AGRICULTURE & HOME ECONOMICS,
Lincoln, Nebr., February 2, 1966.

Hon. CARL HAYDEN.
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

(Through Senator Carl T. Curtis).

DEAR SENATOR HAYDEN: This letter, transmitted to you through Senator Curtis, is in support of an appropriation for forestry research in the Plains, including an office-laboratory and greenhouse facility, to implement the needed research. The research will be conducted by the Rocky Mountain Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture, located on our campus.

The University of Nebraska has long been interested in tree planting on the Plains. As a matter of fact, Arbor Day began in Nebraska. Also, one of the earliest schools of forestry was at the University of Nebraska. Over the years the University, through its instruction, research, and extension programs, has encouraged tree planting on the Plains. We and the people of Nebraska, as well as people in the other Plains States, know the importance and value of tree plantings in various forms.

Because of this knowledge and interest, the University of Nebraska has encouraged and stimulated interest on the part of the Federal Government to undertake needed forestry research in the Plains since it is a broad regional problem and of great importance nationally.

After the great shelterbelt programs of the thirties, it was evident that much information by research pertaining to tree establishment growth, protection, and managemen was needed. To supplement our work, the university entered into a cooperative agreement with the Forest Service, U.S. Department of Agriculture, to begin the needed research. In the spring of 1953 the Forest Service assigned one scientist at our university. During the next few years this forestry scientist, working in cooperation with our people and others in the Plains, made a comprehensive survey and appraisal of the former shelterbelt plantings. This information was published by the University of Nebraska under sponsorship of the Great Plains Agricultural Council. This shelterbelt survey information emphasized the paucity of documented research information and pointed to the various phases that needed investigation and planwise research.

During the past few years some Plains forestry research has been undertaken, both by our university and the U.S. Forest Service located with us. But the effort being made is wholly inadequate. Also, the facilities available are meager and not conducive to effective research. The university has made available some greenhouse space and limited office space. Our own growing needs make it impossible to furnish the space and facilities that are necessary. Moreover, we need the space now being used.

We have enjoyed our relationships with the U.S. Forest Service scientists. This research has complemented ours and we desire this cooperative endeavor to continue.

Because of the importance of the research and our continuing interest in tree planting in the Plains, we are willing to make available to the Forest Service a building site on our campus for the needed office-laboratory and greenhouse facilities. Also, we will continue to cooperate in the planned research.

We urgently request, therefore, that the Congress make available the appropriations needed to the U.S. Forest Service—specifically $200,000 for program support and $350,000 as a nonrecurring item for the office-laboratory and greenhouse facility.

This petition is submitted on behalf of the University of Nebraska.

Sincerely yours,

E. F. FROLIK, *Dean.*

LETTER FROM CLIFFORD M. HARDIN, CHANCELLOR, THE UNIVERSITY OF NEBRASKA

UNIVERSITY OF NEBRASKA,
OFFICE OF THE CHANCELLOR,
Lincoln, Nebr., February 7, 1966.

HON. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

(Through Senator Curtis).

DEAR SENATOR HAYDEN: I am writing through Senator Curtis to support an appropriation for forestry research for the Great Plains and to express my concurrence with a letter to you dated February 2 from Dr. E. F. Frolik, dean of our college of agriculture and home economics.

The University of Nebraska desires to continue its cooperative research with the Forest Service by making available a site on our campus for the needed office, laboratory, and greenhouse facilities. We also wish to continue to make available tracts of land at our locations for research use by the Forest Service.

Not only are trees important in establishing shelterbelts, they also affect the local climate and have a direct bearing on the crops and animals to which they afford protection. The evaluation of these effects needs further research effort. This research is also basic to the development of programs for outdoor recreation, parks development, and highway beautification.

We shall be happy to have the work proceed and will continue to cooperate with the Forest Service by providing land for its activities. Also, we shall encourage our own Forestry Research people to continue close coordination with the U.S. Forest Service team.

Sincerely,

CLIFFORD M. HARDIN, *Chancellor.*

INADEQUACY OF CURRENT PLAINS FORESTRY RESEARCH

Senator CURTIS. Dean Frolik, among other things says:

During the past few years some plains forestry research has been undertaken, both by our university and the U.S. Forest Service located with us. But the effort being made is wholly inadequate. Also, the facilities available are meager and not conducive to effective research. The university has made available some greenhouse space and limited office space. Our own growing needs make it impossible to furnish the space and facilities that are necessary. Moreover, we need the space now being used.

We have enjoyed our relationship with the U.S. Forest Service scientists. This research has complemented ours and we desire this cooperative endeavor to continue.

Because of the omportance of the research and our continuing interest in tree planting in the plains, we are willing to make available to the Forest Service a building site on our campus for the needed office-laboratory and greenhouse facilities. Also, we will continue to cooperate in the planned reseach.

We urgently request, therefore, that the Congress make available the appropriations needed to the U.S. Forest Service—specifically $200,000 for program support and $350,000 as a nonrecurring item for the office-laboratory and greenhouse facility.

This petition is submitted on behalf of the University of Nebraska.

GREAT PLAINS FORESTRY RESEARCH PROGRAM

Senator CURTIS. Included in this national forestry research program are the research program and laboratory needs for plains forestry—the establishment, growing, and management of suitable tree species for shelterbelts, farmstead plantings, and windbreaks.

I am appearing today in support of this plains forestry part of the national forestry research program, including the laboratory facilities needed to implement this part of the program.

One-fourth of the continental United States lies in the Great Plains. The plains include one-third of the Nation's croplands and more than one-half of its grassland.

The plains region is the Nation's top producer of cereal grains and livestock. But the erratic and extreme climate of the plains makes both farming and livestock growing difficult and uncertain. Persistent summer winds and frequent drought keep field crops under moisture stress. Light soils erode and livestock suffer, and sometimes die, from winter winds and blizzards.

TREE PLANTINGS

Trees have been planted on the plains since the first settlement. Initially, they were planted for shade and beauty; to make farmsteads into homes. Since that time we have learned by experience that properly designed tree plantings reduce the effects of strong winds and droughts.

Also, tree shelterbelts, if properly designed, can be used to protect soils from blowing, control snowdrifting, increase yields of field crops, and reduce home heating costs. Livestock sheltered by tree plantings hold weight better with less feed in winter; losses from blizzards are reduced.

Although a large number of trees have been planted on the plains to improve living conditions and increase farm production, many of the trees die prematurely or become ineffective as wind barriers.

We need better trees for the plains; trees that will tolerate heat and cold, drought and high moisture stress, wind and hail, and salt and alkali. Numerous varieties of trees have never been tested on the plains.

Superior trees have not been sought systematically. Attempts to "custom make" trees for the plains through tree breeding have not been tried.

Trees grow well on some plains soil, poorly on others. Tree species differ in response to soils. We need to know what soil characteristics influence tree growth. Effectiveness of wind barriers depends in part on the heights and growth form of the trees.

To design windbreak systems properly, we must know how tall and what form each tree species will grow on important soil types of the plains and in each climatic situation.

TREE SHELTERBELTS

Shelterbelts are planted for many purposes, but no one shelterbelt will serve all purposes well. We need to know how shelterbelts should be designed to serve each specific purpose best, how wide they need to be, and in what pattern or arrangement they should be.

Trees in many shelterbelts lose vigor and become ineffective when only 15 to 20 years old. We need to know how dense the trees should be and how they should be managed to maintain their vigor and effectiveness as wind barriers over a long period of time.

TREE DAMAGE CONTROL

Successful tree plantings are needed to improve wildlife habitat; also to enhance recreation opportunities.

Trees in the nonforest environment of the Plains are especially subject to damage from insects and diseases. We need to know how to combat these damaging disease and insect pests—either by effective and practical control measures or through developing disease- and insect-resistant tree varieties or strains.

Mr. Chairman, I wish to urge your consideration of the request as set forth in Dean Frolik's letter and as endorsed by Chancellor Hardin.

State Tree Planting Program

I might say, Mr. Chairman, that it just isn't a saying or a slogan that Nebraska is a tree planter State. We didn't have any trees for the greater part of the State. It has been a State program all the time.

We have in Nebraska the only manmade forest in the United States. Unfortunately, we had a fire there last year which burned some of the trees that were 50 and 55 years old. The Forest Service is doing a good job replanting.

It was not carelessness that caused the fire. Lightning struck. It was a dry year and it spread to the forest. The fire even jumped the river, a tragic loss.

My appearance today isn't in reference to that loss directly. It is indirectly.

Here we have a situation that the Federal Government has done very little on. It has been carried by the individuals and by the State, by the University of Nebraska, and we ask for the modest sum of $200,000 that the Federal Government can do their part.

Furnishing Laboratory Site

Also with the University of Nebraska's budget it seems they cannot provide a building any longer. They will provide the site and they have a well-planned building in mind for $350,000, but that would be a one-shot item.

Study of Tree Types for Plantings

Chairman Hayden. Has experience demonstrated what type of trees are best to plant?

Senator Curtis. That is one of the things they want to study. They will vary in different parts of the State.

In Halsey National Forest, which was a tribute, started some 60 years ago, 65, to one of the professors at the University of Nebraska who conceived that idea, pine trees have grown very well.

Of course, there are many varieties of pine. The early settlers used a lot of cottonwoods. They are short lived, but a great protection in an area that has no trees.

We come here today reciting a record of many years of carrying the load without adequate Federal help. What we do there will benefit the entire Plains States, and most of the forestry activity has been in Northern States, Mountain States, and otherwise and this is a neglected area, and I certainly thank you.

Chairman Hayden. Thank you for your appearance.

STATEMENT OF HON. FRED R. HARRIS, A U.S. SENATOR FROM THE STATE OF OKLAHOMA

WICHITA MOUNTAINS WILDLIFE REFUGE

Chairman HAYDEN. We shall now hear Senator Harris.

Senator HARRIS. Thank you, Mr. Chairman and Senator Proxmire. I would like to make just a brief oral statement and file for the record my entire formal statement.

Chairman HAYDEN. That may be done.

Senator HARRIS. Mr. Chairman, I am talking to you about something very close to my heart, because it is in my home county in Oklahoma, and that is the continuation for the second year of the 6-year master plan for improvement of the Wichita Mountains Wildlife Refuge.

You, Mr. Chairman, and Senator Proxmire and this committee last year provided an appropriation of $400,000 which started us on the first of the 6-year programs.

The Wichita Mountains Wildlife Refuge is a beautiful area of about 59,000 acres.

It primarily was established to provide a natural setting for the wildlife. It started with building by WPA and by CCC, and that is the last real building that they have had down there.

ANNUAL VISITATION

Now, then, visitation has grown to the extent that it is a million visitors a year, 1 million, and it gets as high as 20,000 a day. The projections now of annual visitation growth indicates that we are going to have twice as many visitors just 10 years from now.

In 1975 we will have 2 million visitors a year, and the facilities there are just totally inadequate to provide the public use and benefits for the number of people who are visiting.

We are asking for this second year of the 6-year master plan for $1,035,000, but we have broken that down into items and put some priorities on those items that make up the $1,035,000, based upon what the Bureau of Sport Fisheries and Wildlife have indicated to us.

ROAD THROUGH REFUGE

The No. 1 priority is for a figure of $465,000, which would complete the last half of the major road through the refuge. You provided last year the $400,000 which completed one-half of that road; $465,000 this year would complete the balance of that road all the way through the wildlife refuge.

I know the road very well because, of course, I grew up in that area, and I can tell you that it is highly hazardous. There have been several tragic accidents on that road. It is a winding, twisting road, too narrow, and it just can't handle modern-day traffic with the kind of visitors we have. So $465,000 is our first priority that would finish out that road.

ACCESS ROADS TO LAKES

The second priority is for an item in the amount of $50,000, which we also need very badly, and which would build the access roads from

that major artery to these lakes, small access roads to the main lakes of the refuge, and that is in the amount of $50,000.

LAKE REHABILITATION

The third priority is to rehabilitate some lakes. We have great and beautiful lakes in this refuge, but some of them have silted in and we have vegetation growing in them, so that the fishing and swimming and boating have been seriously hampered.

The third item of priority is for $95,000 which would allow for the rehabilitation of those lakes. I won't go into the others, since they are detailed in my formal statement.

Chairman HAYDEN. What do you do to rehabilitate a lake?

Senator HARRIS. What they have to do sometimes in completely drain the lake and then plow out and cut out that vegetation.

You know, cattails and peat moss, and everything else grows right down to it and it gets to where you just can't get to the water.

We have there area towns which total about a half million population in close proximity, and people who are too poor to afford any other kind of recreation can come out to this place and go fishing.

Some of these lakes have so much vegetation around the periphery that a little kid can't get his fishhook in the water because he can't get past the vegetation. So this $95,000 item, No. 3, we ask for to rehabilitate those lakes, and I won't go into the other items.

Those are the principal three priorities, and, again, I want to thank you for putting the item of $400,000 in the budget last year to start us on this 6-year plan. I hope, in view of the tremendous growth we are having in public use of these facilities, that you and the committee will see fit to make an appropriation this year to let us continue.

PREPARED STATEMENT

Thank you, Mr. Chairman.

Chairman HAYDEN. We thank you for your statement.

(The statement follows:)

Once again, I find it necessary to call to your attention a greatly needed appropriation that was not included in the administration's 1967 budget request for the Bureau of Sport Fisheries and Wildlife in the Department of the Interior. It is an appropriation for the continuation of work begun in fiscal 1966 on the 6-year master plan for improvement of the Wichita Mountains Wildlife Refuge located in Comanche County, Okla., my home county.

The annual visitation to this refuge now exceed 1 million persons, and it is predicted that annual visitation will increase to 2 million persons by 1975. The U.S. Department of Interior, recognizing the needs for improvements in public-use facilities brought about by this vast increase in annual visitation, has devised the Wichita Mountains master plan for the rehabilitation of buildings, fences, campgrounds, and roads, which are now more than 30 years old, and for the construction of new residences and public use and other facilities.

The total development and rehabilitation proposed for this refuge, the oldest unit in the system of wildlife refuges, is estimated to cost a total of $3,113,900 and will provide much-needed facilities to enable the continued use and benefits available to the general public.

The 59,000-acre Wichita Mountains Wildlife Refuge is dedicated to the preservation and management of big-game herds, and of providing the opportunity for public enjoyment of this natural area. Visitors throng to the lakes and campgrounds, and use the extensive road network to observe wildlife in a natural setting.

Also located within the Wichita Mountains Wildlife Refuge is the world renowned Easter sunrise service facility. This pageant utilitzes a permanent

physical plant occupying a 151-acre site made available under a long-term permit to the sponsoring, nonprofit organization. The annual sunrise service, a pageant sponsored by local civic and church groups attracts a crowd of 35,000 to 50,000 visitors each year. Many people also visit the pageant site, which includes a very attractive chapel, at other times throughout the year. The pageant buildings and scenes harmonize well with their setting and constitute a further attraction for the tens of thousands of visitors to the wildlife refuge.

Recent establishment of a Youth Job Corps training camp located within the wildlife refuge will help with the work outlined in the master plan for improvement. However, the youth stationed at the Job Corps facility will not be able to assist with the heavier construction work which is of priority at this time.

Due to its natural beauty and its close proximity to metropolitan areas in both Oklahoma and Texas, public use is an increasing aspect of the overall requirements of rehabilitation of old, and construction of new, facilities within this complex. The refuge is located within easy access of Lawton, Okla.; Oklahoma City, Okla.; Wichita Falls, Tex.; Altus, Okla.; Duncan, Okla.; Chickasha, Okla.; and Anadarko, Okla. The combined populations of these cities is in the neighborhood of 510,000 people. The Wichita Mountains Wildlife Refuge is the primary recreational facility available to the growing populations of these cities.

To further illustrate the need for rehabilitation of facilities within the refuge, I would like to point out the fact that the visitation sometimes reaches as many as 20,000 visitors per day and completely overruns the inadequate facilities which were constructed during the 1930 WPA and CCC days. The present permanent staff of 16 employees, although very dedicated, find it almost impossible to maintain the 59,000 acres both for wildlife and for increasing public use.

PRIORITIES

1. Heading the list of priorities for the continuation of construction under the 6-year master plan is the need for an appropriation of $465,000 which would enable the completion of work begun last year on the Medicine Park to Cache Gate roadway. The completion of construction on this highway will decrease serious traffic hazards that now exist and will also afford an opportunity for families to enjoy the beauty of nature by providing them easy access to and through the refuge. I have personally traveled this highway when traffic was bumper to bumper and when camping, picnic, and observation facilities were filed to capacity. I therefore urge the committee to include in the budget the $465,000 needed to complete construction and correct this existing inadequacy in the Wichita Mountains Wildlife Refuge.

2. The second area of priority for the provision of adequate facilities in the Wichita Mountains Wildlife Refuge is the construction of adequate access roads extending from the Medicine Park Cache Scenic Highway, to nearby recreational areas. The Bureau of Sport Fisheries and Wildlife has listed four recreational areas which experience a great deal of use, but have poor and inadequate access roads. They have, therefore, requested an appropriation of $50,000 to enable the construction of access roads to the Elmer Thomas, Jed Johnson, and Crater Lake and Dams recreational areas. These facilities provide the only existing swimming facilities now open to the general public within the Lawton-Fort Sill area. I would, therefore, request that the committee approve the requested funds of $50,000 to provide access roads to these highly utilized facilities.

3. The third area of priority consists of lake rehabilitation. Many of the 35 fresh water lakes within the refuge are now virtually beyond use because of aquatic vegetation and siltation. Therefore, the Bureau of Sport Fisheries and Wildlife has proposed a plan to remove sand and siltation from the lakes and to control the growth of aquatic vegetation in order to enhance the use of the lakes for fishing, boating, and swimming. Most of these 35 lakes have not received adequate care over the past 30 years due to lack of adequate funds; therefore, I would request that the committee appropriate this year the $95,000 which the Bureau of Sport Fisheries and Wildlife feels is needed to properly rehabilitate these lakes in order to realize their full public-use benefits.

4. The fourth priority calls for the construction and rehabilitation of public sanitary and recreational facilities within the refuge. I feel that much of the work to be done in this category could be handled adequately by the members

of the Youth Job Corps camp. Therefore, I would feel that the $50,000 requested for these projects could possibly be withheld at this time.

5. The fifth area of priority is the construction of a cutoff between the scenic highway and the Indiahoma road. This job would remove a serious traffic bottleneck and hazard and would require an appropriation of $75,000 to complete.

6. The sixth area of priority involves construction and rehabilitation of the Indiahoma road within the refuge. Construction costs required to rehabilitate and repair the 6.4 miles of this highway are estimated to be $360,000.

The total capability of construction is estimated by the Bureau of Sport Fisheries and Wildlife to be $1,085,000. Inasmuch as construction on this 6-year master plan of improvement was begun last year by an appropriation provided by your committee, I would like to see the entire amount, less $50,000 under item 4, be appropriated this year. I feel it is imperative that we continue our efforts to modernize the facilities within the Wichita Mountains Wildlife Refuge in order that the thousands of people who visit it annually might realize its full public benefit. Therefore, Mr. Chairman and members of the committee, I ask that you make available in the fiscal year 1967 the appropriation of the sum of $1,035,000 in order to enable the Department of Interior to continue its program of rehabilitation and modernization of one of Oklahoma's and America's most outstanding wildlife-preservation and public-recreation facilities. Your consideration of this request is certainly appreciated. Thank you.

STATEMENT OF HON. LEN B. JORDAN, A U.S. SENATOR FROM THE STATE OF IDAHO

NATIONAL FORESTRY RESEARCH PROGRAM, UNIVERSITY OF IDAHO

Chairman HAYDEN. We will now hear Senator Jordan.

Senator JORDAN. Thank you, Mr. Chairman.

Mr. Chairman and Senator Proxmire, I come this morning to present the case for additional funds for the Forest Service national forestry research program which has a project now underway at the University of Idaho.

This is one of the projects that was completed in 1963 and in operation at a cost of $379,000. Phase 2 calling for $560,000 was not included in the 1966 budget. I am very hopeful that it will be included in the 1967 budget.

This research laboratory is very important to the forestry economy of our State. This is the Forest Research Laboratory for the whole northern Rocky Mountain region, and in this region it is estimated by experts that the value of loss stumpage along is $10 million a year due to bug kill, infestation, and so on.

Fire kill is not the chief destroyer of these forests. Some 25 times as many forestry products are destroyed by bug kill, by infestations of the weevil, as by fire.

The purpose of this Laboratory, Mr. Chairman, is to carry out research programs leading to control of those infestations that wreak such havoc with this fine stand of timber in the northern Rocky Mountain region, and I think it is necessary to have this additional fund as soon as possible so we may proceed with this program.

TREE PLANTINGS

Chairman HAYDEN. What type of trees do you plant?

Senator JORDAN. This is in the largest white pine area in the whole United States and, of course, we have the mixed species. We are using more of the fir and larch and spruce, too, but this is in the heart of the great white pine belt of the Northwest.

We do suffer these terrific losses, and I believe it is a good investment to protect our resources. I think it is one that we shouldn't put off too long. Even though we have emergent conditions, as I am well aware, and great call for funds for other purposes, I believe this is the kind of investment we must carry out if we are to meet this ever-increasing toll of damage to our national forest lands.

STATUS OF PHASES 2 AND 3 OF PROGRAM

Senator PROXMIRE. You say that part of the funds are in the budget and part are not or part were in the budget in 1966, but not in1967?

Senator JORDAN. $379,000 was appropriated and the plant was built in 1963. That part of it was completed, with the understanding that there would be a three-phase program.

Phase 2, which was expected to be funded in 1966 for $560 million was not funded.

Phase 3 is a smaller amount that can come later for $150,000, but this was set up originally as a three-phase program.

Senator PROXMIRE. And you are asking now for phase 2?

Senator JORDAN. Now for $560,000 for phase 2, which is already a year overdue.

I thank you.

Senator PROXMIRE. This has been authorized?

Senator JORDAN. Oh, yes; the project has been authorized in its three phases, yes.

Senator PROXMIRE. It must have been authorized some time ago.

Senator JORDAN. Some time ago, because the first phase was completed in 1963. I was at the plant last fall. There was a lot of activity going on there.

INTERMOUNTAIN AREA FACILITY

They are crowded for room. They need more facilities. It is on the campus of the University of Idaho. Ample facilities are being provided in a room by the University of Idaho, but they do need more buildings, and more greenhouses, and the type of things that they use to carry out these experiments.

Senator PROXMIRE. This is the only facility of its kind in how big an area?

Senator JORDAN. Yes; it is.

Senator PROXMIRE. In the intermountain area, including all the Mountain States?

Senator JORDAN. Yes, in the intermountain region; yes, sir.

Chairman HAYDEN. We thank you for your statement.

Senator JORDAN. Thank you.

STATEMENT OF HON. PAUL H. DOUGLAS, A U.S. SENATOR FROM THE STATE OF ILLINOIS

SHAWNEE NATIONAL FOREST

Chairman HAYDEN. Senator Douglas. We are glad to see you, Paul.

Senator DOUGLAS. Very good to see you, Mr. Chairman.

I would like to appear before you today in support of certain pro-

posed projects to be managed by the Forest Service in the southern part of Illinois.

The Forest Service administers the Shawnee National Forest in the extreme southwestern and extreme southeastern portions of Illinois. This is a region of very low incomes, where five or six counties are probably among the 200 counties in the country with the lowest incomes.

One of the counties, Saline, had been a strong coal mining county. Most of the coal mines have ceased production and the coal miners have been left stranded without jobs. The rest of the region has been largely scrub forest and small farms. There has been a big loss in population, at least 30 percent since 1940. The future of the area lies with recreation. It is a beautiful part of America—a continuation of the southern Ozarks.

Development of Recreation Areas

We want to develop the recreational possibilities of this area and, therefore, I am appearing in behalf of certain recreational projects which would be under the Forest Service.

It is my understanding—we have not yet been able to see the details of the budget—that it is proposed to tighten up expenditures on the recreational facilities managed by the Forest Service. Southern Illinois is an area which needs help and we need more recreational facilities for the American people. I am here to support four things:

Lake of Egypt

First the development of recreational facilities along the so-called Lake of Egypt. There is $100,000 reqeusted in the budget for this development; more is needed. The Lake of Egypt is a byproduct of an REA generating plant. The lake has accumulated enough water for cooling purposes and now has 95 miles of shoreline, as you can see here.

Chairman Hayden. Yes.

Senator Douglas. The Forest Service has about 1,700 acres on the south side of this lake. We would like to develop that as a recreational area and the Forest Service budget asks for $100,000. We certainly want that, but if possible we would like to have it upped to $250,000 if this can be done. This is the only one of the four projects I will mention which is in the budget; it has No. 1 priority among the Forest Service people.

Certainly it is something we think should be carried through and given additional money.

George Rogers Clark Recreation Way

The project which we think should be developed the "George Rogers Clark recreation way," stretching from Shawneetown on the Ohio (a course substantially along this line) to a point near grand tower on the Mississippi.

Chairman Hayden. May I ask has the State highway department made plans on that?

Senator DOUGLAS. No. We would like to have plans. These are private plans and we would like to have $260,000 which is approximately $2,000 a mile for the preliminary plans. This would open up the whole area for recreation and there are a large number of existing individual recreation sites which would then be connected. I have been over this area three or four times. There are a large number of individual sites, none of which individually will attract visitors, but which taken together will.

CONSTRUCTION OF BLACKTOP ROAD

There is one point that came out in the House hearings that I think I should clear up. Congressman Denton asked if there was authorization or precedent for the Forest Service to construct a blacktop road, saying that all the roads that he knew about were dirt roads to help in getting logs out from the Government forests. We checked with the Forest Service and we find that there are precedents and I will submit that letter to this effect for the record, so that this is no breach of precedent.

We don't know exactly what the ultimate cost of the road would be and cannot know until the plans are drawn, but the general plan is to have it follow the contour of the height of the cliffs or mountains and not make it a speedway, but a highway down which people can drive rather leisurely.

(The letter follows:)

U.S. DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
SHAWNEE NATIONAL FOREST,
Harrisburg, Ill., March 11, 1966.

MR. GEORGE SCHERRER,
Manager, Saline Valley Conservancy District,
Eldorado, Ill.

DEAR MR. SCHERRER: The following information is furnished in answer to your telephone request to Mr. Lindal Roberts of the Shawnee National Forest staff, on March 10, 1966, at 4:30 p.m.:

Title 23, United States Code, act of August 27, 1958, authorizes the Secretary of Agriculture to build and maintain forest development roads. It specifies no limits on standards for design or construction. This act continued the authority which Congress has granted since at least as early as 1913. The act also authorizes the Secretary to enter into a contract with a State or civil subdivision thereof. Subsequent Federal aid highway acts, including the act of August 13, 1964, continues the authority of the Secretary of Agriculture to build roads and authorized the appropriation of funds for the forest development road system.

Under the Secretary's authority, the Forest Service has constructed about 910 miles of paved highways in region 9 of a total of 15,000 miles of roads constructed to date in this region. Service-wide, the Forest Service has constructed over 4,000 miles of paved highways. We have also planned and designed at least five highways, which may be considered to have the general characteristics of scenic or recreation highways. Specifically the projects in this category include:

1. The Lewis River Road in the State of Washington.
2. The Agnes Road in the State of Oregon.
3. The Waldo Road in the State of Oregon.
4. The Mammoth Pass Road in the State of California.
5. The Sheep Creek Road in the State of Utah.

In general we believe that the Bureau of Public Roads of the Department of Commerce and the State highway agencies are best qualified to design and construct important segments of the highway system. As managers of national forest land, our concern is that proposed highways including scenic or recreation way that will best serve the public interest. Our primary interest with re-

gard to the proposed George Rogers Clark Highway will be that it be located to best serve the scenic resources available and the recreational developments which we have constructed or planned to build.

Under our authority to enter into contracts with other agencies, in this case we would propose to enter into an agreement with the Bureau of Public Roads and the State of Illinois whereby they would perform or contract for the necessary engineering studies and designs and construction. We would expect to review the studies and designs and jointly agree on the highway location. We are now building the Highland Scenic Drive in West Virginia under such an agreement.

We hope this information will answer the questions raised to you by Senator Douglas and Congressman Gray.

Sincerely yours,

FRANK J. KOPECKY,
Forest Supervisor

DAM ON LUSK CREEK AND LAKE GLENDALE PROJECTS

Senator DOUGLAS. There are two other projects that I should like to mention.

One is a dam, and ultimately the creation of a lake, on Lusk Creek, which would be here in Pope County, which is one of the most depressed in the Nation.

Then there is a small lake—Lake Glendale—which I guess was built with the aid of WPA, and CCC, and the other alphabetical agencies during the late 1930's. I have been there twice. During the summertime it is overcrowded and we would like to have the bathing facilities expanded—more space.

JOB CORPS

Chairman HAYDEN. May I inquire whether the Job Corps is operating in that area?

Senator DOUGLAS. It is, but not on these projects, I am sorry to say. There is a Job Corps operating at Crab Orchard Lake. This would be here, a Job Corps operating in here.

There is another Job Corps operating down close to the bank of the Ohio at Golconda. I have inspected both of those camps.

Chairman HAYDEN. Do they engage in roadbuilding?

Senator DOUGLAS. Yes; somewhat, and frankly I think that this might be a very productive use of the Job Corps. If this meets with the aproval of the committee I would be very glad to suggest to Mr. Shriver that he put either a third Job Corps there or detach some men from the two existing Job Corps.

I don't know quite whether he would agree with that, of course. There may be some problem of distance.

The Forest Service recommends another Youth Corps over on the western portion of the area in Union County, which is not as depressed itself as the surrounding counties because it is an orchard and fruit county, but if the Youth Corps or Job Corps, so-called, is to be expanded I think it might very well be used here.

I think you would probably need some more skillful work to make out the cost estimates and draw the engineering plans. They could serve as assistants and so forth. It might be a good project for them.

Chairman HAYDEN. I mentioned the corps because during the Civilian Conservation Corps time I know in my own State roads were built and they were very helpful.

Senator DOUGLAS. Yes; the CCC did splendid work at that time and they were down here at that time, too. That is over 25 years ago, between 25 and 30 years ago.

SUMMARY LIST OF PROJECTS

Those are the four projects, first a recreational area at Lake of Egypt; second, this road; third, Shawnee Lake (Lusk Creek); and fourth, Lake Glendale bathhouse, and I commend these to your attention and I have more a detailed statement which I will ask to have filed.

I appreciate your waiting for me.

Thank you very much.

Chairman HAYDEN. Thank you for your appearance.

(The prepared statement follows:)

MARCH 15, 1966.

STATEMENT OF SENATOR PAUL H. DOUGLAS, DEMOCRAT, OF ILLINOIS, BEFORE THE SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES OF THE SENATE APPROPRIATIONS COMMITTEE

Mr. CHAIRMAN, We are fortunate to have in the southern portion of Illinois hundreds of thousands of acres of land richly suited for recreation purposes. A good part of this is in the Shawnee National Forest. This forest was established in 1933 and consists of two separated units, in the southeastern and southwestern parts of the State. The counties of Illinois touched by the Shawnee National Forest have yet to realize their full economic potential. Today, thanks to the automobile and increased leisure time resulting from our growing prosperity, Americans are on the move and are seeking out pleasant recreational areas. As the members of this committee well know, and as was stated in the report "Outdoor Recreation for America" presented to the President in 1962, "When facilities are there, people use them."

Southern Illinois economic problems are all too well known to require much elaboration or documentation here. Suffice it to say that the rate of unemployment in the six counties of Gallatin, Hardin, Saline, Pope, Johnson, and Union averages 12 percent or almost four times the national rate. There are good and sufficient reasons for this unhappy state of affairs. The population of the area is primarily rural with less than 20 percent of the people living in 10 small towns. The area has lost about 30 percent of its population since 1940. This loss, particularly the migration of young adults, is a serious problem locally. A steady drop in employment opportunities due to mechanization in coal mining, abandonment of submarginal farms, and consolidation and mechanization of the better farms have combined to force people to seek their livelihood elsewhere. Those who have remained have often been unable to find work and the area is classified generally as one of substantial and persistent unemployment. My own work on behalf of the area redevelopment legislation was primarily inspired by the conditions in this part of Illinois. The brightest hope for the realization of the full economic development of this area lies in its potential for recreational and tourism development. The Federal Government recognized the validity of this approach in 1936 and the Shawnee National Forest was established. Two years later, work was begun on what is now the Crab Orchard National Wildlife Refuge. Neither of these is as well developed for recreation as it should be and there are other resources which have not yet been developed at all.

The North-Central States contain about 29 percent of this Nation's population, but only 11 percent of its recreation area. Conserved, protected, and developed, the recreational resources of southern Illinois can give pleasure to millions of Americans, and form a permanent economic asset to the State and the Nation. Let me emphasize that this area is ripe for recreational development. The increasing prosperity and mobility of our people have given them more leisure and the desire to explore and enjoy this beautiful land of ours. The role of the Shawnee Hills as a major recreational area in the Midwest has not yet been realized. Over 1½ million people live within 100 miles of this area; 40 million live within 400 miles.

Long-range plans for the Shawnee Hills envision lakes, roads, hiking trails, and bridle paths to expand and unify the many points of interest and enjoyment in the area. These plans include camping and picnic areas along the lakes and rivers and in open and wooded spaces, as well as historical, archeological, scenic, and other recreational sites—all accessible and all provided with adequate sanitation and safe water.

I am here today to tell you about a few developments which can and should take place this year. I have in mind four specific projects, all of merit and all supported widely by the people of southern Illinois. I want to say a word about each of these projects.

George Rogers Clark Recreation Way.—Opportunities for recreational activities already exist throughout southern Illinois, but so far they have not been unified. Facilities for swimming, boating, horseback riding, fishing, camping, cave exploration, and sightseeing are present, but they are scattered about the area so that the average tourist may happen upon only a few and be unwilling to devote time and effort to locating the others. A scenic road winding in and among these sites would tie them together in an attractive vacation package for the weekend week-long vacationer. Dr. Frank H. Thomas and Dr. Theodore H. Schmudde of the Department of Geography of Southern Illinois University, in their recent study of the feasibility of such a road, stated:

"Most of the scenic attractions and recreational sites of southern Illinois are spread along the entire east-west extent of the Shawnee Hills, yet none of these sites in itself is significant enough, when judged by national standards, to attract large numbers of visitors from outside of the local area. Tied together by the scenic highway these scenic sites would add up to a major natural attraction distinctive in the Middle West and—if properly developed and promoted—would draw large numbers of visitors from other areas. Moreover, the lack of a connecting link between the several north-south arterial highways leading to the metropolitan populations must be overcome by a suitable road before the bountiful recreational potential of the Shawnee Hills can be developed economically and with real hope of success by either public or private means."

The Thomas and Schmudde study estimates an increase in recreational income from its present level of about $4 to $35 million annually, after the road and related facilities are completed. The Illinois Board of Economic Development estimates that approximately 2,300 jobs will be generated by the increased recreational income. The road would pass through or near over 200 points of interest, including scenic, historical, archeological, botanical, and geological attractions. The road would not parallel or duplicate any major highway, but it would be joined to 10 major north-south highways now carrying 25 million people annually. The George Rogers Clark Recreation Way would tie together the presently scattered individual attractions and link the north-south highways that provide access to the major metropolitan centers, such as Chicago, St. Louis, and Memphis. Stretching from the Ohio River on the east across Illinois to the Mississippi River on the west, this scenic parkway would have an immense impact on the area traversed and on the well-being of its people. It would wind through some of the most strikingly beautiful countryside in the Midwest. The terrain varies from steep, rough hills and high bluffs along both rivers to the rolling hills of the central section. Narrow ridgetops look down on deeply cut wooded valleys. On the eastern end of the recreation way would be historical Old Shawneetown—the oldest town in Illinois and once the gateway to the West. This is the land of Davy Crockett and Daniel Boone. The western terminus overlooking the Mississippi would join the Great River Road leading to the metropolitan centers of St. Louis and East St. Louis.

The George Rogers Clark Recreation Way would quickly become the main economic artery of southern Illinois, offering splendid vistas of natural beauty and linking all of the scenic, historical, archteological, and botanical attractions of southern Illinois. The parkway would meet national as well as regional objectives and needs. It would be a boon to the area it serves and a source of enjoyment for those from near and far who use it. The U.S. Forest Service is ready and able to undertake the planning of this project. The Forest Service believes that it has authority to undertake project (see attached letter from Frank J. Kopecky, forest supervisor of the Shawnee National Forest, Harrisburg, Ill., to George Scherrer, manager of the Saline Valley Conservancy District, Eldorado, Ill.). The State of Illinois guarantees its cooperation and support, and the people of the area affected are wholeheartedly behind the project. It is estimated that the Forest Service will need a fiscal year 1967 appropriation of $260,000 for the preliminary planning of the engineering and recreational aspects of the George Rogers Clark Recreation Way. I cannot too strongly commend this project for your committee's consideration. It promises to be the vital link between the development needs of southern Illinois and the dramatically accelerated nationwide interest in outdoor recreation.

Shawnee (Lust Creek) Lake.—Another project which has considerable potential both for the economic development of the surrounding area and for the enjoy-

ment of tourists from Illinois and adjacent States is the proposed Shawnee Lake. Lust Creek, in the Pope County section of the Shawnee National Forest, has for a long time revealed its potential for recreational development. What is needed is a dam on Lust Creek and a resulting reservoir—Shawnee Lake—which would attract vacationers, sportsmen, and naturalists from far and near. The damsite of the proposed Shawnee Lake on Lust Creek is located 20 miles south of Harrisburg, Ill., and 6 miles northwest of Golconda, Ill. The lake would have a 55-mile wooded shoreline, would cover a surface of 2,430 acres and would have a maximum depth of 115 feet at the damsite. The lake would be developed with camping grounds, picnic areas, hiking trails, swimming and boating facilities. Development of the lake site would stimulate private investment in service facilities, such as overnight accommodations and restaurants, and I am told that it is estimated that the project would generate benefits of $2.45 for every dollar invested. The Forest Service has already made feasibility studies of the proposed dam and lake. It is reported that the project is feasible from an engineering standpoint as well as highly justifiable from an economic standpoint. In order for work on this long-desired project to go forward, the Forest Service would need a fiscal year 1967 appropriation of $170,000 for preliminary engineering, design, and planning. I urge the committee's sympathetic consideration of this proposal.

Lake Glendale bathhouse.—The Lake Glendale Recreation Area in the Shawnee National Forest, Pope County, Ill., has been a place of relaxation and enjoyment for millions of Midwesterners for over three decades. The present bathhouse at Lake Glendale was constructed in the late 1930's and the facilities provided were adequate to meet the demands of that time. Since then, however, the number of people wishing to use this facility has increased so rapidly that the existing structure is wholly inadequate. It has been in use for approximately 25 years, contains eight changing stalls, one shower, and two toilets on each side. It was designed to handle a peak capacity of 500 people at one time, while during current peak usage periods (summer weekends) an average of 800 people per day attempt to use its facilities. The existing bathhouse is physically incapable of serving the people visiting the Lake Glendale Recreation Area. It has deteriorated to a point where its appearance as a Government facility is embarrassing and belies our stated purpose of providing adequate recreational facilities for the American people. To accomplish minor maintenance repairs this year will cost approximately $1,000. Major repairs, however, such as new roofing and sheeting, new interior finishing, and improved sanitary conditions are needed. Spending $10,000 to $20,000 to improve this structure will not, however, alleviate the present crowded conditions nor allow for increased future use. It is estimated that last year's use figure could have been increased by 10,000 visits were it not for the crowded conditions. People hesitate to use an area if they know its facilities are overcrowded, in poor condition, and unsanitary. A new bathhouse would correct these conditions. An entirely new bathhouse for Lake Glendale would cost an estimated $105,000. A new structure would be a better investment of the taxpayers money than continued patchwork repairing of the existing dilapidated structure. I believe the necessity of building a new bathhouse at Lake Glendale is beyond question. I urge the committee to recommend a fiscal 1967 appropriation of $105,000 for the Forest Service for construction of this much-needed facility.

Lake of Egypt recreational development.—The Lake of Egypt is an impoundment built for cooling water to use in a steam-generated electrical powerplant. The primary purpose of the lake is to supply water to the generating plant. The lake was built in 1962 in the "Shawnee Gap" between the two separate units of the Shawnee National Forest. The Forest Service has acquired 1,730 acres of land adjacent to the lake for recreational development. The lake is within a short driving distance from several main arteries, and the proposed George Rogers Clark Recreation Way would pass along its south side. Of the 93 miles of shoreline, approximately 5 miles are within the national forest. This shoreline and the surrounding area is suitable for camping grounds, picnic areas, a swimming beach, hiking and horseback trails, hunting and fishing. The recreational potential of this Lake of Egypt property has not yet been tapped. Some of the needs are as follows: A visitors information center with maps, photos, and displays, campgrounds with space for 250 family units, picnic grounds for 150 family units, a swimming area and a bathhouse, hiking trails, horseback riding trails, a boat launching ramp and parking area, roads, and sewage facilities. The total estimated cost of the full development of the Lake of Egypt Recreational

Area is $1,500,000. The budget for the Forest Service for fiscal 1967 proposes the appropriation of $100,000 to begin these developments. When we consider the rapidly increasing recreational needs of our people it is obvious to me that token development of these recreational facilities is simply not enough. I believe that an additional $150,000 over and above what is proposed in the budget is the very least that ought to be devoted to this development during the fiscal year 1967. I hope that the committee will come to share this view.

I urge your committee to give very careful consideration to the merits of these projects. I am confident of the value of these projects, and I hope the committee will come to share this confidence. These projects, long sought by the people of southern Illinois and supported from all quarters, should go forward this year. It is both logical and desirable that this Nation develop its areas of natural beauty for the growing recreational needs and the enjoyment of its people. Where this larger goal can be fostered and at the same time an important stimulus given to the area that has not shared our general prosperity, I think we have a duty to act.

PREPARED STATEMENT

Chairman HAYDEN. Senator Stennis planned to be here today but he is presiding at another committee hearing. Statements which he had planned to make will be printed in the record.

(The statements follow:)

FOREST TREE SEED LABORATORY AT STATE COLLEGE, MISS.

Mr. Chairman, one of the more critical problems in southern forestry is that of improving the quality of tree seed and of developing effective and economical practices for the use of seed in tree orchards, nursery operations, and planting programs. The U.S. Forest Service has recognized this urgent problem by including in the national forestry research program a proposal to construct a tree seed laboratory.

Seed research at this laboratory would emphasize production and handling of the seed of important southern hardwood timber species, about which little or nothing is known at the present time. It would seek to determine the requirements of seed of these species for successful storage, sowing, and early germination. Seed treatments to reduce losses to pests will also be undertaken to assist in direct seeding programs involving hardwoods.

The second phase of this research will be to determine the nutritional and other requirements of the seedlings of various hardwood species for early survival and good growth, as well as to guide proper site selection for these species. Research on important unsolved problems in the handling of pine seed would also be included.

Forestry research has contributed much in recent years to the productivity of southern forest lands. In my State of Mississippi, I have seen gullied fields successfully reclothed with plantations of pine that will soon produce substantial amounts of timber for new or expanded wood industries. I have seen plantations of cottonwood that yield commercial pulpwood thinnings only 4 years after establishment. And I have seen the work of the forest geneticists that is developing hybrid trees that grow fast and resist insects and diseases.

I am told that there are now over 3,500 acres in seed orchards over the South—orchards of forest trees which have been set out to produce improved seed. There are another 4,700 acres of specially selected forests set aside for seed production purposes because of their high quality. I have also learned that the practice of sowing seed directly into forest land instead of planting seedlings has been gaining favor as a way to cut the cost of reforestation.

These are important advances which mean a great deal to the protection of our soil against erosion and to the continued support of pulpwood, veneer, lumber and other wood industries which have been steadily adding to our economic growth over the past several years.

Unfortunately, there are problems that are becoming critically serious in southern forestry. These problems concern forest tree seed—its collection, storage, germination quality, planting, and protection from pests of all kinds. Large quantities of seed are now used in direct seeding and tree planting programs in the South and larger quantities will be used in the years immediately ahead. Much of this seed is of preferred species for use in upgrading the quality

and value of the forests. An increasing volume of seed will be coming from seed orchards where superior strains have been developed through parent tree selection and breeding. This is valuable seed and the utmost care must be used to insure that every seed produces a usable seedling. Forest tree seed and seedling buyers and users are increasingly aware of the importance of verified seed in forestry programs just as farmers are concerned over seed quality when planting their crops. All of these facts point to the need for more knowledge about tree seed collection, processing, storing, certification standards and protection from pests.

Forest land owners and foresters who areengaged in seeding and planting programs have discussed these problems with them. They point out how little is really known about the treatment and storage of seed to protect its germination quality, how to store it to protect this quality, how to sow it in nurseries or directly in the forest to insure quick and complete germination, and how to treat the seeds to keep them safe from birds, mice, insects, or seed damaging organisms. I am told that some research has been done on some of these problems for pine seed but relatively little on hardwood seeds. Thus, it is clear to me that there is a serious lack of knowledge in a key area in the whole chain of timber production problems—that of tree seed. Unless more research is directed to correcting this deficiency in knowledge, our forestry programs in the South are going to be seriously handicapped.

The Congress recognized this urgent need by providing the sum of $20,000 last year for the development of plans and specifications for a tree seed laboratory to be located at Mississippi State University at State College, Miss. The Forest Service advises me that the architectural design and plans will be completed so that construction could be initiated in fiscal 1967.

The estimated construction cost is $250,000, which is indeed a modest sum when considered in relation to the very serious needs in this field of research. Mississippi State University has one of the finest forestry schools in the Nation, and this is of utmost importance. The Forest Service has told me that the "seed and seedling research will benefit greatly from excellent cooperative opportunities" at Mississippi State. And so I respectfully urge, Mr. Chairman, that this committee recommend an increase of $250,000 for the construction of this much-needed laboratory.

FORESTRY HYDROLOGY LABORATORY AT OXFORD, MISS.

Mr. Chairman, in fiscal year 1965 Congress appropriated the sum of $35,000 to develop architectural plans and specifications for a Forest Hydrology Laboratory to be located at a site in Oxford, Miss., adjoining the campus of the University of Mississippi. The estimated construction cost of this facility is $450,000.

Research is underway on two broad and related problems in southern Coastal Plain forests: (1) to develop the principles and forest land practices for reducing storm runoff, erosion, and sedimentation from eroded and rehabilitated forest watersheds and to improve methods of establishing and maintaining soil-binding vegtation on such areas; (2) to determine the effects of soil, cover conditions, and management of forest lands on the volume, quality, and distribution of water yield and the addition of water to groundwater recharge areas.

Some progress is being made in this research; methods of establishing pine plantations are fairly well worked out. What is needed immediately, however, is intensive work to develop an understanding of soil-vegetation-water relationships so that timber harvest and other forest uses may be developed safely without serious impact on soil and water values. Also, much more needs to be learned about the Coastal Plain as a recharge area for underground storage and streamflow. This information is necessary for proper development of forest cutting practices which have a profound effect on floods, water quality and maintenance of usable water yield from forested watersheds.

The proposed laboratory at Oxford will provide for modern research techniques and controlled experiments on a model scale, thus speeding the work and making it more effective. No other forest watershed laboratory of this type is planned for the broad Coastal Plain area of the South.

A building site for this Laboratory is presently owned by the Forest Service, and the plans and specifications will be completed in time for construction to be initiated in fiscal 1967. This Laboratory is urgently needed and has a high priority in the program of the Forest Service; it would be of great value to a large section of our Nation. I therefore strongly urge, Mr. Chairman, that this committee recommend an increase of $450,000 for the construction of this Laboratory.

FORESTRY RESEARCH PROGRAM, SOUTHERN HARDWOODS LABORATORY, STONEVILLE, MISS.

Mr. Chairman, the broad goal of research at the Southern Hardwoods Laboratory, maintained by the U.S. Forest Service at Stoneville, Miss., is the improvement of forest management and forest use of the South's 70 million acres of commercial hardwoods. Sixty percent of national hardwood output is from the South, and the southern forest industry depends on hardwoods for 40 percent of its raw material.

Work of the laboratory is conducted with active financial support of over 50 industrial and private landowners and the Mississippi State University. In addition to laboratory, greenhouse, and nursery phases of research, field studies are underway on three experimental forests and a number of other research areas furnished by cooperators in the States of Alabama, Arkansas, Florida, Louisiana, Mississippi, and Texas.

As Congress provided funds, the Forest Service has gradually increased the staffing and facilities to meet the longstanding need for research in southern hardwoods. During the last 5 years, buildings and greenhouses have been erected to provide laboratories for silvicultural, disease and insect research. The staff, including a soil scientist, physiologist, pathologist, entomologist and wood technologists, totals 14 professional workers active on approved research projects. Over 7,300 foresters, scientists, landowners, and hardwood users have met at the Southern Hardwoods Laboratory to review its research results in the last 3 years. Sixty-five publications reporting research results have been made available in the same period of time.

Although significant progress has been made at Stoneville, an increase of $250,000 is needed this year to bring the program up to the level of research anticipated when the Laboratory was dedicated.

I have previously requested the Forest Service to provide for the record a detailed statement on the needs for this research, but I also want to briefly mention these areas.

Need for research in silviculture

There is now a tremendous need to begin long-deferred research in the alluvial swamp tupelo-cypress forests which are concentrated on millions of acres of lower Alabama, Mississippi, and Louisiana. Only the most rudimentary survey-type research has been done to determine the broad problems of managing, regeneration and utilizing the valuable second-growth forests in these alluvial swamplands.

Hardwood forests are the preeminent game habitat of the South but when populations of deer and other game become large, the animals tend to destroy or seriously damage young trees of commercial species. A pressing need is to determine ways to alleviate or prevent this damage to assure good timber crops while the forest continues to satisfy the ever-increasing demand for game hunting.

Expansion in the one-man areas of soil-moisture-tree research and the tree improvement research for hardwoods is now of great importance as problems of management of valuable hardwood species intensify. A measure of this intensity is found in one company where over $200 per acre is being spent to establish cottonwood plantations, the wood of which will be used in the manufacture of fine papers.

Need for research in forest protection

Hardwood insect research at the Laboratory is concentrated on insects that bore in living hardwoods causing lumber degrade amounting to millions of dollars annually. Mill scale studies have shown that an annual loss of $41 million is sustained in oaks degraded by the boring carpenterworm. Biological studies of the worm have shown that the female moths produce a powerful sex attractant. This suggests the possibility of using the attractant to collect and destroy the male moths, thus preventing the production of fertile eggs. The present two-man insect research staff needs assistance to expand into studies of site-species of relationship and silvicultural practices that will improve tree vigor and make the trees more resistant to insect attack.

Annual losses from diseases sustained by southern hardwoods are estimated at $2 billion. The current two-man research program at the Southern Hardwoods Laboratory needs strengthening if these losses are to be reduced appreciably. Increased research is needed in wood rots, root rots, and cankers, emphasizing the biology of disease-producing organisms in relation to site and management practices as a basis for practical controls. Many root, bark, and leaf fungi have been found but little is known of their importance or control.

Mr. Chairman, the appropriation of these increases will enable the research program at the Southern Hardwoods Laboratory to move forward as planned. The benefits to be derived from such research will far exceed the cost. I strongly urge the subcommittee's approval of this increase.

PREPARED STATEMENT

Chairman HAYDEN. Senator Hruska also is prevented from attending this morning because of a conflicting appointment. He has asked that a statement which he would have made be entered in the record. That will be done.

(The statement follows:)

SHELTERBELT RESEARCH, UNIVERSITY OF NEBRASKA

My purpose today is to urge your support for an expanded program of forestry research to be carried on by the U.S. Forest Service at the University of Nebraska.

Specifically, an appropriation of $350,000 is requested as a nonrecurring item for construction of an office-laboratory and greenhouse facility, and an appropriation of $200,000 for program support for the year. These funds would appear under the category forest research in the appropriation for the Forest Service.

Our experience with the shelterbelt program of the 1930's taught us that there were great gaps in our knowledge about trees and their potentialities. The Forest Service entered into a cooperative agreement with the University of Nebraska to begin the necessary research, and since that time, research has been carried on, but the effort has been on a small scale. The University of Nebraska has made space available for the Federal research scientists stationed at Lincoln, but the facilities are admittedly inadequate. Furthermore, demands on the university for space and facilities are heavy and increasing.

A laboratory is needed that will combine adequate space for the professional staff with efficient facilities for scientific research. Such a laboratory is estimated to cost $350,000. Architectural design and specifications will require $28,000. A building site has been offered by the University of Nebraska.

Trees have been planted in the Plains States since first settlement. Initially, they were planted for shade and beauty; to make farmsteads into homes. Since that time, we have learned by experience that properly designed tree plantings reduce the effects of strong winds and droughts. Also, tree shelterbelts, if properly designed, can be used to protect soils from blowing, control snow drifting, increase yields of field crops, and reduce home heating costs. Livestock sheltered by tree plantings hold weight better with less feed in winter; losses from blizzards are reduced.

There is a need to develop better trees for the Plains; trees that will tolerate heat and cold, drought and high moisture, wind and hail, and salt and alkali. Numerous varieties of trees have never been tested on the Plains; superior trees have not been sought systematically.

Trees grow well on some Plains soils, poorly on others; tree species differ in response to soils. Information is needed on the soil characteristics that influence tree growth. Effectiveness of wind barriers depends in part on the height and growth forms of trees. To design windbreak systems properly, the height and growth form for each tree species on the important soil types of the Plains and in each climatic situation must be known.

Trees in many shelterbelts lose vigor and become less effective when only 15 or 20 years old. Studies are needed on how they should be managed to maintain their vigor and effectiveness as wind barriers over a long period of time.

Trees in the nonforest environment of the Plains are especially subject to damage from insects and diseases. Methods to combat these damaging disease and insect pests must be developed—either by effective and practical control measures or through developing disease and insect resistant trees varieties or strains.

To carry on research work along these various lines on an adequate basis, there is requested an appropriation of $200,000 for the coming fiscal year in addition to the small allotment—$53,000—being provided for the program already being carried on.

SUBCOMMITTEE RECESS

Chairman HAYDEN. We will stand in recess until 10 a.m., March 16, when we will hear public witnesses.

(Whereupon, at 11:20 a.m., Tuesday, March 15, 1966, the hearings were recessed, to reconvene at 10 a.m., Wednesday, March 16, 1966.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1967

WEDNESDAY, MARCH 16, 1966

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10:45 a.m., in room 1224, New Senate Office Building, Hon. E. L. Bartlett presiding.

Present: Senators Bartlett and Byrd.

DEPARTMENT OF THE INTERIOR

NONDEPARTMENTAL WITNESSES

STATEMENT OF HON. EVERETT M. DIRKSEN, A U.S. SENATOR FROM THE STATE OF ILLINOIS

INTRODUCTION OF WITNESSES

Senator BARTLETT. The committee will be in order.

This morning the subcommittee will hear nongovernmental witnesses on a variety of subjects.

Because of a conflict with another Appropriations Subcommittee hearing, it was necessary to postpone the start of this hearing for 45 minutes. I regret it if the delay has caused any inconvenience to those who planned to appear.

All of the witnesses have been requested to prepare written statements for the record. I ask that each of you file his statement and then summarize it rather than read it.

The first witness will be the Senator from Illinois. Senator Dirksen is accompanied by Dr. Tudor and by Mr. Gott.

Senator DIRKSEN. It is my pleasure to present two witnesses; Dr. W. J. Tudor, whom I affectionately call Bill, who is a public relations and congressional liaison for Southern Illinois University.

Senator BARTLETT. I am becoming well acquainted too with Mr. Tudor.

Senator DIRKSEN. And Mr. Gott is here. He is executive director of the American Walnut Manufacturers Association. He appears here on that item too, so I will present both of them.

Senator BARTLETT. Thank you, Senator Dirksen, for having appeared.

59-370—66—pt. 2——47

DISTRESSED AREA

Senator DIRKSEN. Mr. Tudor is here for a Forest Service Appropriation request for $690,000.

By way of preliminary, let me say I suppose every State becomes somewhat distressed over a period of years. In southern Illinois that has happened in part because of the decision of our coal industry and its concentration, and we have not done too much with the timber industry and it has been rather difficult. It embraces an area of about 30 counties.

UNIVERSITY COMMUNITY INVOLVEMENT

Fortunately, what was once upon a time a normal school became Southern Illinois University with a huge enrollment and it has become a focal center of interest and it gives direction to the affairs of people and particularly the youngsters who get out of high schools. because this is close by and it gives them something to which they can anchor.

Now, the relations between the forest service and the Department of Agriculture and the university have been very sweet over a period of years and they have cooperated fully.

TIMBER AND BLACK WALNUT RESEARCH

Now and then there are needs in order to keep abreast of what has to be done and that means research, particularly in the field of timber and black walnuts. If we do not utilize the two resources we have there, or three; oil, coal and timber, then I do not know quite what to do.

And so, research is at the basis of this game because ultimately it attracts industry and picks up this lag and it solves many problems.

FOREST SCIENCE LABORATORIES AND OFFICES

The relief load area in that particular part of the State has been extraordinarily high over a long period of years. Dr. Tudor will tell you what he has in mind, and I want to fully support that additional request because I think it is needed and it is one of the things we can timely do to meet a problem that has been growing for a long time.

BLACK WALNUT TIMBER AND EXPORT DRAINAGE

Then, in behalf of Mr. Gott, I want to say that I have been here and testified on the need for doing something with respect to walnut timber. We have a type of soil in Illinois where that can be done, but there are other States where the soil and conditions are also equally conducive to the production of walnut timber.

The amount of export and the increased usage has put a terrific drain on walnut lumber and even though the veneers are getting thinner every year it still does not meet the problem. Sooner or later if we do not do something about it we will have to be looking for substitutes. But frankly, builders and architects and others never think in terms of substitutes when walnut or walnut veneer is the thing they really want.

FISH PROTEIN CONCENTRATE

Before I leave, Mr. Chairman, there is another subject on which I wish to comment.

Over $1,700,000 has already been spent by the Government in attempting to develop a process for the production of fish flour which

was offered to it free of charge 7 years ago. In comparison to other expenditures in the national budget, the sum of $465,000 asked for here may not seem so large, but it should be pointed out that it is an unnecessary duplication at the taxpayers' expense of a process already known to be in existence and in operation at the present time.

The VioBin Co., in Monticello, Ill., has been producing fish protein concentrate for approximately 10 years. They have an investment in plant facilities of approximately $3 million, and their sales of this product are currently running at $600,000 per year to markets in 41 countries.

Despite the fact that fish flour made by the Government from a process similar to that used by the VioBin Corp. has been pronounced by scientists for the National Academy of Sciences to be "safe, nutritious, wholesome, and fit for human consumption," the Food and Drug Administration refuses to approve it.

It would seem to me that the taxpayers are entitled to some answers in these circumstances; $1,700,000 has already been spent by the Government on this process and somewhere along the line someone should have ascertained whether these efforts when complete would have the approval of those agencies responsible for passing on the product.

I find it hard to believe that those dedicated public servants who constitute the personnel of the Bureau of Fisheries would deliberately develop a product which the Food and Drug Administration considers unfit for human consumption. Nor can I conceive that the scientists who have so carefully tested this product and pronounced it wholesome can be so derelict in thir duty to the public as to approve a product in any way substandard to their specifications. Certainly some reappraisal seems to be in order.

Mr. Chairman, the resourcefulness, research, and know-how of private enterprise in this country has done much to make us the greatest Nation on earth. We are willing to develop new inventions, new processes, and new ideas, and these have usually come from private enterprise. I would like to see more encouragement given to this section of the economy, and I do not like to see the promising efforts of enterprise needlessly and expensively preempted by Government agencies, more particularly in an area where the results, as here, lack the approval essential to the success of the product. I urge you to disapprove this appropriation.

STATEMENTS OF W. J. TUDOR, SOUTHERN ILLINOIS UNIVERSITY; DONALD H. GOTT, EXECUTIVE DIRECTOR, AMERICAN WALNUT MANUFACTURERS ASSOCIATION; RALPH C. WIBLE, STATE FORESTER, PENNSYLVANIA; ROBERT T. RADFORD, PRESIDENT, WATERSHED FIRE COUNCIL OF SOUTHERN CALIFORNIA, AND CHAIRMAN, WATERSHED COMMISSION, COUNTY OF LOS ANGELES; H. E. RUARK, DIRECTOR, GEORGIA FOREST RESEARCH COUNCIL; JOHN D. RITCHIE, REGIONAL VICE PRESIDENT, AMERICAN PLYWOOD ASSOCIATION; NORMAN HERREN (REQUEST OF SENATOR HOLLAND); JOSEPH S. MILLER, WESTERN FOREST INDUSTRIES ASSOCIATION; KYRAN McGRATH, STATE OF ILLINOIS

Senator DIRKSEN. Now Mr. Gott and Dr. Tudor will give you their stories.

I commit you to the sympathetic hands of the chairman.

Senator BARTLETT. I will say you come under splendid auspices.

PREPARED STATEMENT

Mr. TUDOR. It is a real privilege to appear before you and I will be glad to follow on your suggestion and file a statement that has been prepared. I have a copy of it and I will summarize very quickly what we have in mind and what our concerns are.

(The statement follows:)

FOREST SCIENCE LABORATORIES AND OFFICES

I am William J. Tudor, special assistant to the vice president at Southern Illinois University, Carbondale, Ill.

I have had the privilege and pleasure of appearing before this subcommittee several times in the past to present testimony favoring a stronger Forest Service research program. The many courtesies you have shown me on these occasions are greatly appreciated. Too, I want to thank you for the increased appropriations you have made available to the Forest Service over the past few years so that forestry research of vital importance to Illinois and other parts of our Nation could be strengthened.

It has been the policy of Southern Illinois University to not appeal to this committee for more funds except in extremely critical situations. We have now reached one of these stages. My purpose in appearing before you this year is to recommend that you add $690,000 to Forest Service appropriations for the construction of forest science laboratories and offices at Southern Illinois University.

During your hearings in 1963, I presented testimony favoring the construction of these research facilities. You very generously appropriated funds for the preparation of architectural and engineering plans for the recommended building. The plans are now essentially complete and will be ready for contract bidding before the end of this fiscal year.

In my previous testimony, I stated that the university would work with the Forest Service to select a construction site at Carbondale and furnish the land needed without cost to the Federal Government. We have provided the Forest Service with a prime area on the campus under a long-term, free lease, arrangement. The site is the finest we had available. It is located in a small tract of native timber that is the heart of the university campus. Our agriculture building, where our forestry department is housed, and the university library are immediately adjacent to the area. Furthermore, all utilities are available on the site and thus costly connections have been avoided.

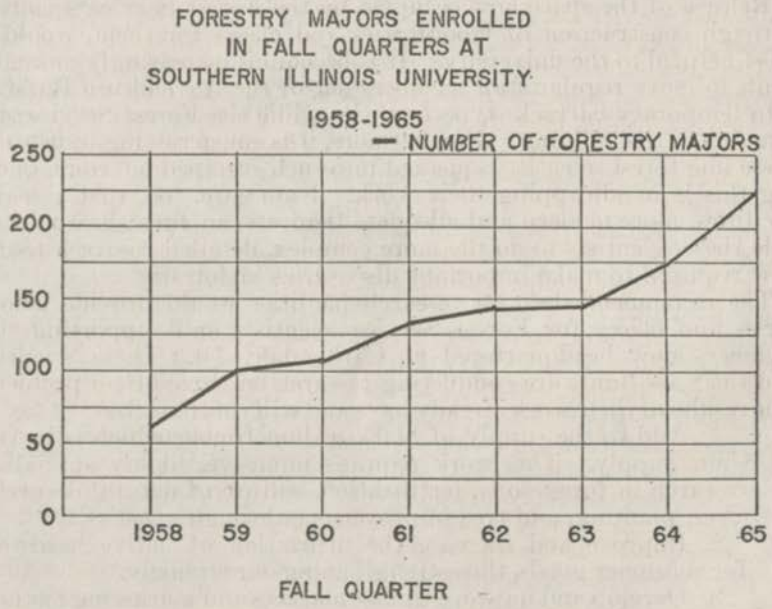
So, all the necessary planning and local arrangements have been completed. Contracts can be let and the work undertaken just as soon as construction funds are provided.

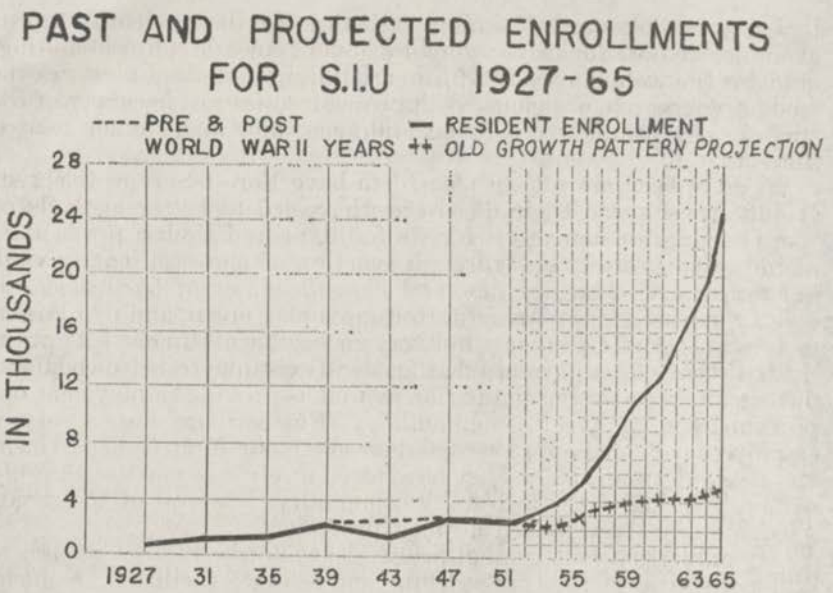
The Forest Service has for over a decade maintained and staffed a research office on our campus at Carbondale. We have furnished, as best we could, and without cost to the Forest Service, offices, labora-

tories, greenhouses, and similar facilities for their scientists. For example, we now furnish a suite of offices in our agriculture building, land for the walnut research farm, a building and some facilities for wood-use research, automatic data processing services for many of the studies they conduct, use of our libraries, and many other related services.

We have been more than pleased to have Forest Service scientists at our university. Their discoveries have led to better methods of tree planting, of managing forests for improved timber production, of improving forest trees through genetics, of more efficient ways to harvest timber crops, of new and expanded uses of hardwoods, of greater marketing opportunities for our timber crops, and to a larger, more stable forest products industry in southern Illinois. Application of these research results has and will continue to help woodland owners and wood-using industries, as well as provide employment opportunities in many rural communities. Furthermore, Forest Service employees have made major contributions to our forestry department and research programs. They have fitted nicely into and are a highly valued addition to the university community. Several of the senior scientists have been named adjunct professors.

Our university construction program has not been large enough to keep pace with the need for teaching and research facilities. Student enrollment in the university has increased at a fantastic rate over the past several years, as shown in the chart "Past and Projected Enrollments for S.I.U., 1927–65." The enrollment in our forestry department, which was started in 1958, has jumped to 226 undergraduates





and 9 graduate students this year. The number of agriculture majors has increased from 112 in 1948–49 (my first year at Southern Illinois University) to 752 this past fall. We also now have 55 graduate students in a program that has only been in existence a short time.

Release of the space now occupied by the Forest Service scientists, through construction of laboratories and offices for them, would be most helpful to the university. It is becoming increasingly more difficult to move regular staff members out of the Agriculture Building into temporary barracks-type facilities while the Forest Service staff remains in the building. Furthermore, it is embarrassing to us to see these fine forest scientists squeezed into such cramped quarters, knowing this is handicapping their work. I am sure, too, that research facilities, more modern and adequate than we can furnish, would enable these scientists to do the more complex, detailed research that is now required to make important discoveries in forestry.

The recommended forest research facilities would provide laboratories and offices for Forest Service scientists and supporting staff members now headquartered at Carbondale, Ill. These scientists and their assistants are conducting research on three broad problems. The results of their work already have and will continue to—

1. Add to the supply of black walnut timber which is in very short supply. This work requires intensive, highly specialized research in forest soils, fertilization, culture of natural occurring trees, planting, and tree improvement through genetics.
2. Improve and increase the utilization of native hardwood for consumer goods, thus strengthening our economy.
3. Develop and improve timber markets and marketing methods to the benefit of forest land owners and wood-based industries.

As planned, the building is not elaborate but is attractive and efficiently arranged. (See architect's sketch.) It would meet the current needs of Forest Service scientists at Carbondale and would be a satisfactory addition to the university campus.

The total cost of the facility, including the basic scientific equipment needed to make it operable immediately is estimated to be $690,000. I recommend that this sum be added to the Forest Service budget you are considering, so that construction can be started early next fiscal year. I am confident that this would be an investment in forestry that will be repaid many times over in the future.

Based upon past experience, I am sure that the Forest Service would move ahead aggressively in getting construction completed. Too, I want to assure you that Southern Illinois University will assist the Forest Service in every way we can to construct and make useable the recommended facility.

I appreciate greatly your granting me this opportunity to appear before you again, and the many times you assisted us in our past needs. I know that you will give full consideration to my recommendations just as you have always done in the past.

Thank you.

ESTIMATED CONSTRUCTION COST

Mr. TUDOR. You were very considerate 2 years ago; provided funds to design and plan a new building for the Forest Service to be located on our campus. The plans are now in the stage where we need the funds to build the building. That is my purpose in appearing before you this morning.

We estimate the cost, which would also include some of the major equipment, to be $690,000. This would be located on our campus in a very beautiful location. It will be at the edge of a wooded area that is almost the geographic center of our university. It will be near the Agricultural Building. It will be near the library so the staff of the Forest Service would have these facilities available to them.

We are leasing, with no cost, the land to the Federal Government so that this has all been taken care of. And we are ready to move on.

GREATLY INCREASED ENROLLMENT

I want to plead with you on the basis of what has happened at our university.

I show you here a chart and there is one in the testimony that indicates that our enrollment stayed at a very low level, below 4,000 until 1951. And on this chart you will see a line that is the projected enrollment.

It was estimated at that time this would be what our normal would be and by last fall it would have been slightly over 4,000. We are six times greater than that, with 24,500 students. We rank 20th in size in the United States.

We have not been able to build the buildings rapidly enough to meet that particular problem.

PRESENT FOREST SERVICE USE OF BUILDINGS

We have continued to make available to the Forest Service at no cost, the space in one of our main buildings, in our Agricultural Building. This is crammed space, it is not adequate for them. We are embarrassed by not being able to do better for them but we have actually put our own faculty and classes in temporary barracks buildings and

allowed the Forest Service to continue to use those facilities because we feel this is such an important program and of such great value to southern Illinois that we want to see it continue and to grow and to be of service, not only to southern Illinois, but to the surrounding States of Indiana, Kentucky, southeast Missouri, and Ohio.

Increase in Forest Students

We also have a chart indicating the growth in our forest students at the university in 1958. When we started the program we had about 55 or 60 students. This fall we had 225. So that you can see that there has been a nice steady growth there.

It is for this reason we feel that the time has come to build this building, make it available to the Forest Service so that they can continue in their very excellent work that has had a hand in reducing the cost of public assistance in that area.

Black Walnut Research

I also want to support Mr. Gott's testimony. He is not asking for anything, but he is going to tell you what has happened with the black walnut research we talked with you about last year and which you generously supported, and we think it is moving along very well.

George Rogers Clark Recreation Way

This afternoon, Mr. McGrath will appear before you to talk about the George Rogers Clark Recreation Way. I would like to support his project also. I had a hand in the planning and consideration of this project for some 17 years and we hope this will get some favorable attention also.

It is a real privilege to meet with you again and I want to thank you and your staff for the very courteous and friendly support that you always give.

Forest Science Laboratories and Offices

Senator Bartlett. Thank you, Mr. Tudor.

Is there any money budgeted for this?

Mr. Tudor. No. We thought there would be but when the budget came out it was not in it.

Senator Bartlett. Would $690,000 do the whole job or would this be the start?

Mr. Tudor. The whole job.

Senator Bartlett. It would not be an elaborate building then, as you noted?

Mr. Tudor. No.

Prepared Statement

Senator Bartlett. Mr. Gott.

Mr. Gott. I want to thank you for the privilege of appearing before you and I will do, I hope, equally as well to summarize our statement which I filed.

Senator Bartlett. It will be incorporated in the record.

(The statement follows:)

BLACK WALNUT RESEARCH

I am executive director and secretary of the American Walnut Manufacturers Association, with headquarters in Chicago, Ill.

I have two primary purposes in appearing before you today. First, I want to thank you for your assistance over the past few years in getting a concentrated, productive, and fast-moving walnut research program started. And secondly, I want to discuss briefly progress the U.S. Forest Service is making in this program.

My association is composed of 23 companies which are engaged in processing black walnut timber into a variety of products—paneling, furniture, gunstocks, novelties, and musical instruments. Our members produce more than two-thirds of all walnut veneer made in the United States. The domestic walnut industry, in itself, furnishes employment for many people in Central and Eastern United States as well as providing a lucrative market for walnut tree growers throughout this area. Furthermore, an important segment of our furniture industry depends upon walnut veneer and lumber for its products. These American industries operate over 6,000 plants and employ 200,000 people with an annual payroll of $850 million. They manufacture and ship annually consumer products valued in excess of $2⅔ billion.

Since the United States was first settled, walnut has been one of our most treasured and valuable woods. It is held in high esteem by designers and architects for many high-valued uses because of its uniquely beautiful grain, hardness, strength, and durability combined with excellent machining and finishing properties. I'm sure you are familiar with these fine characteristics because I have seen walnut desks, chairs, and paneling in congressional offices and buildings here in Washington.

The walnut producing and furniture industries and the people of the United States now are threatened with the loss of this fine wood. Increasing export and domestic demands over the past decade have reduced severely our supply of walnut trees. Numerous surveys made by the U.S. Forest Service in the walnut growing States show clearly that the volume, tree size, and quality of walnut timber is declining sharply. Strong, but unsuccessful efforts have been made to curtail exports. You are, I'm sure, familiar with this situation. Our domestic industry has instituted sound conservation measures to stretch the walnut supply by reducing the thickness of veneer. In spite of these efforts, heavy cutting continues, especially for export. For example, approximately 21 million board feet of walnut veneer logs were exported during the period 1965. This is substantially more than was exported during any similar period in the last 10 years.

So, the outlook is dark for our having a reasonable supply of walnut timber in the years immediately ahead.

The Forest Service research program, undertaken with your good help, offers the first ray of hope we have for improving this situation. I am very enthusiastic about the program and have followed closely its development. Your committee is to be commended for its understanding of the need for a "crash" research program in growing walnut and can take great pride in providing last year the funds to start it. The Forest Service, through its office at Carbondale, Ill. has moved aggressively and has underway an excellent research program. With their leadership, Southern Illinois University, several State agricultural experiment stations, State forestry organizations, industrial interests, and others have joined forces to mount a major walnut research program. My industry is cooperating and participating fully in this work. To illustrate, we have increased our contribution of funds to the program and are participating cooperatively in several specific studies.

The Forest Service research program has both short-term and long-term objectives. These are—

1. To improve the quality and growth rate of natural occurring walnut trees. They have already found that the quality of individual trees can be improved by pruning and that the growth rate can be accelerated sharply by removing competing trees and vegetation. Application of these research results will help us grow better walnut trees faster and extend the present supply of timber.

2. To increase the total supply of walnut timber by planting. Research in progress has already given us some good guides for establishing successful walnut plantations. For example, clean cultivation or elimination of weeds and grasses with chemicals is necessary to obtain good survival and fast

growth of the planted trees. Forest Service research now underway in soils, planting methods, fertilization, irrigation, and genetics will, I'm convinced, help us build up a supply of walnut timber for the use and enjoyment of our future generations.

Research results are, of course, without value unless put to work. Several walnut culture programs of major significance are being initiated. These are action programs designed to improve and increase the supply of walnut timber. Their success is heavily dependent upon research conducted by the Forest Service. Let me take a moment more of your time to briefly describe three of these action programs.

1. The Boy Scouts of America, in cooperation with my industry, landowners, and public agencies, is seriously considering a national hardwood tree planting program. The first planting, to be done on a trial basis, will be made in Indiana and consist of 75,000 walnut seedlings. If successful this program very likely will be extended into other States and will include several species of prime hardwoods.

2. Public and private interests in Kentucky are joining forces to plant 1 million walnut seedlings this spring.

3. My association, Southern Illinois University, and the Forest Service are cosponsoring a walnut culture conference. The principal purpose of the conference is to relate the results of research in growing and planting walnut to the members of forest industries, landowners, and public officials who advise and assist landowners in growing walnut timber.

To summarize quickly, the outlook for a continuing supply of walnut timber in the immediate future is dark. But, research and action programs now underway will help us overcome this problem. The funds you have appropriated for Forest Service walnut research work have been the springboard for these excellent and most promising programs. And I want to thank you for your assistance.

I listened, with real interest, to Dr. Tudor's recommendation for construction of Forest Service laboratories and offices at Southern Illinois University. We support fully his recommendations. The addition of modern scientific facilities certainly will speed walnut research and permit important investigations that cannot now be undertaken. Thus, I hope that you will provide the additional funds he has proposed.

Thank you for this opportunity to appear before you and for your assistance in financing a research program that will help solve the critical shortage of walnut timber.

Program Progress Report

Mr. Gott. The two reasons for appearing here this morning are to express our sincere appreciation for the assistance this committee has given to our small industry in the past years and secondly, perhaps to give you a very brief progress report of what this essential crash program has accomplished to date.

Our little association which is 25 years old this year is comprised of veneer, lumber, gunstock, and walnut manufacturers who are the basic raw material suppliers to industries such as the furniture, plywood, civilian and military arms.

And, thanks to your thoughtfulness and perception, with this extraordinary increase in the demand for walnut by foreign countries who have embargoed their own laws, the export of walnut timber this year to foreign nations exceeded 21 million board feet.

With this in mind we attempted, through the Commerce Department's efforts to conserve domestically. We reduced the standard thickness of our veneer from a nominal 1/28-inch thickness to a 1/36-inch dry thickness.

Reimposition of Export Control

Senator Dirksen said we could probably go down to one-hundredth if necessary and if our customers would accept same. But we are in the

midst of attempting, with Senator Connor, after a year's trial to reimpose the export control program which Senator Hodges instituted in 1964.

By doing this, the increased usage domestically will be offset by the thinner thickness of veneer and the quota system of export would be such that the combined domestic and export usage would bring the walnut grown right back in balance.

Today it is in extreme imbalance. It exceeds annual growth rate by an alarming figure.

Careful Nurture of Trees Planted in Plantations

However, this crash program which you so kindly assisted us in starting in cooperation with Southern Illinois University and the Forest Service, is the only bright light we have in the way of perpetuating this American hardwood. Unfortunately, the results of these programs are not going to be seen or bear fruit until perhaps 20 or 30 years. But the twofold purpose of this program is: Now, to take the existing immature trees and by careful fertilization, release of poor trees and pruning and weeding, develop that tree to maturity a lot faster with a lot more commercial value.

The second function of this program is one of genetics which you might term a disproving of an old wife's tale, that walnut cannot be planted in plantations. And the 3-year study at Southern Illinois has proven the opposite to this, where our growth rates are fantastic through proper fertilization, cultivation, and select seedlings.

So with it all we feel indebted and grateful that the program has started and is underway. And through the cooperation of Southern Illinois University and the Forest Service we are holding an industry culture workshop this coming August where we hope also to dedicate the Walnut Research Center.

Indiana State Council Program

One of the results of this program you might be interested in is the fact that we have a very active interest on the part of the National Council of Boy Scouts, Senator, and we have a trial program with the Indiana State council this coming month, where 500 troops are going to plant 75,000 select walnut seedlings in the State of Indiana. It is not the quantity we are after but if the program is successful from a survival standpoint the national council will adopt it as one of its conservation practices.

State of Kentucky Program

The second point is that we have, through this kind of research, the State of Kentucky for example has announced its program to plant over a million seedlings in the State of Kentucky this year. So all in all my purpose in life today is to perhaps advise you of a program with the Forest Service in southern Illinois and to express my deepest appreciation for continuation of the assistance of this committee in this behalf. Thank you.

OREGON AND CALIFORNIA HYBRID WALNUT

Senator BARTLETT. Thank you. How far away does the walnut grow?

Mr. GOTT. The walnut grows, Senator, as far west as Oregon and California, but it is of a different specie than the Midwest walnut as you might call it, the Juglans Nigra. The California specie or the Oregon specie is botanically called Juglans California or a Clare walnut. The seeds came from Iowa and were crossed with an English walnut that has developed that hybrid but the heart of the botanical range of the American black walnut could be termed the six Central States.

GROWTH PERIOD

Senator BARTLETT. You say it takes from 20 to 30 years for the walnut to mature?

Mr. GOTT. No, sir. The results of this crash research program will be available as evidence in 20 to 30 years, but what we are trying to do is mature a walnut tree in 40 years instead of 80 to 100. It is one of the fast tested growing hardwoods.

Senator BARTLETT. If all goes well, on account of your research and other efforts, when might you reasonably expect growth to match the demand?

Mr. GOTT. Had the export control program of Secretary Hodges remained in effect, the Forest Service estimates were that, if our domestic consumption, based on the use of thinner veneers was maintained and the export quota maintained, that the growth versus cut balance would have been achieved by 1970. I am sorry to say that 1965 exports have probably set us back another 10 years.

Senator BARTLETT. I am sorry to learn that too.

Thank you very much.

STATEMENT OF HON. JOHN S. COOPER, A U.S. SENATOR FROM THE STATE OF KENTUCKY

ESTABLISHMENT OF TROUT HATCHERY ON CUMBERLAND RIVER, KY.

Senator BARTLETT. Senator Cooper.

Senator COOPER. Thank you Senator Bartlett and the committee.

I have two requests that I will make of the committee. One is to provide planning funds for the establishment of a trout hatchery on the Cumberland River in Kentucky, below Wolf Creek Dam which impounds Cumberland Reservoir. To give some background of the problem, let me say that the Governor of Kentucky, the commissioner of the department of fish and wildlife, the director of the division of fisheries, the membership of the League of Kentucky Sportsmen and the congressional delegation of Kentucky, have requested the Department of the Interior to proceed with planning for this hatchery, and I have also requested funds from this committee. Last year I came before you and, while the committee did not provide funds for planning at that time, Senator Hayden in a colloquy on the floor told me that he would give the utmost consideration to this request and he felt the committee would do so.

KENTUCKY PAST TROUT STOCKING

Since 1948 Kentucky has been stocking trout in its streams from hatcheries in other States, primarily from a hatchery in Virginia and one in Tennessee. The first stockings were experimental in nature, but in 1952, a trout fishery was established below Wolf Creek Dam on the Cumberland River at a point near where it is proposed that a hatchery now be constructed. It has been very successful and, from the history of this experimental work, certain conclusions can be drawn.

STATE DEPARTMENT OF FISH AND WILDLIFE STATEMENT AND SURVEY

The department of fish and wildlife in the Kentucky State government has provided a statement which I will file. Its survey shows that at least 75 streams in Kentucky can support a trout fishery of which some 515 miles of streams are suitable for stocking trout. There are 30,000 acres in reservoirs which would be suitable for trout stocking.

KENTUCKY NAVIGABLE STREAMS

I might say here that while it is not generally known—unless Alaska has now taken the lead—Kentucky has more miles of navigable streams than any State in the Union.

Senator BARTLETT. This is the first time I find myself unable to claim Alaska is first, because I do not know.

Senator COOPER. You might have more miles of streams than we have but I suppose our claim is we have more miles of navigable streams. We are fourth nationally in the number of rivers that we have in our State.

DEPARTMENT AND BUREAU OPPOSITION AND DEARTH OF HATCHERIES IN SOUTH

I do not think there is any question that the qualities that are needed for a fish hatchery have been established in Kentucky. But I might say that I think the Department of the Interior and its Bureau of Sport Fisheries and Wildlife has quibbled about this. However, they have said that during the next 5 years Kentucky could use about 91,500 pounds of trout annually which meets the 5-year estimate of the State of Kentucky.

The Department has suggested that trout could be furnished from Tennessee or Virginia, as in the past. But, to supply trout from Virginia for some of the streams would involve haulage up to 600 miles, the nearest point being 250 miles. Tennessee is somewhat closer, but I think any examination would show that Tennessee can use all of the trout that its hatchery produces.

The Department has also said that it will have to determine if there is a suitable site available. Yet the facts show that the Corps of Engineers has assured the State that it would make a site available. I am conscious of the problems of the Department of the Interior and its Division of Wildlife but I want to call the subcommittee's attention to the fact that if you examine the list of present trout hatcheries, you would find there are very few in the South. I notice in the report of the committee for last year that funds were made available for studies and for continued appropriations to a number of hatcheries in the North. Of course that may be because their streams are generally

more suitable. But when there are streams in a Southern State which can support trout, and are appropriate for it, then an effort should be made to develop the potential in that area.

For 5 or 6 years or perhaps longer our Kentucky congressional delegation has been meeting with representatives of the Department of the Interior on this subject. I am not one who wants to place blame, but I must say in this instance I think the Department has dragged its feet and that it has not made the investigations or completed the studies it should have made. Even now the Department's answer is that it wants to continue to make further studies of streams and related factors which data is already available.

Funds Request

Based on this long record, I earnestly ask that the committee take this matter in hand and if it cannot supply the $50,000 that the Department says it would need to make this study, then at least supply some funds—$20,000 or $25,000—so that the Department will actually make the study, report to this committee, and report to our State. It has not done it. And I ask that this be done.

Senator Bartlett. $50,000 seems quite a little for a study, don't you think?

Senator Cooper. I think so, but as I say in our report——

Senator Bartlett. That is what they want.

Senator Cooper. Yes; and if that is too much, I would say give them $25,000. Because of the data which have been accumulated by the State, and the data which they say they have accumulated themselves in the past years, I believe they can make this study and make a determination.

Senator Bartlett. The committee will give it close consideration.

Forest Service Research Building, Berea College

Senator Cooper. I appreciate it very much.

Now I want to make one other request for the planning of a research building for the Department of Forestry and Berea College, Kentucky. There has been a research program at Berea, established by the Division of Forestry and in existence about 12 years. Berea is a very interesting college about which I think it is also worthwhile to say something in praise.

It was started in 1865 at the close of the Civil War to provide education for boys and girls in the mountains areas of Kentucky, Virginia, West Virginia, and Tennessee—the first Appalachian program and by its charter the first integrated school in the South. Later the legislature amended the charter, requiring all the students to work to help pay their way through college. This gives you some background of the college itself.

Berea College, in the foothills of our mountains, became the nucleus of the forest research center about 12 years ago.

Center Research Program

The college furnished the building at a very nominal rent for the operation of the research program, which expanded to include a number of buildings. Now this work had advanced so as to require a

research center. I think eventually it will cost about $600,000 but what is now needed is planning money for this research building—$48,000.

Just briefly—for I know your time is very valuable—I would like to tell you what kind of research is being carried on at this center.

The first area consists of research in forestry, forest products, better forestry methods, and the growing of timber. I am very proud to say that Kentucky, in the past, has been one of the great hardwood producers in our country—of oak, white oak, poplar, maple, ash and, in the past, chestnut. I was very much interested to note the comments on walnut which some people in my area used to call warnut.

Kentucky Forest Lands

Forty-six percent of the area of Kentucky is forested. Many of the counties in eastern Kentucky, 75 percent of the area, are in forest land, producing about $30 million of soft timber a year which is very important as a wealth-producing product in Kentucky.

Forest Reclamation

The second area of research in which Berea College engages is finding the practical steps to reclaim, reforest and put to use the stripped coal lands. This is a very interesting thing, for when the scientists at the Berea Research Center determine the engineering properties of the earth and shattered rock materials removed in mining, they can place the material so it will not slide down the steep slopes. They can show how to locate, construct, and maintain haul roads to prevent erosion, stream contamination, and damaging storm runoff from the bared areas, and keep the tree seedlings from being washed away. My State of Kentucky, recently passed a very comprehensive strip-mining law. But, apart from the work at Berea, I do not think there has been very much research in this area and certainly not in the mountainous areas.

So if strip-mining control is to be effective, not only is legislation necessary but there must be research to determine what kind of cover can be provided for the denuded areas. Strip-mining research at Berea goes further than that, and is a very valuable project.

Unbudgeted Funds Request

I think now it is imperative that money be provided for planning to see that all of these programs can be centered in a building with research facilities.

I want to say one more thing. For several years I have had the pleasure of knowing and working with Mr. Richard D. Lane. Mr. Lane has been director of the Central States Forest Experiment Station at Columbus, Ohio, which has responsibility for the Berea Center. I am very happy to know that he will soon direct the Northeastern Forest Experiment Station, for he is very able and has been helpful to Berea and to the work of the Forest Service.

I will file my formal statement on both of these points and supporting statements from officials of the State of Kentucky.

Senator Bartlett. I assume that planning money is unbudgeted?

Senator Cooper. It is unbudgeted, yes.

Senator BARTLETT. Thank you. These statements to which you refer will be placed in the record.

Senator COOPER. I may say that last year the Senate did provide money for the planning of a research center building, but it was stricken out in conference with the House.

(The statements follow:)

I appear today in the interest of the State of Kentucky to request that funds for a trout hatchery in Kentucky be included in the Bureau of Sport Fisheries fiscal 1967 budget.

At this point I would like to place in the record a statement which I have received from Mr. Minor Clark, commissioner of the department of fish and wildlife resources of the State of Kentucky, and from Mr. Bernard T. Carr, the director of the division of fisheries in the department. This statement concerns the needs and justification for the construction of a Federal trout hatchery in Kentucky.

For the past several years I have urged the administration to provide funds for such a trout hatchery and I have introduced legislation to authorize its construction. It is difficult for me to understand and I know it is difficult for the fish and wildlife enthusiasts of Kentucky to understand why Kentucky has not been provided with a Federal trout hatchery when States having waters suitable for trout have not only one but two such hatcheries.

On March 3 when I appeared before this committee, I requested that Mr. John S. Gottschalk, Director of the Bureau of Sport Fisheries and Wildlife submit for the record answers to several questions concerning the trout needs and requirements for Kentucky over the next 5 years. I have had an opportunity to review his answers and I am encouraged. I note that he states that "the Bureau has no specific funds to complete a survey of needs in Kentucky or to begin a plan for facilities to meet them." He further stated that funds required to initiate a hatchery in Kentucky would be approximately $50,000 and would "include completing the biological studies and if a suitable site was found the remainder would be used to acquire land and water rights required, use agreements, and preliminary engineering."

I respectfully urge that the committee give consideration to the inclusion of these funds in the Department of Interior's budget so that we in the State of Kentucky may proceed to initiate planing for this much-needed hatchery.

PROPOSAL FOR CONSTRUCTION OF A FEDERAL TROUT HATCHERY IN KENTUCKY, JANUARY 1966

INTRODUCTION

Kentucky has been stocking trout procured from Federal hatcheries located in Virginia, Tennessee, and South Carolina since 1948. The early introductions were experimental in nature, but in 1952, a sincere attempt at establishing a productive trout fishery was initiated in the Cumberland River below Wolf Creek Dam. The first few years of stocking this river resulted in complete failure, because only 4-inch fingerling trout were made available to Kentucky by the Federal hatcheries. Since 1958, however, larger trout have been available, although in very inadequate numbers, and a fishery has been established. The present record for a rainbow trout from this stream is 11 pounds, 4 ounces, and 5-pound trout are not uncommon. The only thing preventing the establishment of a phenomenal trout fishery in this large river is the inadequate supply of trout for stocking.

Twenty-five other streams and four impoundments have also been stocked with trout. The trout stocked in Cumberland Lake, for instance, are growing at a minimum rate of 1 inch a month, and a trout that weighed 7 pounds was caught last fall. This trout had been in the lake less than 4 years.

These data are sufficient proof that if adequate numbers of trout were made available, a productive and valuable trout fishery can be established in the public waters of Kentucky.

ECONOMICS OF THE POTENTIAL FISHERY

Every State, so far as is known, that has trout water has a federally constructed and operated trout hatchery, many States having two; yet, Kentucky has no hatchery.

The providing of trout fishing, however, is only part of the overall potential benefit of a Federal trout hatchery located in Kentucky. There are 120 counties in Kentucky. Of this number, 84 are officially listed as depressed areas. Of the 75 streams known to be capable of supporting a trout fishery, only 4 are located in areas not classified as depressed.

In an attempt to determine what the economic impact of a trout fishery could mean to a county in a depressed area, a survey was conducted on a trout stream in the Cumberland National Forest in McCreary County, Ky., in April 1962. At this time, the Bureau of Sport Fisheries and Wildlife stocked into a 7-mile section of Rock Creek 2,000 catchable-size rainbow trout. During the following 16 days, 978 fishermen were checked on the stream while fishing. Twenty percent, or 192, of these fishermen were nonresidents, and 786 were Kentucky residents. The nonresident fishermen spent an average of $24 to make the fishing trip, or a total of $4,608 during the 16-day period. Resident fishermen from all sections of Kentucky spent an average of $5 to fish for these trout, for a total expenditure of $3,930. The total moneys spent in fishing for trout during the 16-day census period was $8,538.

This stocking program could be expanded many times in many areas of Kentucky if sufficient numbers of trout were made available from a hatchery located in Kentucky. At present, all the trout furnished to Kentucky by the Bureau of Sport Fisheries and Wildlife, except those stocked by the Bureau in Rock Creek, must be transported to the various streams by the Kentucky Division of Fisheries from the Federal hatchery located at Paint Bank, Va., a distance of 275 miles from the nearest point in Kentucky and more than 675 miles from the most western trout streams in the State. These great distances not only prohibit us from receiving into the State adequate numbers of trout but reduce transportation and stocking survival of the fish.

At present, it costs approximately 30 cents per pound to produce trout in a modern hatchery, but it is costing the Kentucky Division of Fisheries approximately $1 per pound to transport and stock the trout now being made available.

Federal facilities, now existing or planned, cannot supply the trout poundage needed in Kentucky. A hatchery located in Kentucky would, in no way, compete with or duplicate the operations of the Celina, Tenn., hatchery. Conversely, these two hatcheries would complement each other. It is known that the State of Tennessee can use, to good advantage, the entire scheduled production of the Celina hatchery. Concurrently, it is known that Kentucky could use all of this same production in our streams and lakes. With the two hatcheries in operation, production success, not now always reliable at a single station, would be assured. If egg production or fry survival was low at one station, this deficit could be made up at the other station. If disease or nutritional losses were heavy at one station, these losses could be compensated for at the other station. This type of operation is now and has been in practice between the Federal warm-water hatchery in Kentucky and Kentucky's warm-water hatchery. Many times, fry production has been very low at one station but very good at the other. In these cases, the young fish were divided between the two stations, and maximum production was accomplished. This tandem operation is desirable and can, many times, mean the difference between successful operation and failure in a single year.

In a report published in 1964 by the Kentucky Department of Public Information entitled "1964 Travel Spending in Kentucky Is Up," Dr. Copeland reports that 22 million nonresidents traveling in Kentucky spent $238 million in the State. In 1964, Kentucky had an increase of 8 percent in tourist business as compared to the national average of 6 percent. It is believed that the development of a productive trout fishery in strategic locations throughout Kentucky would help attract more people to our State.

Three of the most populous States in the Nation are located on Kentucky's northern border. These people are more and more turning their eyes to the south to get away from the densely populated centers of midwestern industrialism. Kentucky's streams and lakes can offer these people the recreation and solace so very necessary to their well-being.

Kentucky has a magnificent State park system that is being ever expanded. The tailwaters of Wolf Creek Dam are located no more than 10 miles from Lake Cumberland State Park. Natural Bridge State Park has a trout lake within view of its new lodge and is within 10 miles of two trout streams in eastern Kentucky. The Land Between the Lakes National Recreation Area is less than 15 miles from three trout streams. Rough River State Park is within 1 mile

of an excellent trout stream. This listing could go on and on, but the point is that these excellent facilities are there, waiting to be used, and a trout fishery in these areas would certainly attract many people to the area. These visitors would bring into these depressed areas a very substantial amount of moneys, and these moneys would create more employment, more and better facilities, and would help to stabilize a sick economy.

PRESENT NEEDS

A survey of potential trout waters in the State of Kentucky was conducted by staff biologists of the Kentucky Division of Fisheries and the U.S. Bureau of Sport Fisheries and Wildlife during 1963.

This survey revealed that there is at least 515 miles of streams suitable for stocking trout. These streams were located mainly in the southern half of the State from Harlan County in the east to Trigg County in the west.

A stocking requirement of 217,000 trout, 8 to 10 inches in length, or 67,000 pounds for the 515 miles of streams was determined as being adequate based on stocking rates in other Southeastern States. Fish would be stocked from April through June in most streams and year round in those suitable.

There was a total of 113 miles of tailwaters surveyed during this time. A stocking requirement of 2,000 fingerling trout per mile, or 226,000 fish weighing approximately 7,500 pounds, was recommended by the U.S. Bureau of Sport Fisheries and Wildlife; however, the Kentucky Division of Fisheries experimented with fingerling stocking in tailwaters for a period of 7 years with absolutely no success. Experiments with 8- or 10-inch trout proved highly successful during the past 5 years of testing. For this reason, exception is taken with the Bureau recommendation and the Kentucky Division of Fisheries estimates the needs for existing tailwaters at 113,000 trout, 8 to 10 inches in length, or a total weight of 38,000 pounds.

Reservoir stocking requirement estimates of the Bureau were 500,000 fingerling fish, or 17,000 pounds, per year. The Kentucky Division of Fisheries takes exception to this recommendation for the same reason cited above. Kentucky's estimation of the existing needs for reservoir stocking is 100,000 trout, 8 to 10 inches in length, or a total weight of 33,000 pounds. There is now approximately 30,000 acres of reservoir suitable for trout stocking. The recommended number amounts to only 3.3 trout per acre.

Total annual stocking figures calculated from the results of the survey amount to 475,000 trout, 8 to 10 inches in length, or a total annual requirement of approximately 158,000 pounds of trout.

SITE LOCATION AND JUSTIFICATION

A number of trout hatchery sites have been investigated and rejected for one reason or the other; e.g., water turbidity, inadequate flow, high summer temperatures.

Of all the potential sites investigated, the area below Wolf Creek Dam on the Cumberland River is the most promising.

The U.S. Bureau of Sport Fisheries and Wildlife states that approximately 5,000 gallons of water per minute is needed to produce 100,000 pounds of trout. Kentucky's present needs of 158,000 pounds could be adequately supplied by a hatchery using 8,000 gallons of water per minute, but if modern facilities are constructed to provide for the future needs of Kentucky for partial needs of adjacent States, it is estimated that a minimum of 15,000 gallons of water per minute will be required. At the Wolf Creek site, this amount of water is available. The pipe from which this water can be taken is already in place in the Wolf Creek structure. Also, it must be pointed out that the land upon which the hatchery could be built is now owned by the U.S. Army Corps of Engineers. The engineers have assured the Kentucky Department of Fish and Wildlife Resources that adequate land for the hatchery can be made available.

The Bureau of Sport Fisheries and Wildlife has stated that optimum water temperatures for a trout hatchery should be in the range, 45° F. to 50° F. The water temperature range at the Wolf Creek site is 42° F. to 54° F.

It has been shown that Kentucky has a need for a large number of trout, that these fish will assist the economy of the areas in which they are planted, that modern tourist facilities are now available near many of the trout waters, and that a hatchery site with near optimum conditions is available.

For the above reasons, the Commonwealth of Kentucky respectfully requests that construction of a trout hatchery at the Wolf Creek Dam site be initiated at the earliest possible date.

STATEMENT OF SENATOR JOHN SHERMAN COOPER BEFORE THE SUBCOMMITTEE ON APPROPRIATIONS FOR INTERIOR AND RELATED AGENCIES FOR FISCAL 1967

Senator Byrd and members of the subcommittee, again, as I have in past years, I want to ask your subcommittee to add funds to the budget request for the Forest Service for planning a forest science laboratory at Berea, Ky. Your committee and the Senate last year approved $40,000 for planning a new building for the Berea Forest Research and Land Restoration Center, but this item was lost in conference with the House.

Forest service research programs at Berea have centered on reclamation of strip-mined land, on growing of timber crops and production of timber-related products. The Center began about 12 years ago with a small program in timber management research, but the problems caused by strip mining of coal in the mountainous Appalachian region were acute, and work on methods to reclaim stripped land was begun in 1961 when the Berea Kentucky Forest Research Center received an allotment from the regular Forest Service appropriation, to which the State department of conservation contributed funds. In 1962, I came before this committee to ask that $200,000 be added to the Forest Service budget for research at Berea, and I requested these funds again in 1963, and the Congress appropriated $150,000 for this purpose. In 1964, I requested additional funds for research on timber related crops, and last year I asked that the Congress provide funds for a much-needed research facility.

Much progress has been made in this area and the study of strip mining and land reforestation authorized by the Appalachian Regional Development Act is now underway in the Department of the Interior. Only last month, the State of Kentucky enacted historic legislation calling for the strict regulation of strip mining in the hills of eastern Kentucky and in the western part of the State, which is being carefully considered by the other Appalachian States.

The Forest Service can utilize $48,000 to plan a laboratory building to provide facilities for Forest Service scientists at Berea to better conduct the research needed to solve the more complex forestry problems of Kentucky, and to place in one building all Forest Service employees at Berea. I hope very much that the committee will recommend this amount.

The problems of strip mining, particularly in Appalachia, are now receiving more attention—and progress is being made at the Berea Forest Research Laboratory. With a building to bring together and efficiently house these activities, an Appalachia reclamation and conservation center could bring great benefits to the economy and future of the region.

MARCH 8, 1966.

Senator CARL HAYDEN,
Chairman, Senate Subcommittee on Appropriations for the Department of the Interior and Related Agencies, Senate Office Building, Washington, D.C.

DEAR SIR: The U.S. Forest Service and our department of natural resources have just completed the most intensive inventory ever made of Kentucky's forest resources. The results of the inventory show clearly that our forests play a major role in our State and Nation's economy and have the potential for making a much greater contribution to our economic and social welfare.

About 46 percent of the land area in our State is in forests. We rank among the 10 top States in the Nation in both standing hardwood timber volume and production. The annual value of sawtimber logs delivered to mills exceeds $30 million. And value of consumer products made from these logs add each year approximately one-quarter billion dollars to our local and national economy. Our forests can support right now a much higher cut of products and a larger wood-using industry. Furthermore, the total production of timber from our forest land can be at least tripled in the future by proper protection, management, and cutting methods.

I am firmly convinced that we must have a strong, aggressive forestry research program in Kentucky if we are to realize fully our forest potential. Research conducted by the U.S. Forest Service from their office in Berea, Ky., has already been of great assistance to us—for example, in developing new regulations and laws to reduce the ill effects of strip mining; in the improvement of timber-growing practices; and in the marketing of timber products. I am sure that strengthening the Forest Service research work at Berea would increase substantially its contributions to forestry in Kentucky and be an excellent investment of Federal funds.

Our most urgent need now is for a laboratory-office building for the Forest Service research staff at Berea. The scientists there are sorely handicapped by the lack of adequate research facilities. The few small laboratories available to them are cobbled up, makeshift affairs, totally inadequate for good, sound research. In fact, they cannot do some of the research needed to solve the more complex problems of reclaiming strip mines and growing hardwood timber until adequate scientific facilities are made available.

We were disappointed to find that the President's proposed budget did not provide for planning a Forest Service research facility at Berea, Ky. Therefore, I recommend that the funds needed for planning this structure be added to the Forest Service budget for next year. The cost of preparing engineering and architectural plans for the laboratory-office building is estimated to be $48,000.

I respectfully suggest that you actively support my recommendation and take appropriate action to obtain the needed $48,000 addition to Forest Service appropriations when their bill is prepared by the Senate Appropriations Committee. Your fine assistance in the past has given us a much stronger, productive Forest Service research program. We appreciate greatly your leadership and hope that we will continue to have your support of forestry research needs in Kentucky.

Sincerely yours,

J. O. MATLICK.

BEREA COLLEGE,
Berea, Ky., March 1, 1966.

Hon. JOHN SHERMAN COOPER,
U.S. Senate,
Washington, D.C.

DEAR SENATOR COOPER: As you may recall, I wrote to you last year for assistance in obtaining a building to house Forest Service research work in Berea. I know you were as disappointed as I that the final appropriations included no money for this purpose.

Berea College has been supplying the Forest Service with office and some laboratory space, at normal rent, since the research center was established here 12 years ago. These quarters are small and scattered over our campus. We realize they are inadequate, but they are the best we can provide.

Two years ago we gave the Forest Service a long-term, free-use lease to a tract of land on which to build the laboratories and centralized office needed to properly carry on the work. The Forest Service has moved ahead as best it can to develop this tract. Utilities have been brought to the site, and garages, a warehouse, and a small greenhouse have been constructed. But these things do not fill the major need of specialized laboratories required in a program of scientific forestry research.

Therefore, I am again asking your assistance in initiating construction of the laboratories at the earliest possible date. I am not fully acquainted with details of the laboratories needed, nor do I know what the cost will be. However, I do know that this structure is included in the national program for forestry research recently developed by the Forest Service. The establishment of this facility would be most helpful to the community of Berea and the State of Kentucky as a whole. I suggest that you contact the Washington office of the Forest Service for more detailed information.

Thank you for your assistance last year. I am confident that we can continue to count on your full support for such worthy programs in our State.

Sincerely,

FRANCIS S. HUTCHINS.

STATEMENT OF HON. CHARLES M. TEAGUE, A U.S. REPRESENTATIVE FROM THE STATE OF CALIFORNIA

PREVENTION OF FOREST FIRES

Senator BARTLETT. Congressman Teague, we shall now be glad to hear you.

Mr. TEAGUE. For the record I am Congressman Charles M. Teague, 13th Congressional District, California.

I am delighted to find a fellow westerner in our chair because your subject is fire protection.

I will be very brief. I have appeared here several times with Mr. Radford. He has been president of the Watershed Fire Council of Southern California for a good many years. This is a thoroughly responsible, fine organization representing the interest of southern California in preventing forest fires, particularly in the four national forests in that area.

Forests cover the backend of both of my counties, in my congressional district; Ventura and Santa Barbara, so I support the statement that Mr. Radford will make which will be very brief but very meaty and, Mr. Chairman, with your permission, I would like to introduce for the record a telegram I received this morning from the Santa Barbara County Board of Supervisors on the subject of fire protection. I would appreciate it if I could read it in the record.

TELEGRAM OF SANTA BARBARA COUNTY BOARD OF SUPERVISORS

Whereas it has come to the attention of the Board of Supervisors of the County of Santa Barbara, State of California, that the Appropriations Committee of the Senate of the United States will shortly be considering the budget of the U.S. Forest Service; and

Whereas within the aforesaid budget are funds to be allocated to Los Padres National Forest, a national forest of 2,018,236 acres, a portion of which is within Santa Barbara County; and

Whereas as a result of a disastrous fire in 1964 in Santa Barbara County, which burned some 70,000 acres of brushland in the national forest, there was revealed to the board of supervisors through hearings conducted by a special committee that the National Forest Service in the Los Padres National Forest was and is still seriously deficient in manpower and equipment, both to suppress and prevent wildlife within the forest area; and

Whereas the Forest Service has, after its valiant and herculean efforts in the suppression of the said disastrous fire, started a program to permanently convert flammable brush to less flammable perennial grass, as well as the development of fuel breaks and accompanying access for vehicular fire traffic; and

Whereas these steps and procedures are considered vital for the protection of valuable watershed and improved lands, as well as the preservation of wildlife in the forest areas; however, such programs have barely started and will require years to effectuate: Now, therefore, be, and it is hereby

Resolved, That the board of supervisors respectfully urges the Senate Appropriations Committee to give favorable consideration to the budget of the U.S. Forest Service.

The continuance of brush conversion and fuel-break construction at this time is urgent before the regrowth of brush of the denuded lands of the national forest make such work prohibitively expensive.

The serious deficiencies in manpower and equipment for the prevention and suppression of wildlife within the forest lands are a constant and continuing threat to the watersheds, improved lands, and wildlife conservation of this county.

STATEMENT OF ROBERT T. RADFORD, PRESIDENT, WATERSHED FIRE COUNCIL OF SOUTHERN CALIFORNIA, AND CHAIRMAN, WATERSHED COMMISSION, COUNTY OF LOS ANGELES

FOREST FIRE PREVENTION

Mr. RADFORD. I have been here about 14 years and I remember being before you last year. I have some statements here and I have enough others so that I would be very pleased to give you these if you want them. All I am going to do is make some highlights on this statement, because we have some peculiar situations that have been developing that I would like to report on. That is we have about 12

million people in those 8 counties and, of course, we have all the attributes of fair weather all year round except for the first time in years we had rains in November and December and we did not have any chance of a forest fire there because we had the biggest rains they had in any 2 months, with one exception, since they kept records.

Effectiveness of Joint Undertaking

We have a chart for rains in populations which is due to people wanting to come out there. But this is the very interesting thing, last year in the four forests we had a total of 3,445 acres burned and the average annual burn is 50,000 acres.

Now, why did that happen? We had just as many fires as the average but it comes to show the effectiveness of the joint efforts of the agencies and the additional funds that the Federal Treasury has put into those four forests for maintaining and protection.

We are faced now with another thing and that is that with our exploding population out there, we have a tremendous amount of recreation in these mountains, especially in Angeles and in the San Bernardino National Forests, which brings me to the problem of the 1962 adoption of base plan for the Forest Service which they adopted after the approval of the Bureau of the Budget.

Now, we were going to have it for 2 years and it was a 10-year plan. I realize it was adopted in 1962 and it would not get started until probably the fiscal year of 1964. So taking the 2 years of 1964 and 1965, if we took the amount of money that was allocated to the four California forests, the need each year would a little over $7 million for those four forests under the plan as it was set up.

Where are we now? We are about $8.5 million behind. In other words, if this is going to be a 10-year plan it needs to be augmented to bring it up to date.

Now, in this blue copy you have in front of you, Senator, you will find that down in No. 1 that is an incorrect statement. That is not the Angeles National Forest. It should be "four southern California forests."

Then we ask again as we always do; the fact that we need more roads.

Now, we have a set from the Los Angeles Watershed Commission. I am not going to go over that except to call your attention to the last page of it because this is the first time in the history we have been able to get the County of Los Angeles to spend time and energy enough to put somebody on the books.

Los Angeles County Payments

On the last page you will find that in the last 10 years these are actually figures and these are actually taxpayments of taxpayers of Los Angeles County. In the last 10 years we have paid 44.8 percent of every 100 cents that has been spent in Angeles National Forest.

In other words the Federal Government pays 55.2 percent and the taxpayer of Los Angeles County pays the other. We have tried to be very fair in that and we put it down here, what the comparable expenditures are and what the additional expenditures are; $10 million is mostly by fire. The net result is that we feel that we should

have a little bit more funds in the pot out there, as long as we spend that kind of money.

Federal Government Ownership of Forest

You can appreciate the fact, Senator, we cannot help ourselves. The Federal Government owns that forest. That forest burns. And we get occasional rains. And, just last year, just one of the dams, St. Demas Dam, we had to clean out and it cost $1.5 million. Just one dam. Now we have a lot of them there. We explained that we spend about from $8 to $10 million a year cleaning these dams out. What we are trying to do is get some upstream protection. Maybe if we could get this money we could get it done.

Thank you very much and I appreciate your courtesy.

I would like to say how do you do to Senator Byrd, because I have been before him several times.

(The prepared statements follow:)

Statement of Watershed Fire Council of Southern California

Fire Protection Needs for National Forests of Southern California

Each year the Watershed Fire Council of Southern California, representing 12 million people in 8 counties of this region, has presented to Congress a proposed program to help provide adequate fire protection in the Los Padres, Angeles, San Bernardino and the Cleveland National Forests—a program directed toward the preservation of valuable watershed areas of this area.

Because of the combination of long periods of drought, hot desert winds and low humidity which characterizes this region, there exists an extremely critical fire hazard on virtually a year-round basis. With the sharp rise in population, increased demands for the recreational use of the forests have resulted, thus heightening the hazard of forest fires.

According to recently compiled statistics, the total acreage burned in the national forests of southern California amounted to 3,445 acres during the year of 1965.

The average amount of acreage burned annually is approximately 50,000 acres in this same area. Thus, the 3,445 acres burned in 1965 represent a sharp reduction in the total acreage burned even though the incidence of fires, numbering 327 during 1965, are about average, underscoring the effectiveness of the joint efforts of agencies of the State and local government as well as the Federal Government toward improved fire protection in the four national forests.

This reduction in acreage burned is the direct result of continuous efforts of forestry personnel and the availability of increased Federal funds in the past 10 years. However, with the continuous upsurge in population, Congress must redouble its efforts to keep abreast of this growth with additional appropriations.

In this highly populous region which is still growing rapidly, it must be recognized by Congress that the population growth and the increased use of forest areas for recreation bear a direct relationship to the fire hazard. Only the careful planning and recognition of the fiscal responsibility of the Federal Govment will enable us to combat this constant threat to our forests.

Congress acted in 1962 to adopt a base plan for the U.S. Forest Service for the purpose of protecting and maintaining national forests, and it was the intent at the time of adoption that this plan was to be fully implemented within a 10-year period. The need each year during this 10-year period for the protection and maintenance of the four southern California national forests amounts to $7,319,118.

There is genuine concern on the part of local officials that there remains a deficiency of Federal appropriations for the past 2 fiscal years amounting to $8,457,246 to implement the 1962 plan.

The November and December storms of 1965 have resulted in extensive damage to fire roads and truck trails over which men and equipment must travel in order to control forest fires in much of the back country of each of these four national forests.

So that we may be assured of provisions for more effective methods of prevention and suppression of fires in these national forests, the watershed Fire Council of Southern California urgently petitions your committee and the Congress to—

1. Increase the appropriation of funds in the 1966–67 fiscal year budget for for fire protection and maintenance in the Angeles National Forest by a minimum of $8,457,246 in order to bring the 10-year plan up to date according to the needs established under the U.S. Forest Service.

2. Appropriate the necessary funds to continue the program for national forests.

3. Appropriation the necessary funds to provide for structural improvements within all of the national forests of the United States, including fire protection faciltities and fire personnel quarters.

STATEMENT OF WATERSHED COMMISSION, COUNTY OF LOS ANGELES

FIRE PROTECTION NEEDS FOR ANGELES NATIONAL FOREST, LOS ANGELES, CALIF.

Each year the Los Angeles County Watershed Commission has presented to Congress a proposed program to help provide adequate fire protection in the Angeles National Forest, a program directed toward the preservation of valuable watershed areas of this county.

The Los Angeles County watershed and the territory of the Angeles National Forest is a constant target for devastating forest fires because of the peculiar characteristics of the climate of this region. These forest areas are situated in a climate which is characterized by long periods of droughts, hot desert winds, and low humidity—all of which contribute to the extreme fire hazard on virtually a year-round basis. Los Angeles County's population is continuing to rise sharply each year, resulting in increased demands for the recreational use of the forest areas, and this too has been a prime factor in heightening the hazard of forest fires.

According to recently compiled statistics on the amount of acreage burned in the national forests of southern California, a total of 1,304 acres of valuable watershed in the Angeles National Forest was destroyed by fire during the year of 1965.

The average amount of acreage burned annually is approximately 14,000 acres in this same national forest area. Thus, the 1,304 acres burned in 1965 represent a sharp reduction in the total acreage burned even though the incidence of fires, numbering 60 during 1965, are about average, underscoring the effectiveness of the joint efforts of agencies of the county and Federal Government toward improved fire protection in the Angeles National Forest.

In this regard, the Board of Supervisors of the County of Los Angeles, in cooperation with the Federal Government, has developed a comprehensive watershed fire protection plan for Los Angeles County over a 10-year period commencing in 1962 at a total cost of $5,238,950. To date, there have been expenditures by Los Angeles County of $1,359,081.

Congress acted in 1962 to adopt a base plan for the U.S. Forest Service for the purpose of protecting and maintaining national forests, and it was the intent at the time of adoption that this plan was to be fully implemented within a 10-year period. The total need each year during this 10-year period for the protection and maintenance of the Angeles National Forest amounts to $2,045,707.

There is genuine concern on the part of local officials that notwithstanding the fact that the property taxpayers of Los Angeles County have contributed some $1,359,081, there remains a deficiency of Federal appropriations for the past 2 fiscal years amounting to $2,328,592 to implement the 1962 plan.

In analyzing the comparison of expenditures by county government and the U.S. Forest Service in the Angeles National Forest since 1955–56, it has been determined that the property taxpayers of Los Angeles County have contributed a total of $19,643,839 as Los Angeles County's share of the cost of maintaining and protecting forest areas. A survey of comparable expenditures on the part of the United States Forest Service indicates that a total of $24,145,410 has been expended over the same period.

Of the total amount of expenditures of this period, some 44.8 percent has been borne by the county taxpayers and 55.2 percent by the U.S. Forest Service. (See schedule below.)

The base plan includes appropriations for personnel preattack planning, fuel treatment, equipment, and supplies. It does not include appropriations for buildings and roads which are critically needed in order to provide better fire control.

The November and December storms of 1965 have resulted in extensive damage to fire roads and truck trails over which men and equipment must travel in order to control forest fires in much of the back country of the Angeles National Forest.

So that we may be assured of provisions for more effective methods of prevention and suppression of fires in the Angeles National Forest, the Los Angeles County Watershed Commission urgently petitions your committee and the Congress to—

1. Increase the appropriation of funds in the 1966–67 fiscal year budget for fire protection and maintenance in the Angeles National Forest by a minimum of $2,328,592 in order to bring the 10-year plan up to date according to the needs established under the U.S. Forest Service.

2. Appropriate the necessary funds to continue the program for national forests.

3. Appropriate the necessary funds to provide for structural improvements within all of the national forests of the United States, including fire protection facilities and fire personnel quarters.

Comparison of expenditures by Los Angeles County government and the U.S. Forest Service in the Angeles National Forest over a 10-year period

LOS ANGELES COUNTY		FEDERAL	
Forester and fire warden	$1,926,158	Timber resources management	$130,759
Road department	10,900,777	Forest pest control	68,426
Parks and recreation	290,229	Recreation use	2,315,937
Recreation subsidy	504,000	Wildlife habitat	64,340
Flood control	5,984,981	Soil and water management	4,380,919
Health department	37,694	Fire protection and maintenance and flood	10,199,123
		Fire emergency management	2,155,659
		Maintenance of fire and general administrative structural improvements	956,868
		Maintenance of roads	996,675
		Maintenance of trails	140,914
		Construction of roads	1,985,790
		Construction of forest highways	750,000
Total comparable expenditures	19,643,839	Total comparable expenditures	24,145,410
		*Other additional expenditures not comparable	10,490,743
		Grand total	34,636,153

STATEMENTS OF THEODORE B. HETZEL, BOARD OF INDIAN RIGHTS ASSOCIATION, AMERICAN FRIENDS SERVICE COMMITTEE, AND DR. CARL MUSCHENHEIM, CHAIRMAN, NATIONAL COMMITTEE ON INDIAN HEALTH, ASSOCIATION ON AMERICAN INDIAN AFFAIRS, INC.

INDIAN WELFARE PROGRAMS

Senator BYRD. Drs. Theodore B. Hetzel and Carl Muschenheim will now be heard.

Mr. HETZEL. I appreciate this opportunity to appear before you Senator Byrd, for the second time in behalf of budgets for Indian programs.

I am Theodore Hetzel, a Haverford College professor, asked by the Friends Committee on National Legislation to testify in behalf of Friends' interests for Indian welfare and also for the Board of the Indian Rights Association in Philadelphia.

I have traveled around the country for the last 12 or 14 years specifically to study Indian problems and to see people and meet people and study so that I can speak and write on the subject. I have seen great unmet needs that still exist among American Indians, our lowest educated and our poorest and least healthy citizens, and the least able to help themselves.

TREATY AND IMPLIED COMMITMENTS TO INDIANS

I think our Nation still has a commitment to Indians that has not been met, not only because of our treaties and promises to them but also because of our commitment to ourselves.

Fulfilling this commitment is important to the kind of society that we want America to be. And, to achieve these goals, we need money. It costs money. When we have the means to do it we know what we want to do.

I notice people say that the cost of Indian affairs is increasing, but everything is increasing. The small increase in appropriations for education and welfare services does not even keep pace with the increase in population, inflation, and building costs. The National Science Foundation budget has increased 2,000 times, 200,000 percent in the last 15 years. So if we want to overcome these problems, we can do it.

We help Indians through the Bureau of Indian Affairs and the U.S. Public Health Service. They need larger appropriations for their educational and social programs.

EDUCATIONAL REQUIREMENTS

Education is certainly a crying need. Lots of the children do not go to school yet, either elementary or high school.

Construction is needed. Construction costs are going up, I understand, about 10 percent a year. The population in some communities is going up more than 7 percent a year and there is inflation besides.

The costs of education, of opening the schools is going up, so this increased budget is really mandatory.

Many Indians are not able to succeed in our society because they do not have the skills; the proper skills need to be supplied to them. There are special needs for Indians, both in language and in preparation for gainful employment.

It has been said there are too many chiefs and too few Indians. It is now the other way around, too few productive workers and too many dependents. We need to increase the ability of Indians to make their own way.

UNORGANIZED STATUS OF INDIANS

Senator BYRD. Our Government is supporting a multitude of programs to teach the Negroes how to develop skills and become self-supporting. Is the Government, in your judgment, approaching the needs of the Indian equally assiduously and with as great interest and

with as much emphasis upon these various manpower training programs and poverty programs and so forth as applied to the Indian?

Mr. HETZEL. There is a lot of good work being done. The answer is yes, in some intances, but in most instances, no. The Indians are not well enough organized to know the ropes, to know how to apply for those things. Indians well represented by lawyers who know their problems can make progress, but there are those who do not have that kind of representation and do not know the reasons for or the means to get these services.

I think the Bureau of Indian Affairs does its custodial work well but does not take the initiative to find out how better to serve the Indian.

INDIAN POPULATION AND EMPLOYMENT MOTIVATION

Senator BYRD. What is the Indian population in our country?

Mr. HETZEL. At least a half million. The number related officially to the Federal Government is something probably under 400,000. But the number is increasing quite rapidly.

Senator BYRD. Do Indians generally have the motivation and the desire to improve their lot and prepare themselves for employment, and are they then interested in continued employment?

Mr. HETZEL. Yes, I think they are. Certainly the young people are. Some of the older ones have met with frustration and feel they are too old, that it is a hopeless case, but the young people are seeking education and an opportunity to improve themselves. They are not lazy people, but some of them are frustrated people.

INDIAN HEALTH AND LIFE EXPECTANCY

The health situation of Indians is bad. The life expectancy is more like that of Africa rather than that of America. Indian health conditions are much worse than for the rest of our population, and the incidence of disease is correspondingly high. I understand dysentery might be 100 times as great and trachoma, which was once eradicated, is now coming back and is a very serious problem.

Most of these things are due to the lack of good water supply and bad sanitation, which are things that can be taken care of.

POVERTY PROGRAM

Senator BYRD. Is the poverty program reaching the Indians?

Mr. HETZEL. In some instances it is. But I am not speaking for the poverty program now. That is good but the budgets I am speaking about are Bureau of Indian Affairs budgets.

Senator BYRD. But if you have any information on the poverty program the committee would be glad to know whether or not that program is proving to be effective in helping the Indian.

Mr. HETZEL. In responsibilities, yes.

Senator BYRD. What do you mean by "in responsibilities?" Does that indicate lack of followthrough on the part of people here in Washington, or is it a failure to apply and activate the programs on the whole level?

Mr. HETZEL. I am afraid I cannot answer that. I don't think I know. The cases that I do know about seem to result from lack of knowledge of how to initiate the contacts at the Indian's end but there may be the other too.

INDIAN HOUSING

Lack of housing is a serious problem. In some instances, the housing is waiting on the future budget to provide waterlines and sewage disposal; there is no use in building the houses now because they won't be fit to live in without these services. So the budget is holding things up.

MENTAL HEALTH AND FRUSTRATIONS

Indians are not as well equipped for mental health care as the rest of the population. Improvements are taking place on this, too, but Indians have special frustrations which cause mental health problems that are not met.

POPULATION EXPLOSION

The population increase causes concern with me. More should be publicly known among the Indians as to availability of information and how to plan the size families they find best for their purposes.

I brought with me some photographs which, if they would be of any interest, I would be glad to offer or to leave.

Senator BYRD. We will just retain those in the committee files.

Mr. HETZEL. They show the need for housing and rural conditions, the need for water and, in a couple of instances, the good services that have been made available because of budgets in the past.

PREPARED STATEMENT

Senator BYRD. All right, Mr. Hetzel, we appreciate your appearance and your statement will be included in the record in its entirety. Thank you very much.

(The statement follows:)

I am Theodore B. Hetzel, engineering professor at Haverford College, a member of the board of the Indian Rights Association, member of the Indian Committee of the American Friends Service Committee and of the Philadelphia Yearly Meeting of the Religious Society of Friends. I am here today for the Friends Committee on National Legislation and the Indian Rights Association. The FCNL seeks to represent many of the concerns of the Religious Society of Friends, but does not claim to speak officially for all Friends. However, Friends have a history of over 300 years of active interest in the welfare of Indians, expressed corporately and also by individuals. The Indian Rights Association is a nonsectarian, nonpartisan organization supported by voluntary contributions, which seeks to promote the welfare of the American Indians.

I appreciate this opportunity to speak in support of increased appropriations for the educational and social programs of the Bureau of Indian Affairs, and for the health activities of the U.S. Public Health Service.

WAR ON AMERICA'S WORST POVERTY AREAS

On my vacations during the past dozen years I have visited Indian communities across the country for the Indian Rights Association, the Association on American Indian Affairs, and for Quaker and other Indian-interest organizations. I have seen excellent work that has been done by the BIA and by the Division of Indian Health, both in the construction of facilities and in the work of personnel. But I have also seen great unmet needs. Many Indians belong to that poorest segment of our society which is becoming relatively more destitute as the more affluent portion of our population enjoys a rapidly improving standard of living. Indeed, it seems to me that our worst pockets of poverty are in Indian communities.

Much is being said about our Nation's commitments abroad. In no case is that commitment more clearly documented in treaties and in promises, or more firmly based on moral obligation than is our commitment to provide services that can help Indians achieve a better life, a new society and economy to replace those old ways which are now impossible.

There are many advantages in our society and our economy of which Indians wish to avail themselves, and there are strong pressures on our part to force

them to conform to and integrate with our dominant culture. For these accommodations to take place in a wholesome and constructive way, the choices must be free ones, and the results must be a general equality of standards of health, and of opportunities for education, employment, and economic and social well-being. Action which has been taken to terminate Federal services to some Indians, for instance, the Catawba, Menominee, and Klamath, has proved to be mistaken, or at least premature, for the Indian communities were not at the health, educational, and economic levels of their neighbors, and they had not had the experience of managing their affairs in our context, of paying taxes, of managing school systems, and so forth.

THE BUREAU OF INDIAN AFFAIRS BUDGET

Of course, I approve of the increased appropriations for the educational and welfare services, but this is not a real increase, for it does not keep pace with the increases in population, inflation, and building costs. We must do better than just maintain present levels of education, for there are still areas where the needs have never been met. Adequate pay and specail preparation are needed to provide suitable teaching for the special needs of the many children who start school without a knowldge of English. Schools for these small children should be near their homes, and not in border towns or remote places where the children would have to live in dormitories. Such schools are being built, but more are needed. At the high school level, there is a real need for dormitories because high school students ought to have the educational advantages that can be offered only in larger places. Dormitories for high school students are especially needed in Alaska, so that native children can get to BIA or to public high schools.

Money is needed for revolving loan funds to enable Indians to develop enterprise, management skills, and self-sufficiency. These skills must be developed if Indians are to be prepared to do without special Federal services at some future date.

More vocational schools are needd, and present high school curricula should include more vocational orientation, especially to hold the interest of boys. It is a misfortune for the individual, and a social and economic loss to the Nation, when an able student drops out of school. It is often the able student who just can't take any more of a curriculum which is deficient in meaning for him.

INDIAN HEALTH SERVICES

The Division of Indian Health is to be commended for the quality of the work it has been doing, but it is far short of its goal of raising Indian health to anything like national standards. Substantially expanded programs are needed, yet the proposed 1967 increase is scarcely greater than the increase in Indian population. Just maintaining the present level of health services will not correct the disadvantages that Indians suffer. There are twice as many Indians per physician, and nearly three times as many Indians per dentist, as for the American population generally, which reminds me of how I felt in Alaska with an abscessed tooth and 500 miles from a dentist. You know how much more prevalent among Indians, and how much more deadly, are the diseases: measles, diabetes, hepatitis, dysentery, pneumonia (two times) and tuberculosis (five times). Trachoma, once thought to have been eradicated, and virtually unheard of in the white population, was recently reported to infect 23 percent of Navajo schoolchildren and 61 percent of those at San Carlos, Ariz.

The situation is principally due to insufficient and unsafe water and to lack of sanitation. For years we have provided good water for cattle on some reservations, but only recently have Federal funds been available to provide water for people.

Indians cannot overcome these handicaps by themselves. Most Indian tribes have an inadequate land base for self-sufficiency with their traditional skills, and they have not yet learned the skills to achieve well-being in our modern economy. They are therefore unable to afford medical and dental care, and few communities can afford a wholesome water supply and sanitary waste disposal. In addition, new construction and the renovation of housing is held up because the present budget for sanitary facilities is inadequate, and Indians must wait for future appropriations to provide for water supply and waste disposal services. We are told that the backlog of unmet housing need totals 65,000 dwellings. Government agencies are rendering a great service in attacking this need, but the need is enormous and the present program is too small.

I understand that a program for mental health has started at Pine Ridge, S. Dak. This is good, but such services are deficient or nonexistent in other Indian communities. If Indians were as well provided with mental hospitals as are other Americans, there would be 1,000 beds just for Indians, but I believe there are none. It has been my experience that indigent Indians are not admitted to State and county mental hospitals unless a Federal agency pays the expenses.

Population explosion of concern.—More effort should be made to inform Indians of the availability of birth control information, and to supply it on request. Health services have saved so many lives that families are much larger than in the past. The natural resources of an inadequate land base will not support the increased population. The social structure of Indian communities cannot absorb this increase either, one might say that there are too few chiefs and too many Indians, too few productive workers and too many dependents, so children must be sent away for adoption, or live more or less permanently in institutions. Young adults must leave their home communities whether they want to or not. Education must be geared to the needs of those who must leave home, with the result that the curriculum neglects the transmission of values from the Indians' own heritage. Thus, whether we want to eradicate poverty, to maintain the mental health of parents who already have too many children for their means or health, to acculturate Indians to succeed in our culture, or to make it possible for those who wish to preserve values from their own tradition, in any case, the control of population is essential wherever the economic base is meager.

Photographs show the need.—I have brought some photographs which I have taken to show the need for water, health services and housing. Here is what they show—

Papago volunteer labor built a building for a clinic, but 10 years elapsed before the medical services were provided to make use of it;

Adobe houses at Nambe Pueblo deteriorate while Indians wait for future budget to provide water and sewer lines for new construction;

Ute Reservation slum housing without water or sanitation;

Oklahoma rural slum housing without water or sanitation;

Three hundred and fifty natives of Tanana, Alaska had a well and pump in 1962, but in 1963 their only source of drinking water was the Yukon River;

Comparison (two photos): Papago village of Hotason Vo in 1955 with no sanitary facilities, and in 1964 with public water supply and a privy for each house.

CONCLUSION

I feel that my testimony would be incomplete if I did not express my high regard for the persons I know in the Bureau of Indian Affairs and in the Division of Indian Health, and for my general approval of their policies. They merit our financial support.

INDIAN HEALTH DIVISION BUDGET REQUEST

Senator BYRD. Dr. Muschenheim, would you like to proceed?

Dr. MUSCHENHEIM. Thank you very much for this opportunity to appear before you.

Senator BYRD. Do you have a prepared statement?

Dr. MUSCHENHEIM. I have a prepared statement which I believe has already been distributed.

Senator BYRD. Can you summarize that for us?

Dr. MUSCHENHEIM. The purpose of my statement is to comment on the overall budget request for the Division of Indian Health and also to recommend for your consideration two items which do not appear in the budget.

As regards the total budget which request is approximately $73.5 million, this represents an increase over 1966 of approximately $6.25 million. About $1.5 million of that, however, is for mandatory pay increases and the like. So that the net increase is $4.7 million which

is for program activities, which is still slightly under the $5 million annual increment which has been recommended by our association for the past several years.

TRACHOMA CONTROL PROGRAM

We do support this general budget but we note with concern that a special program for trachoma control in the Southwest which our committee recommended both to the Division of Indian Health and the Bureau of the Budget does not appear in the budget request.

It is well documented that trachoma is widely prevalent among Indian communities in the Southwest, particularly the Navajo, Papago, and the San Carlos Apache.

ESTIMATED CONTROL COST

It is also well documented that this could be controlled by an intensive program which would cost relatively, actually quite modest sum of $250,000 a year and in 5 years the prevalence, it is believed, could be reduced to such a low level that it might very well then eradicate itself.

Senator BYRD. How much money is needed for trachoma?

Dr. MUSCHENHEIM. $250,000 a year for 5 years so we would respectfully like to request your consideration of an appropriation of $250,000 for the coming fiscal year.

Senator BYRD. How did you reach this estimate?

Dr. MUSCHENHEIM. This estimate actually, we reached by consultation with experts in the field including Dr. Teageson who is from the University of California, who is a consultant for the Division of Indian Health.

We do have a breakdown of these needs if you would care to have them.

Senator BYRD. You say you have a breakdown?

Dr. MUSCHENHEIM. I don't have it here. I can produce it as regards a breakdown of the cost.

Senator BYRD. Breaking down the $250——

Dr. MUSCHENHEIM. Of the $250,000.

Senator BYRD. Maybe we ought to have that.

Dr. MUSCHENHEIM. May I present that later?

Senator BYRD. Yes.

(The information follows:)

The following priceout is based on the use of two trachoma teams:

Breakdown of cost estimate for trachoma control project

	Annual salary	Cost for 2 teams	Total
I. Resources, Window Rock subarea:			
A. Personnel:			
Each team will consist of—			
1 medical officer, full grade (ophthalmologist)	$11,000	$22,000	
2 trachoma nurses, GS–6	5,505	22,020	
1 education specialist, GS–9	7,220	14,440	
1 driver, W–4	4,600	9,200	
1 clerk, GS–3	4,100	8,200	
Total			$75,860
	Personnel	Cost	Total
B. Training and meetings:			
American Academy of Ophthalmology, or equivalent	2	$600	
Specialty training for nurses	4	800	
Specialty training for education specialists	2	400	
Initial orientation meeting for 2 teams		600	
Total			$2,400
	Unit cost	Total unit cost	Total
C. Equipment:			
2 typewriters	$150	$300	
2 fluoroscopy stools	30	60	
2 American Optical slit lamps, portable	1,200	2,400	
2 audiovisual apparatus with program	700	1,400	
2 Zeiss-Gulstrand Loupe	60	120	
2 Phenoff illuminators	15	30	
2 slit lamp tables	60	120	
2 basins	3	7	
2 Schiotz tonometers	60	120	
Total			$4,557
D. Supplies:			
Paper, pens, literature, alcohol		850	
Miscellaneous		600	
2 volumes text books, Soresby		300	
Total			1,750
E. Drugs:			
Kynex, 500 milligram tablets, 273,000, at 4 cents		11,000	
Kynex suspensions		5,000	
Achromycin in oil gtts., 3,000 4 cubic centimeter gtt. containers, at 57 cents		1,700	
Total			17,000
F. Travel: 2 teams, each at $15,000		30,000	30,000
Total cost (Window Rock)			132,267

Breakdown of cost estimate for trachoma control project—Continued

	Annual salary	Total salary	Total
II. Resources, Phoenix area:			
A. Personnel:			
Trachoma team complete except for—			
1 trachoma nurse	$5,505		
1 education specialist (CH) GS-9	7,220		
1 clerk GS-3	4,100		
1 driver W-4	4,600	$21,425	
B. Equipment:			
1 American Optical slit lamp	1,200		
1 audiovisual apparatus with program	700	1,900	
C. Travel	15,000	12,000	
D. Drugs	5,000	5,000	
E. Other personnel: epidemiologist full grade or senior grade	12,000	12,000	
Total cost (Phoenix area)			$52,325
III. Resources, Albuquerque area:			
A. Personnel (1 trachoma team):			
1 medical officer, full grade	11,000		
2 trachoma nurses, GS-6	11,010		
1 education specialist, GS-9	7,220		
1 driver, W-4	4,600		
1 clerk, GS-3	4,100		37,930
	Personnel	Cost	Total
B. Training and meetings:			
American Academy meeting or equivalent	1	$300	
Specialty training for nurses at $200	2	400	
Specialty training for education specialist (CH)	1	200	
Initial orientation meeting for team		300	$1,200
C. Equipment:			
1 typewriter		150	
1 American Optical slit lamp		1,200	
1 audiovisual apparatus with program		700	
1 Zless-Gulstrand loupe		60	
1 Phenoff illuminator		15	
1 slit lamp table		60	
1 basin		3	
1 fluoroscopy stool		30	
1 Schiotz tonometer		60	2,278
D. Supplies:			
Pens, paper, literature, alcohol		300	
Miscellaneous		300	2,278
	Unit cost	Total unit cost	Total
E. Drugs:			
Kynex, 500 milligram tablets, 262,500 at 4 cents		$10,500	
Kynex suspension		500	
Achromycin in oil gtts, 600 bottles at 57 cents		400	$11,400
F. Travel		15,000	12,000
Total cost (Albuquerque area)			65,408
Total price-out for resources needed			250,000

MENTAL HEALTH IN ALASKA PILOT PROJECT

Dr. MUSCHENHEIM. Another program which we would like to bring to your consideration is a pilot project for mental health in Alaska.

I believe that the Chief of the Division of Indian Health, Dr. Ribald, has already testified before this committee, so I will not take your time to go into any detail about this. But the estimated cost for this would be approximately the same as the pilot projects now going on on the Pine Ridge Reservation; namely $100,000. The need for such a program in Alaska also is well documented in terms which have already distributed to members of the committee.

INDIAN SANATATION CONSTRUCTION

Finally, there is the question of the budget for the sanitation construction. We note that on this $6.2 million is requested for this year. The total needs have been identified which would cost $116 million. If the construction were to be actually performed in the next 6 or 7 years, at the rate of $6.2 million a year, however, which is the request, this would take 20 years to fill identified needs for safe water supplies and sewer in Indian communities which totally lack such facilities at the present time.

We recommend therefore that this item be increased in the coming budget to $16 million rather than $6.2 million in order that these programs can be completed in a more reasonable time than 6 or 7 years.

Those are the things I wish to bring to your attention Senator, and I would, in conclusion like to emphasize these are very modest requests, the needs for which are well documented in the materials that we have distributed and I shall be glad to present to you the breakdown of the projected costs for the trachoma.

Senator BYRD. That would be helpful. We thank you for your appearance and for your fine presentation.

(The prepared statement of Dr. Muschenheim follows:)

Thank you for this opportunity to appear on behalf of the Association on American Indian Affairs.

The Association on American Indian Affairs is a national voluntary organization founded in 1922 to assist American Indian and Alaska native communities in their efforts to achieve economic and social equality with other American communities. Its national committee on Indian health is composed of doctors, anthropologists, and tribal and public health workers who are experienced in the conduct of health programs on the reservations.

In recent years our association has appeared before committees of the Congress in support of such measures as the transfer of health services from the Bureau of Indian Affairs to the Public Health Service in 1955; Public Law 86-121, the Indian Sanitation Facilities Act; and the establishment of a preventive mental health program beginning with a pilot activity at Pine Ridge, S. Dak., during the fiscal year 1966.

My purpose in appearing here today is (1) to comment on the budget request of the Division of Indian Health for fiscal year 1967 in light of Indian health needs, and (2) to recommend for your consideration two items which do not appear in the Division's 1967 budget:

A 5-year comprehensive trachoma control program, estimated to cost $250,000 a year; and

A pilot preventive mental health project in Alaska, estimated to cost $100,000 in fiscal year 1967.

Trachoma and mental health are subjects of intense interest to our association and its national committee on Indian health; and they were the topics of our third national conference on Indian health. A report of this conference appears in the Journal of the American Medical Association (Dec. 6, 1965). It was read into the Congressional Record by Senator George McGovern of South Dakota and is appended to my statement.

TRACHOMA

Trachoma, an eye disease extremely rare in the general population, is staging a comeback on reservations and has become one of the most serious problems in Indian health today. A form of keratoconjunctivitus, it is a major cause of blindness among Indians and probably the greatest cause of visual impairment.

The Division of Indian Health lists trachoma in 1964 as fourth among the 10 most frequently reported diseases among Indian beneficiaries (excluding Alaska natives). In that year 7,043 cases were reported—an increase of 124 percent over 1963, reflecting an intensification of case finding.

In the 1930's trachoma infected approximately a fourth of the Indian population. With the introduction of the sulfonamides in 1938, it became evident that

trachoma could often be cured in a matter of weeks. A crash program of treatment for all the western tribes, in which sulfanilamide was used, almost eradicated trachoma on the reservations. Unfortunately, the program was interrupted by World War II and not reestablished at the end of the war. As a result, by 1956, trachoma had returned to its presulfonamide level among Indians in areas of the Southwest.

Of the 7,043 cases of trachoma reported by the Division of Indian Health for 1964, 4,517 occurred in the Phoenix health area, and 2,352 in the Window Rock health area.

It is estimated by the Division of Indian Health that in the Phoenix area the rate of active trachoma infection in schoolchildren for fiscal year 1965 will be 33,000 per 100,000.

Clinical impression based on pilot surveys on five reservations indicates the rate for the Indian general population (above and below school age) is approximately 15,000 per 100,000. A recent survey conducted in the Bylas area of San Carlos Reservation indicated an incidence of active trachoma by age group as follows: 0 through 4 years, 35 percent; 5 through 18 years, 61 percent; 19 and older, 43 percent.

In the Window Rock health area, the rate of infection in schoolchildren on and near the Navajo Reservation is approximately 15,000 per 100,000 and 10,000 per 100,000 in the non-school-age population.

Trachoma is a profound personal tragedy for its victims; and it is linked to the economic plight of the people, for the visual impairment and blindness caused by the disease are an impediment to the acquisition of skills required to improve their economic lot. As a measure of this economic toll, a pilot survey on San Carlos and Sacaton Reservation Indians in fiscal year 1964 found a rate of 830 per 100,000 individuals to be industrially blind (20/200 or less vision in both eyes) due to trachoma sequelae. It is of interest in this connection that approximately 23 percent of the blind-aid recipients in Arizona are American Indians and that one-third of these are blind due to trachoma.

Trachoma is entirely a preventable disease. Infection is due in large part to the scarcity of water on many reservations and to the lack of health education concerning proper hygienic practices in the home.

The Association of American Indian Affairs believes that the present and growing crisis justifies the need for a 5-year comprehensive trachoma control program calling for (1) the treatment of all known cases with antimicrobial drugs, and (2) a sound health education program. To be effective, this program must be accompanied by the provision of an adequate supply of readily accessible, uncontaminated water.

Over a 5-year period this control program would cost an estimated $1.25 million, an amount roughly equivalent to the 5-year cost of blind-aid to victims of trachoma.

MENTAL HEALTH

The problems of poor mental health are vitally related to the poor health and low socioeconomic status of American Indians and Alaska natives, as is the case among other proverty-stricken communities in the Nation.

Recognizing that mental health services should be an integral part of a total Indian health program, last year this subcommittee approved an appropriation of $100,000 to the Division of Indian Health to launch a pilot preventive mental health project on South Dakota's Pine Ridge Reservation, a project which our association supported at these hearings last year. Our association wishes to compliment the subcommittee on its pioneer action.

We would like to suggest that it continue this initiative by extending as rapidly as possible mental health services to other areas, and recommend that as a next step a division preventive mental health project be established in Alaska to serve that State's 43,000 Indian, Eskimo, and Aleut citizens.

Data presented at our Third National Conference on Indian Health indicated that the percentage of American Indians and Alaska natives with psychotic problems probably does not exceed that of the non-Indian population, but that the incidence of preventable neurotic disturbances appears to be considerably higher among the Indian population than among the general population. Yet counseling and other services which might help an Indian person approach his problems with a healthy attitude are rarely available.

Factors bearing on the development of mental illness among American Indians and Alaska natives include the disintegration of their culture, the generally poor level of education, poverty, disturbing early experiences in school, and the ambivalent position of the Federal Government in relation to the Indian.

The prevalence of mental health problems among Indians is manifested by such indexes of maladjustment as the nearly 3,000 Indian patients who were hospitalized in 1964 by the Division of Indian Health for psychiatric disorders; 13 to 30 percent of students treated in various boarding school infirmaries who showed signs of prolonged emotional stress; the abandoned and neglected youngsters who are now in foster homes; and the high percentage of accidents among Indians due to excessive use of alcohol.

Nowhere is the lack of mental health services more acute than in Alaska. Despite the efforts of the State mental health program to provide psychiatric treatment to all the citizens of Alaska, the majority of natives residing north of Anchorage are dependent for diagnostic and followup psychiatric services on the general physicians and allied staff of the Division of Indian Health.

It is proposed that a mental health team be located at Anchorage, to travel from there to outlying hospitals. Based on the Pine Ridge model, the Alaska team could help general medical staff handle groups of native patients who need to learn how to manage periods of crisis in their lives with a minimum of stress to avoid mental breakdowns that require prolonged outpatient or inpatient therapy. The team would train Division of Indian Health physicians, nurses, and other allied medical personnel and Bureau of Indian Affairs schoolteachers to incorporate good mental health practices in their daily routine and to focus on early case detection.

Staff required consists of a community psychiatrist, a clinical psychologist, one mental health social worker, and two clerks. The support of such a team requires an estimated $100,000 in 1967.

PRESENT INDIAN HEALTH STATUS

The goal of the Division of Indian Health is to elevate the health status of American Indians and Alaska natives to a level comparable with the general population.

Marked progress has been made toward that goal since the transfer of program responsibility to the Public Health Service from the Department of the Interior in 1955.

Infant mortality is down 34 percent among Indians and 38 percent among Alaska natives. Tuberculosis deaths among Indians have declined 55 percent and among Alaska natives 84 percent. Deaths from influenza and pneumonia are approximately 30 percent lower. Deaths from gastroenteric diseases have declined 60 percent among Indians.

Despite these strides forward, the program remains far short of its goal. Present comparisons with the general population are highly unfavorable. The infant mortality rate is 44 percent greater than for the general population. Influenza and pneumonia deaths are twice as high among Indians and three times as high among Alaska natives. Gastroenteric deaths are five times the national rate. Tuberculosis death rates are five times higher among Indians and Alaska natives. TB incidence is seven times as great.

Poor environmental health conditions and a low level of family and community knowledge in the application of modern health measures contribute heavily to these intolerably high rates. Today over 66 percent of American Indians and Alaska natives haul their drinking water, in some instances, a mile or more, from potentially contaminated sources, in unsanitized containers, and more than 66 percent of them have grossly inadequate waste disposal facilities or no facilities at all.

Most Indian and Alaska natives live in poorly heated, overcrowded homes, many with more than five people to one room. The Bureau of Indian Affairs has identified a current need for 65,000 housing units. However, in the last 4 years only 400 units of public housing have been built and occupied.

It is the firm belief of our national committee on Indian health that increased preventive medical services, including an aggressive program of health education, and improved environmental conditions hold the key to further progress.

BUDGET REQUEST FOR 1967

With the understanding and support of the Congress, funds available to the Division of Indian Health have increased steadily since July 1, 1955. The funds have made it possible to accommodate a substantial increase of patient load in the hospitals, clinics, and other outpatient facilities of the Division as well as those facilities under contract in non-Indian communities.

Over the years our committee has been concerned with the slow growth in the field health activities of the Division's program. Preventive and field clinic services have failed to keep pace with curative services, and appropriations for environmental sanitation facilities have lagged far behind recognized need, resulting in an unbalanced general health program and inefficient utilization of existing resources.

In fiscal year 1966 the Congress took an important step toward improving environmental health conditions by appropriating $2.2 million for construction of sanitation facilities in connection with approved public housing projects which had been stalled for lack of sanitation funds.

Analysis of the President's budget for 1967 indicates a program activity budget for the Division of Indian Health in the amount of $73,448,000, representing a gross increase of $6,278,000 over 1966 for the same activities. Of this amount, $1,577,000 of the increase must be utilized for mandatory pay increases and other statutorily required costs, which reduces the net increase to a little over $4,701,000. The Association on American Indian Affairs is heartened by this significant increase. It comes close to the annual increment of $5 million that the Association on American Indian Affairs has, for the past several years, recommended for use in program activities by the Division of Indian Health in order that the growth of the preventive health program might measure up to the curative phase of the Division's operation in a balanced total program.

Our analysis of the President's budget for 1967 also indicates an appropriation request of $6,200,000 to correct existing gross sanitation deficiencies of the beneficiary communities, including $2,200,000 for construction of sanitation facilities in connection with approved public housing projects. This represents a net program increase of only $88,000 over fiscal year 1966, which falls far short of immediate needs. The total backlog need for sanitation facilities is currently estimated at $116 million. At the present rate of expenditure, it will take approximately 20 years to catch up with this backlog.

RECOMMENDATIONS

The Association on American Indian Affairs respectfully submit the following recommendations to this subcommittee:

1. An appropriation of $250,000 a year for 5 years for a comprehensive trachoma control program.
2. An appropriation of $100,000 for fiscal year 1967 for an Alaska preventive mental health project.
3. An appropriation of $16 million a year for construction of needed environmental sanitation facilities, in order that the existing backlog be eliminated within a 7-year period.

Our association believes these recommended increases are fully justified in view of the now-prevailing health conditions among Indian and Alaska native citizens.

CONCLUSION

On January 20, 1964, President Johnson stated: "It is a fact—a shameful fact—that America's first citizens, our Indian people, suffer more from poverty today than any other group in America. * * * I have directed that in our attack on poverty, we put our Indian people in the forefront."

The harsh profile of poverty for a half a million Indians and Alaska natives is indicated by these statistics:

Average unemployment, 45 percent.
Median family income, $1,500.
Average education, 5 years.
Housing, unfit for habitation, 90 percent.
Average age at death, 43 years.

Poor health, meager education, low income, and appalling living conditions tend to prevent these citizens from extricating themselves from a vicious circle of poverty and disease.

The Nation's greatest asset in fighting these conditions are the Indian people themselves who have long been waging their own war on poverty. It is noteworthy that a number of tribes have responded to the Economic Opportunity Act of 1964 by sponsoring community health aid programs. Such programs are now in operation on the Pine Ridge and Rosebud Sioux Reservations in South Dakota and on the Northern Cheyenne Reservation in Montana. Other projects will follow, including a program to train 400 Alaska natives as community health aids.

We believe that now, as never before, there is a great opportunity for a breakthrough in Indian health and the problems of poverty through a coordinated attack utilizing all available Federal, State, and local resources.

[From the Journal of the American Medical Association, Dec. 6, 1965]

AMERICAN INDIAN AFFAIRS—THIRD NATIONAL CONFERENCE ON AMERICAN INDIAN HEALTH

(Agnes Fahy and Carl Muschenheim, M.D.)

Mental health and trachoma are emerging as major health problems among American Indians, as intensive prevention and treatment programs are improving the outlook for the conquest of such systemic infectious diseases as tuberculosis.

To focus attention on the increase in mental disorders and the recurrence of trachoma, once almost completely controlled on the reservations, and to consider approaches of their solution, the National Committee on Indian Health of the Association on American Indian Affairs, last fall, called its third conference on Indian health. The first conference had been held in 1953 to consider whether to recommend the transfer of Indian health services from the Bureau of Indian Affairs, Department of the Interior, to the Public Health Service, a transfer which was subsequently effected. The second conference, in 1955, was concerned with questions related to the administrative change.

The third conference was held in New York on November 19, 1964. There were two half-day sessions.

MENTAL HEALTH

The morning session was devoted to a discussion of mental illness on the reservations. Alexander H. Leighton, M.D., professor of social psychiatry, Cornell University Medical College, New York, was the discussion leader.

The prevalence of mental disturbance among Indians can be estimated only on the basis of known prevalence among certain other segments of the population. Possibly 20 to 25 percent of a population of 400,000 Indians are affected by some type of mental illness, ranging from major psychoses down the scale to personality disorders. This is the range of prevalence observed in surveys of other population groups in which the social handicaps are not dissimilar. However, it was emphasized that preventive programs are nonexistent on the reservations and the true figure may be higher. Of this potentially large number only a small fraction is currently identified as needing psychiatric care, and a yet smaller fraction receives care.

Causes of mental illness among Indians

Factors cited as having a bearing on the development of mental illness among the Indians included the disintegration of their culture, the generally poor level of education, poverty, disturbing childhood experiences, and the ambivalent position of the Federal Government, the trustee of the Indian's land, in relation to the Indian.

The conferees were aware that the disturbing effect of a people caught between two cultures is not peculiar to the Indian. It is well known that the stress of adaptation to a strange way of life is an emotional ordeal for people low in the economic scale, who are unequipped by education or training to stand on equal terms with those already established in the new social order.

The Indian is in such a transitional period at present. Expected to adapt to the industrialized urban life of the Western World, he is pulled by tradition and religious concepts toward the tribally oriented society of his ancestors. Torn between two extremes, he gropes in vail for help in making his adjustment.

A parallel was drawn between the apathy and dependency of some Indian groups and that of the people of the poverty-stricken communities of Appalachia. The problems of both were described as spiral—their lives circumscribed by poverty, the people become emotionally disturbed, and in their disturbed state they fail to take advantage of opportunities to raise themselves to a higher rung on the economic ladder.

This is a situation which, it was agreed, calls for direct attack on both the psychiatric and economic fronts.

The question of whether alcoholism is causally related to mental disturbance on the reservations was debated at some length. Some of the conferees indicted alcoholism as a major cause of mental illness, but others contended that alcohol serves the Indian primarily as a safety valve—an outlet without which he might develop serious psychiatric problems.

Annie Wauneka, a member of the Navajo Tribal Council, expressed concern not only over the drinking among her people, but also over the use of peyote. In her opinion, both alcoholism and peyotism are major contributors to mental illness among the Navajos.

Others pointed out this misuse of peyote may be largely a regional problem, and that its ritual use in religious services has not been shown to be harmful. Alfreda Janis, of the Oglala Sioux Tribe, defended such ritual use of peyote by members of the Native American Church in her area.

Carruth J. Wagner, M.D., assistant surgeon general and chief of the Division of Indian Health, U.S. Public Health Service, questioned that there is much true alcoholism on the reservation. Chronic alcoholism, according to Dr. Wagner, occurs among Indians for the most part only when they have lost identity as members of an Indian community and have passed culturally into another environment. What occurs on the reservation, he contended, is "binge" drinking which, in effect, affords an escape from the trauma brought on by the struggle to survive without loss of mental balance.

The consensus was that many mental disorders of Indians are traceable to childhood experiences, frequently having their roots in the educational system. In the absence of sufficient schools on many reservations, one of two substitute procedures has been followed. The children may be transported to towns bordering the reservation where they live in dormitories and attend the public school in the town, or they may attend a boarding school operated by the Federal Government, perhaps far distant from home. Separated from his family and thrust into an alien environment where even language intensifies the sense of isolation, too often but understandably, the child becomes bewildered, and the seeds of serious future illness are sown.

Solutions suggested

No simple solution to the total problem was advanced. Discussion revolved around the need for a two-pronged approach: (1) More adequate services than now exist for the care of immediate acute situations, and (2) a long-range preventive program.

There was general agreement that before long-range plans could be mapped certain basic information must be obtained. Answers to such questions as the following are needed: What are the most prevalent types of mental illness among the Indians? In what areas are they principally to be found? Are there facilities to care for the acute cases? Are existing facilities accessible to those in greatest need of them? What kinds of services can be expected to contribute most significantly to a program to help the Indian overcome problems affecting his mental health?

Pending such time as an in-depth, reservation-by-reservation survey can be made, utilizing modern techniques of psychiatric epidemiology, it was recommended that pilot studies be undertaken to pinpoint the most acute needs of those with psychiatric disorders.

Information gained from such studies, it was brought out, would not only serve to identify the various aspects of the problem and indicate the type of service needed to meet each specific problem, but would also be of major importance in establishing baselines against which the effectiveness of the preventive program adopted could later be gaged.

The chief stumbling block to the conduct of a meaningful survey is lack of trained personnel, according to Dr. Wagner, who expressed the opinion that the interviewing should be done by medical social workers, preferably Indians. Dr. Wagner maintained that if he had one medical social worker on each reservation the amount and quality of services to the Indians could be increased by several hundred percent with little increase in the gross expenditure. This could be accompanied, he said, by eliminating existing inefficiencies of services due to lack of personnel capable of making maximal use of available resources.

Dr. Wagner emphasized, too, that mental health services should be an integral part of a total health program for the Indians, a concept that was endorsed by the conference as a whole.

Several areas for immediate action were suggested. One of these was to seek correction of State regulations which discriminate against Indians in regard to commitment to mental hospitals and to care in existing facilities.

Other steps proposed were the provision of consultative services to the Indians (1) on the emotional effect of certain physical illnesses and how these illnesses may be prevented, (2) in the first years at boarding school, and (3) on the health care of children to young married couples and to young people planning to be married.

A fifth point considered of prime importance was that each tribal council be invited and urged to participate in conferences to plan mental health programs. Many Indians are known to be deeply concerned by the lack of services to the emotionally disturbed and can make valuable contributions to the formulation of programs to meet needs which they undoubtedly understand better than the non-Indian.

The conferees envisioned a mental health program that would not only provide for the needs of individuals as isolated beings, but also of the individual in relation to his community. Thus, an effective plan, one which would have a salutary effect on the entire community, should be developed and supported by all agencies and groups within the community—psychiatrists and other doctors, social workers, clergy, teachers, health educators, and tribal leaders.

TRACHOMA

Trachoma, an eye disease extremely rare among the non-Indian population of the United States, is staging a comeback on Indian reservations in the Southwest after apparently having been controlled. It was the subject of the afternoon session, with Phillips Thygeson, M.D., director of the Francis I. Proctor Foundation for Research in Ophthalmology, University of California, San Francisco, as the discussion leader.

A form of keratoconjunctivitis, trachoma is characterized by follicles, scarring, and the vascularization of the cornea with formation of pannus. It often leads to blindness, although there are instances of benign cases which heal spontaneously. Some 4 million people in the world are believed to be afflicted with the disease, principally in Asia and Africa.

The etiological agent is a virus classified with the psittacosislymphogranuloma group. It is atypical in that it is larger than the usual virus, can be seen under a microscope, and is susceptible to chemotherapy. In many respects it resembles a bacterium but is considered a virus because it requires a system of living cells to propagate. Only within the last few years have methods of growing it in the laboratory been developed. Some strains are difficult to distinguish from the virus of inclusion conjunctivitis, a fact that at times complicates diagnosis.

Trachoma is believed to be one of the first diseases described in medicine. Regardless, it was widespread in the ancient world and references to it appear in old Egyptian papyri. It is likely that it was brought to this country by the Spanish conquistadors.

Why trachoma did not establish itself among segments of the population other than the Indians is not known. By the 1930's approximately a fourth of the Indian population was infected. Fortunately, the sulfonamides, introduced in the late 1930's, were found to be effective against the infection and an intensive control campaign, based on antimicrobial treatment, brought excellent results. Unfortunately, under the pressure of World War II, attention was diverted to other health needs and by 1956 trachoma had returned to its presulfonamide level among Indians in some sections of the West.

Undoubtedly a major factor in the spread of this highly infectious disease is the scarcity of water on the reservations in the warm, dry climate of the Southwest. The highest prevalence of trachoma is on the Arizona reservations of the Apache, Navajo, the Pima, and the Papago. Trachoma is not a serious problem on the reservations in the North.

Participants in the conference who have made a study of the situation pointed out that the difficulty in obtaining water on many reservations has made the Indian chary of using it. Furthermore, his lack of knowledge concerning the transmission of disease leads to his repeatedly violating the simplest rules of hygiene. Not only is one towel for all accepted as adequate in the family, but one pan of water may be used for the ablutions of the entire family.

In recent years the tendency of the young Indian girls to imitate the habits of their pale-faced sisters has also promoted the spread of the disease. The Indian girls have taken to using mascara and eyebrow pencils. They do not hesitate to pass one mascara brush from girl to girl and, along with the brush, they often pass the virus of trachoma.

This, then, is the situation. Trachoma has reappeared following a letup in the control program, aided and abetted by lack of sanitation plus inadequate education in hygiene. Now, with the availability of chemotherapy, the conferees considered that delays in reinstituting an effective control program were inexcusable. The tetracyclines have largely replaced the sudfonamides in treatment.

Recent control efforts

Within recent years a control program was initiated on the San Carlos Reservation in Arizona. The program was concentrated on schoolchildren and considerable progress appeared to have been made. After an interval, the children who had been treated were resurveyed and, surprisingly, as much trachoma was found as there had been prior to treatment. The question arose of whether overdiagnosis had played a role in the picture—that cases of eye disease had been diagnosed as trachoma that really were not trachoma. Another survey, using the most precise diagnostic techniques available, was obviously in order. The schoolchildren were resurveyed, a biomicroscope, or slit lamp, being used to examine the eyes. To the astonishment of the investigators, instead of finding fewer children with trachoma, they found more, and a larger percentage of trachoma with the grave pannus which, when total, causes blindness. In the original survey, the incidence of pannus was 12.9 percent. Within a year, using the slit lamp in casefinding, the incidence jumped to 25 percent.

There could be no question that the slit lamp was an indispensable diagnostic tool, but still unanswered was the question of the sources of infection. The next step was a mass survey of a segment of the population consisting of all age groups. The survey was conducted among approximately 900 Apaches in the Bylas area of the San Carlos Reservation. The incidence of active trachoma by age group was found to be as follows: 0 through 4 years, 35 percent; 5 through 18 years, 61 percent; 19 and older, 43 percent.

These figures revealed a tremendous reservoir of trachoma which was not reached by the school program. Thus, children successfully treated at school were being reinfected at home.

Other interesting facts learned from this survey were that the more acute form of the disease occurred in the younger age groups and that there was a rapid increase in scars and pannus (trachoma III) with age. After 10 years of age, 35 percent of the people had the disease in this stage. Healed trachoma (stage IV) began at 6 years of age and progressed to 100 percent at 90 years. Over 15 years of age, all persons had either active or healed trachoma.

This study served to lend emphasis to the importance of health education and cooperative action in attacking an infectious disease among the Indians.

The question was asked at the conference whether viral resistance to the drugs in use might affect the response to therapy, a question which could not be answered with certainty because methodology has not yet been developed to test the viral agent for resistance.

Possibilities for future control

The possibility of vaccines against the disease was also discussed. Studies in this direction are underway in four laboratories—at the Schools of Public Health at the University of Washington, Seattle; at Harvard; at the University of Rome; and at the Lister Institute in Great Britain.

Since natural immunity is of a low order and seemingly insufficient to prevent reinfection, the likelihood of a vaccine at present does not offer great hope. There is some inconclusive evidence that artificial immunity may reinforce natural immunity and that a vaccine may enhance therapy. The difficulty in growing the agent in the laboratory and the fact that the monkey is the only experimental animal in which trachoma can be produced impede progress in the field of immunology.

The inescapable conclusion was that treatment alone is not the answer to the solution of the problem. Treatment must be reinforced by (1) the availability of safe water in adequate amounts, and at accessible points, on all the reservations; and (2) a sound health education program so planned and carried out that the Indians will understand the role of hygienic practices in the prevention of disease.

In fact, Dr. Thygeson made the point that trachoma will die out in a population without treatment if the economic level is raised and personal hygiene attains normal standards. This has happened in some areas of the world and in some sections of this country, he said.

Dr. Wagner pointed out that 80 percent of the Indians still have to haul their water a mile or more, often over difficult terrain, and that about 70 percent of the water comes from potentially contaminated sources. A water supply and waste disposal construction program initiated several years ago with Federal funds has not yet caught up with the known needs. Construction work in the amount of approximately $51 million is still needed to provide the known needs of Indians for necessary sanitary facilities, the conferees were told. Lagging, too, are educational efforts on the use and maintenance of facilities.

As with mental health, trachoma is linked to the economic plight of the people, for the visual impairment and blindness caused by the disease are an impediment to the acquisition of skills required to improve their economic lot.

Since trachoma is a preventable disease, the conferees agreed that the immediate situation calls for the treatment of all known cases with antimicrobial drugs, as was done so effectively in 1938. Such an undertaking would not only help those already infected, but would also break the chain of infection. It was emphasized, however, that a "crash" program would fail to eradicate the disease unless backed by sound health education and accompanied by the provision of an adequate supply of readily accessible uncontaminated water.

There was unanimous agreement also that the attack on trachoma, like the attack on mental illness, must be planned and executed with the advice and active participation of representatives of the tribal councils.

Such participation was an important factor in the initiation of a stepped-up tuberculosis control program when the health services to the Indians were assigned to the Public Health Service in 1955. Since then, tuberculosis mortality among the Indians has declined 55 percent. Yet, even with this decline, the tuberculosis mortality rate is five times as high among Indians as among the population as a whole and the morbidity is seven times as great; these facts serve to emphasize the neglect of the past and the great need for expanded health services for the Indian in the immediate future.

STATEMENT OF DON CLYDE, HONORARY PRESIDENT, NATIONAL WOOL GROWERS ASSOCIATION

Witness Biographical Sketch

Senator Byrd. Mr. Don Clyde, honorary president, National Wool Growers Association.

We are glad to have you before the committee today.

Mr. Clyde. I appreciate the opportunity of appearing before you. I have filed a statement. I have a sort of short résumé if you can allow me 6 or 7 minutes.

My name is Don Clyde. I live in Utah. This statement is presented in behalf of the National Wool Growers Association. I have been president of the Utah Wool Growers and also president of the National Wool Growers.

I also served 18 years on Utah's big game board and 20 years as a member of the Utah State Predatory Animal Committee. The Bureau of Sport Fisheries and Wildlife and Utah Fish and Game Department have membership on this group, so I feel qualified to see both sides of the question before us.

Predator Control Program

Off the record I gave the clerk a set of pictures showing the work of predatory animals destroying livestock. If you care to see them they are with you.

I am a producer of both cattle and sheep and have been on the range well over half a century. Before I could reach the stirrup on my pony my father lifted me into the saddle. I know what takes place on the range.

I believe in the multiple-use principle that sportsmen, recreationalist, conservationists, and stockmen should all share in the benefits of western rangelands.

I am here to tell you with both emphasis and honesty that predatory animals are wasting our products of the range—both yours and mine.

The predator is destroying $30 to $40 million worth of food and fiber in livestock. He is killing the game herds and he is eradicating the small game and upland bird population. He is destroying the range by forcing the stockman to drive his herd to a camp or corral for protection at night and then drive them back the next morning to the feeding area.

If sheep are allowed to graze on a range without too much movement or handling there is not damage to soil or plantlife. However, if you are forced to excessive driving to protect them from predators, then there is the possibility of some range deterioration.

Wasters Come to Want

I have always been taught that, "wasters come to want." Food is the most precious commodity we have because it sustains life. The future is filled with more and more people. By 1970 we will have another billion to feed and clothe. By the year 2000, which is only 35 years away, the world population will double—or reach 6 billion people. Even today three-fifths of the world population go to bed hungry.

Where is the justice or the reason in the toleration of the concept to starve people so that wild and ferocious animals will live?

May I leave this question with you? Is it better to feed a hungry child or retain the opportunity to watch a sneaking coyote or a vicious cougar slink into the forest so the landscape may maintain that primitive look and atmosphere?

Food is the greatest weapon we have. With it we can stop the spread of communism. We can bring health and happiness to innumerable people and above all else, we can keep the peace.

Predator Research Requirement

We need additional money for research in the predatory animal program. We need to discover new and more effective methods to control predators. The wiley coyote has become too smart to be fooled any longer with guns, traps and poisons. Some progress has been made in this direction.

We now have birth control pills for every female specie, including the coyote. This is a hormone known as stilbestrol and it is put out in pellet form.

If you are familiar with coyotes, you know one will howl and another will answer. I've noticed an unusual amount of this dialog lately. I suppose they are discussing the pill.

Control of Poisons

I should like to correct an erroneous theory that I have heard so often since I came East. In the control of predators many people believe that poison programs are greatly overdone, that baits are broadcast without discretion. Stockmen are accused of poinsoning

every animal possible with 1080 or other lethal compounds. The Bureau of Sport Fisheries and Wildlife is, and always has been, in complete control of poisons.

I have never known a stockman to have access to these substances. The professional trappers have a well-mapped plan for the whole operation. They collect the baits, place a certain number to a township of rangeland, mark the poison stations conspiciously. As soon as spring breaks the station is cleared of any bait or dead animals and their remains are burned.

I should like to compliment the Bureau of Sport Fisheries and Wildlife on the excellent job they do in handling poison activities. I have seen hundreds of poison stations and surveyed the kill. It is remarkable how few animals, other than coyotes, cougars, bobcats and foxes that are killed: No bears, porcupines, badgers, martins. No birds except an occasional magpie. Nature has done a wonderful job in protecting her species through appetite and instinct.

RECOMENDED APPROPRIATION

To the committee, I should like to appeal for a larger appropriation for the predatory program. We need help in all the Western States and perhaps in other places. We need the $350,000 added to the budget of the Bureau of Sport Fisheries and Wildlife which was taken away last year and an additional $500,000 to do a more effective job.

The stockmen, with some help from the State fish and game organizations, are presently carrying more than 60 percent of the program. In my State there is a levy of 60 mills on the valuation of each sheep for predatory control. We need more trappers, not more men at the Washington level.

It is a continual battle with the cunning coyote to save the livestock, restore the game, improve the forage and maintain the watersheds We are willing to give of our necessity but we can't do it alone indefinitely.

I hope and pray that you will give this request careful consideration and recommend to the full committee that sufficient funds be appropriated to save this important multiple use program.

Senator BYRD. Thank you, Mr. Clyde, we appreciate your coming and I may say your pictures are very descriptive and they tell quite a story.

Thank you.

(The prepared statement of Mr. Clyde follows:)

This statement is presented on behalf of the National Wool Growers Association, which in 1965 completed 100 years as the recognized national spokesman for the sheep farmers and ranchers of the United States. The National Wool Growers Association membership consists of 20 affiliated State and area producer organizations where approximately 75 percent of the Nation's sheep, lambs, and wool are produced.

Representing the National Wool Growers Association, I want to thank you for this opportunity to discuss with you one of the most vexing problems of the sheep industry, that of "controlling the devastating effects of the predatory animal." The pictures given to you will show some of this needless devastation. Representatives from several of our member States are also appearing before you with regard to this problem.

Food and fiber are two of our most important basic needs. The sheep industry produces both. Production of these items by our industry is in real jeopardy due to predators. In the words of a California sheepman just the other day,

"Predators are real bad—they are eating us up." During the past year we have heard many similar complaints in Washington, Oregon, South Dakota, Utah, Nevada, Texas, Montana, Colorado, Arizona, Idaho, Kansas, Wyoming, and New Mexico.

A year ago before this subcommittee our testimony stated that losses were increasing and would continue to increase if work was reduced at the field or control level. In this regard, grassroot contacts by the officers of this association throughout the West during the past 6 months indicate without a doubt that sheep and lamb losses from predators have increased substantially in all areas over last year.

Presently, losses due to predators amount to between 5 and 10 percent of a man's yearly production. In some cases the loss is higher. At the conservative 5-percent figure, this roughly meant a $30 to $40 million direct loss to the sheepmen of this country in 1965. And this is not all—losses are sharply increasing. We feel that this is a very strong manifestation that more and better control is needed. In other words, the present level of control is now allowing sharp increases in predator numbers, especially coyotes and eagles. It is extremely important to our industry that stepped-up control efforts be instituted at the control points where losses are actually occurring. Therefore, we strongly urge that the $350,000 cut from the predatory control budget last year be restored, along with an additional $500,000, and furthermore, that these funds be directed toward the field or control level where they are urgently needed and can best be utilized.

We realize that predator control is complex in its nature and that policies and practices in connection with control are not always viewed in the same light. However, I hope you can appreciate the vital importance of an adequate control program to the livestock industry.

I point out that this is not a one-sided problem, but one that is, or at least should be, of vital concern to many people. For example:

The coyote is of major concern to the livestock industry because he destroys thousands of lambs and ewes each year, causing millions of dollars worth of damage.

The coyote is of concern to big game enthusiasts because he is a killer of large numbers of big game animals.

The coyote is of concern to the land conservationist, including sheepmen, because he makes it necessary to group domestic livestock into bands and herds for protection. This increases the possibility of land overuse and overgrazing.

The coyote is of great concern to the public in general because he is a well-known carrier of the dreaded disease, rabies.

The coyote is of great concern to bird enthusiasts and sportsmen because he harasses and destroys untold numbers of upland game birds each year.

Because of this wide concern, we definitely need a strong control program that will hold to a minimum the extensive and growing damage now underway—damage that will increase substantially if the predator population is not more effectively controlled.

PREDATORS—THEIR DEVASTATING EFFECT ON THE LIVESTOCK INDUSTRY

The livestock industry, the largest single segment of our agricultural economy, is being called on more and more each year to increase its production to meet the increasing food and fiber demands of our growing population. Furthermore, forecasters say this population will increase by 1 billion in the next 15 years and double by the year 2000. Can we afford inadequate control of an element that destroys and wastes our food supply? We all think of economizing our own budget at home. Many housewives are continually trying to cut corners and eliminate waste in order to make the food budget stretch farther. Therefore, we can't afford this unnessary waste in the production of food, which, of course, indirectly raises costs to the housewife. If we in the livestock industry must double our food production in the next few years, then we must double our efficiency and this means reducing unnecessary waste. Predators cause waste.

The problem is a serious one. He who is a disbeliever does not understand or does not want to understand the problem. In order to understand fully, like many sheepmen:

He would have to lose several thousands dollars worth of ewes and lambs in a single season—very often all and more of the profit.

He would have to be on the spot as the first rays of the morning sun reveal a frightened herd of sheep huddled in tight bunches which instinct tells them will afford some protection.

He would have to see the sickening sight of the many dead lambs strewn over the bed grounds with their sides or throats torn open.

We would have to see the many lambs that are still living with their ears chewed off, legs torn open, or a hamstring severed. His bite is poisonous. Practically all will die.

He would have to see the frightened condition of the sheep—frightened to the point that they are wild and restless and would run off any flesh conditioning they may have put on.

He would also have to see the work of the rebel coyote that sneaks into the herd each night to kill 2 or 3 or as high as 20 lambs or ewes, then steals off into the darkness.

He would have to see the remains following a lion raid. He could see several hundred animals killed in one small area in a single season by a few marauding lions.

He would have to see the little lambs on the bed grounds, staggering around, bleating for their mothers with their eyes picked out by eagles.

He would have to help untangle a pile of lambs and ewes that had been scared into a fence corner out of extreme fright from a coyote. It isn't a pretty sight to untangle 20, 40, 50, or 75 cornered lambs or ewes that piled on top of each other out of fright and then suffocated.

These are bad conditions, but real ones—conditions that the ordinary sheepman has witnessed many, many times. Each has inflicted economic damage of varying degrees. These are just a few reasons why adequate predator control is necessary and they are factors which point up the inadequacy of present control work.

The human diseases such as polio and small pox were not conquered solely by treating the patient, but rather through preventative methods on a widespread front. Effectiveness of these programs was not measured by how many people had died but rather how many were living. The same holds true with the predatory control program. Critics have said that the predator control program actually costs more in some areas than the value of the sheep lost. This might be the case in an isolated incident or two. However, this is not the point. The point is that in these areas the control program is working; therefore, concentrating control efforts only on bad predatory outbreaks is like locking the barn door after the horse is out, or like putting a curve sign on the highway after the accident has happened. Uniform control of all areas with control of "hot spots" when they occurr is the bets and most economical in the long run. By just attempting to control "hot spots", the present level of personnel would not be able to keep up in a year or so, because the number of these "hot spots" would increase by leaps and bounds.

Critics of the present program have raised several questions. One of these strongly suggests the limiting of the control of predators to those troublesome individuals of certain species in a particular area. This is virtually impossible. Certainly it is economically impossible. Any expert from the Fish and Wildlife Service or any stockman who lives with this situation knows that this policy is not feasible except in rare instances. It would be like trying to tell which mouse stole the cheese.

Within each State there are certain localities or areas that develop as "hot spots" (areas where predators get out of hand and do considerable damage) and in this regard we commend the practice of concentrating control efforts in these areas until the situation is brought under control, while at the same time continuing control programs in other areas. If control programs were restricted to strictly "hot spots" it would only be a short time until an entire State would become a "hot spot." Therefore, a uniform control on a national basis is needed, with emphasis on troubled areas.

CLOSE HERDING FOR PROTECTION

Since almost the beginning of recorded history, shepherds have watched their flocks to protect them from the marauding wild animals that may chance to catch the scent of the fatted lamb.

Before much of the West was settled, or for that matter explored, nomadic herders with their bands of ewes and lambs made their way in a penetrating circle deep into the wild, desolate country, being ever watchful for the molesting

coyote, moutnain lion, bobcat, or bear. For example, in 1847, when the first settlers dropped into the Salt Lake Valley and Brigham Young spoke the famous words "This is the place," they found Thomas Grover protecting his grazing herd from predators in the vicinity of what is now designated as Centerville, just north of Salt Lake. At his headquarters on the Weber River, near Ogden, they found Miles Goodyear protecting his Spanish type sheep, which he had driven up over the Escalante trail, against the sinister coyote or bear or mountain lion looking for a young lamb for dinner.

Today the story is no different. Sheepmen spend considerable money and time attempting to protect their investment and the lives of their sheep from the ever-present predatory animals.

The point I am making is that if it were not for the predator, in most cases, the sheep would not have to be herded. If they did not have to be herded, they would spread out over the pastureland in a more uniform distribution pattern, thus greatly reducing the possibility of destroying the forage cover and causing erosion.

Stockmen are among our most dedicated land conservationists. They are constantly concerned with the ground covering on their ranges and the prevention of overgrazing, yet utilizing one of our basic renewable resources—grass. They know that close herding, which is necessary if predators are abundant, can have an adverse effect on soil conditions. We in the livestock industry know it is to our best interests to conserve and improve the ranges so that we can continue to keep them in condition for proper grazing year after year. We also know that sheep that have been "spooked" by marauding predators will only graze in tightly knit bunches, with the consequent threat of damage to the grass covering.

Sheepmen, in an attempt to offset the need for herders (which are very scarce) and thereby reduce operating costs, have gone to fencing where possible. One such experiment I am somewhat familiar with is underway in Oregon, where a man's entire allotment is fenced and the sheep are turned loose. Forest Service officials like this very much because it allows the sheep to spread out uniformly, thus reducing the possibility of land damage and also giving better utilization of available feed.

Such States as Wyoming have had a successful fencing program for many years, which, incidentally, has also helped wildlife numbers. However, the only drawback is predators. If they are very abundant and not adequately controlled, it just won't work.

One such case is in Nevada where a large rancher has attempted to turn his sheep and cattle loose, and looks after them with a small airplane. He reports that his losses to coyotes in 1965 amounted to 1,950 lambs and better than a hundred ewes, a total economical loss of over $32,000. Gentlemen, this is a lot of money. Can you blame him for being disturbed over the loss caused by predators? How many of us here today can stand this or even one-tenth of this loss?

THE PREDATORS AND THE BIG GAME HERDS

Many people, including stockmen, are interested in big game and concerned with such predators as coyotes, eagles, lions, and bobcats. They know these animals are killers of big game. Statistics show that where predatory animal populations are high, severe wildlife losses are also high.

For example, the Wyoming Bureau of Land Management just recently released the following statement in a report that was made in connection with the antelope population of that State. "* * * the wildlife population of Wyoming was considered to be increasing or static until 1962, with a decline noted in 1963 and 1964. It is interesting to note that these last years were periods of rapid decrease in effectiveness of predatory animal efforts * * *."

Another such incident was reported in the Ogden,Utah, Standard Examiner, in the spring of 1965 with a lead caption of "Deer Survey Shows Herd Still Missing." The account goes on to say that "the herds have been missing all winter and several checks by the Utah State Fish and Game Department fieldmen have failed to find them." The fish and game representatives said this mystery was further heightened by the fact that hunter pressure had been much lighter in that area during the previous two seasons. During their search rides, the two fish and game conservation officers said, "We didn't see very many live deer, but we saw quite a few coyotes and considerable trace of them." They reported instances where as many as 12 deer had been found slaughtered by coyotes in a single area.

It is interesting to note that in this regard, Utah's 1965 fall deer hunt was one of the poorest in many years.

A recent South Dakota publication points out that in that State, the hunter harvested only 2,000 antelope from 1911 to 1944—33 seasons. During this time, the seasons were repeatedly closed and the antelope population seemed doomed. A good hard look was then taken at the predator situation and efforts which followed resulted in sharp predator reductions. As a result, in the next 12 years, 46,000 pronghorns were legally harvested.

"What was happening to the hunter's share of antelope?" The same report goes on to say, "The U.S. Department of Agriculture reported coyotes in one winter on Montana's National Bison Range destroyed all but 17 of a herd of 60 antelope, and also credited coyotes and bobcats on the Wind Cave National Park with killing over half the antelope." That's the balance of nature you hear so much about.

According to this same report the Black Hills of South Dakota enjoyed this so-called balance of nature when, from 1915 to 1925 hunters would search a week to find a single deer trail and in the 11 seasons harvested only 11,281 deer. In 1950 alone, hunters in this same area harvested 60,000 deer. The same story is true in many areas of the West.

The question then might properly be phrased, Which do we want—livestock, big game, game birds, health protection, or do we want the coyotes, bobcats, eagles, foxes, etc., to take over? We can have both by proper control.

Before man, we had a balance of nature, but after man entered the picture this balance greatly changed. Some animals could adjust and adapt. The coyote was one of these. Predator control measures are necesary to offset major buildups.

PROTECTION OF OUR CITIZENS

Have you ever seen a person bitten by a rabid dog? Rabies has always been one of our most feared diseases and justly so. If a person happens to have been bitten by a dog and the dog is later discovered to be rabid, an all-points bulletin goes out over the country in a concentrated effort to find this person in the short time before this disease becomes fatal.

Rabies is transmitted from wild animals, such as foxes, bobcats, and coyotes, to domestic livestock and dogs by saliva deposited in bite wounds and is transmitted by dogs to humans in the same way. An active predator control program is necessary not only to keep the disease in check but also to have a staff readily available to move in on an area should an epidemic or outbreak of rabies occur.

A recent article carried by the New York Times Service said that "* * * a widespread outbreak of rabies among wild animals in many parts of the globe has been noted for the first time in about 100 years." The survey went on to point out that "Rabies expands in these areas where it is always present when wild animals that transmit it become 'unusually abundant' " (1,435 died of rabies in 1 year). Going on, the article said that "Rabies transmitted by the vampire bat when taking blood from cattle is said to have proven a major obstacle to the expansion of Latin America's agricultural economy." Predators have proven to be a major obstacle in expansion of this country's sheep industry.

The recent annual report of the Texas U.S. Department of the Interior's Predator and Rodent Control Branch said that rabies in wildlife was confirmed in 83 counties of Texas alone last year. This dreaded disease is very much a reality.

THE VANISHING UPLAND GAME BIRD AND WATERFOWL POPULATION

The fox and coyote are living "high on the hog" on our upland birds and waterfowl. The South Dakota study mentioned earlier, shows a picture and gives an account where the remains of 50 hen pheasants were found in one fox den.

In Utah, the Goshen Valley Wildlife Federation claims that predatory animals are eliminating the bird population. Their president, in a recent article said, "We will spend thousands of dollars to equip our fieldmen to catch the man who illegally steals one bird and then waste thousands of birds each year because we cannot worry ourselves with the predator 'poacher' who is busy destroying our birds each day and night."

There are many more accounts, but these two reflect some of the grassroots thinking of people who live near these conditions and their feeling about dangers that confront our bird population.

I believe sportsmen would rather have a big pheasant population than a large fox population.

FOOD

The world is starving—we can't afford waste or inefficiency in the production of food. In the production of this food lies one of this country's greatest allies. Economists say that by 1970 our exports of food must be increased by the following percentages: wheat, 27; rice, 53; coarse grains, 55; vegetable oil seeds, 90; meat (not including poultry), 93; poultry and fruit, 50.

Since we have had plenty of food in this country, there is a tendency to minimize this and say that this is easily solved—just tell the farmers to produce more. But right now, our surpluses are rapidly decreasing, and, in fact, we are short now of some commodities such as dried milk, rice, anything containing protein, except soybeans.

Also, despite a big feed grain crop this year, our feed supplies are no longer the burden they once were.

Our own population is increasing like the world population. Therefore, we are rapidly increasing our requirements for food. Doubling our production will not be easy, but double it we must do.

The item of greatest shortage is protein. As you well know, the best source of protein is meat. Our industry is producing meat. We cannot afford to be inefficient; we can't afford not to produce all we can. President Johnson is waging a war on world hunger. Our Government has recognized the problem of increased food needs. Our food production is something that you just don't turn on and off like a spigot on a tap or a switch on a machine. Starvation is the greatest tool the Communists have.

How does all this relate to the proper control of predatory animals? We can't afford to waste and we can't afford yolks that reduce production or keep it from increasing. The lack of adequate predator control is one of these unnecessary wastes. I will make this prediction that if predators of all kinds were no longer a major problem, you would see a steady increase in sheep numbers. Thus, an increase in our supply of food and fiber to meet our domestic and world needs would come about.

I should also point out that predatory animals are of growing concern to others in the livestock industry besides sheepmen. There is mounting evidence that cattle producers are suffering growing economic losses through predatory animal depredations on their calf crops.

In my State there are 52 million acres of land. Less than 4 million acres have available water to grow a crop. That leaves 48 million acres, or approximately 85 percent, which will mature only a growth of range forage. This can only be harvested by sheep and cattle. They turn gross into new dollars. The same holds true in practically all of the West. Are we going to waste much of this valuable resource because of an inadequate predator control program?

I leave this question with you. Please give it some careful consideration. Is it better to feed a hungry child or retain the opportunity to watch a sneaking coyote or a vicious cougar vanish into the forest so that the landscape may retain its primitive look and atmosphere?

CONCLUSION

Present losses due to predators are now costing the sheep industry $30 to $40 million annually. This is unnecessary waste and added expense that the consumer must eventually absorb in higher food costs. Furthermore, these losses are increasing, which indicates a sharp increase in predator numbers under the present program. If this increase is allowed to continue due to an inadequately financed program at the control level, the very existence of the sheep industry of this country will be in jeopardy. An adequate predatory animal control program is vital and to have an effective program, it must be adequately financed.

We are not asking for an outright dole or gift. This is an appropriation that is urgently needed which will be returned many times to the Federal Government, both directly and indirectly via the tax route. Furthermore, we stockmen and the States we represent are already paying over 60 percent of the total control bill.

We strongly recommend that appropriations for predatory animal control be sharply increased for use at the field or control level because:

Livestock losses due to predators are sharply increasing.

Increased predator numbers threaten our big game animal and upland bird population.

Field or control personnel have been cut to a dangerously low level—too low to handle serious local outbreaks.

The public needs protection against the dreaded disease, rabies.

Thirty to forty million dollars worth of food and fiber production is now being destroyed annually by predators.

STATEMENT OF J. STEELE CULBERTSON, NATIONAL FISH MEAL & OIL ASSOCIATION

Association Industry Representation

Senator Byrd. The next witness is Mr. J. Steele Culbertson, director of the National Fish Meal & Oil Association.

Mr. Culbertson, I have your prepared statement. Would you like to summarize it?

Mr. Culbertson. Thank you very much, Senator Byrd. I appreciate this opportunity to appear here this morning. Very briefly I will tell you a little about our organization, its members, and the industry they are engaged in and the uses of their products.

The National Fish Meal & Oil Association represents the producers of about 90 percent of all fishmeal that is manufactured in the United States. Their operation extends from the southern New England States all the way along the Atlantic and gulf coasts to Sabin Pass, Tex.

Menhaden Fish

The principal raw material used in the manufacture of fishmeal, fish oil and fish solubles is the specie known as menhaden. It is not a desirable specie for human food. It is very bony and oily. It is the most abundant species of fish surrounding our coastal shores.

Multiindustry Supporting

Menhaden first became important in the early 1800's when oil was very important. Its present wide use and importance began about World War II when it was found that the meal was very high in protein and it was manufactured primarily for use in poultry and turkey feeds because of its high protein quality.

As a matter of fact, it has helped to revolutionize the poultry industry. It contains all the essential amino acids that the chickens and turkeys need in their diet for growth.

The oil is used in the manufacture of many industrial products; it is used for paints and other protective coatings. It is used as a lubricant, in tempering metals, and it is our largest export fishery item. It largely goes to Europe and is used in the manufacture of margarines.

Food and Drug won't let us use it in this country for some reason.

Industry Capital Evaluation

There are about 600 vessels employed in this industry, 60 airplanes and 30 large manufacturing plants. All this equipment has a value of over $100 million. The industry furnishes employment for many people in the small communities where they fish and where the fishmeal plants are operated. They do not have other sources of employment in many places so it is highly necessary for them.

INDUSTRY DECLINE AND RESEARCH REQUIREMENT

Within the last 3 years, the Atlantic menhaden fishery has declined over 50 percent. From a production in excess of 1 billion pounds a year, it has declined to about 500 or 600 million pounds which means a direct loss to the fishermen themselves of about $6 million.

Neither the Government nor the industry know the reason for this drastic decline. And the main reason we do not is that the amount of research that has been done on this resource has been very infinitesimal compared to the broad area it covers and the enormous value it has. As a matter of fact it was not until 1955, that there was any Federal funds spent on this industry for research.

From then until 1965, the average amount of funds per year for the Atlantic was less than $100,000. The gulf research program started in about 1964 when this committee was considerate enough to act upon a request that we made through Senator Stennis for $125,000 to commence a program in the gulf.

That has been the extent of the funds that have been available for this highly valuable resource, the largest fishery resource we have in volume and the fourth largest in value.

It seems almost unbelievable when we look around and practically everything we see and have is the result of intense study and research that here is a resource that is enormous size, which we are inclined to take for granted and think will last forever, until it gets into serious trouble. Now that this has been allowed to happen we do not know what the causes have been or what to do about it. So we have come up with these recommendations, Senator, to try to get an adequate biological program started that would be in keeping with the value and importance of this research which we hope might provide some of the answers.

(See recommendations in statement below.)

It is impossible to estimate the value of a resource like this. It could continue forever if it is properly conserved. You cannot place a value on that kind of thing. So we would be very grateful if you would consider these recommendations. I will not go over them. They are listed here, I think very clearly. And you might say that they are the results of three or four hearings that were held between the industry and the Bureau of Fisheries last fall after the third very disastrous year we had on the Atlantic.

So, we are in general agreement with the Government that this kind of program is necessary, but since it was too late for inclusion in the budget, we respectfully request that it be added in order that the research work can be stepped up this year.

Senator BYRD. Thank you. Your recommendations will appear in the record.

(The prepared statement of Mr. Culbertson follows:)

I am J. Steele Culbertson, director of the National Fish Meal & Oil Association, a division of National Fisheries Institute.

I am appearing here today on behalf of the members of the National Fishmeal & Oil Association who are engaged in fishing and in the manufacture of fishmeal, fish oil, and fish solubles. Their operations extend along the Atlantic and gulf coasts from Portland, Maine, to Sabine Pass, Tex., and account for 85 to 90 percent of the total U.S. production of these products, whose wholesale value is approximately $50 million annually.

The raw material used for this purpose is primarily derived from menhaden, a member of the herring family and the most abundant species harvested by

U.S. fishermen, which in some years account for over 40 percent of the total landings of all commercial species in the United States. Other sources of raw material used are trimmings from the food fish industry and certain species that are not sought after for food purposes.

Our main purpose in appearing before your committee today is to give you a brief report on the menhaden fishery, which first became important in the early 1800's for the production of fish oils. Although this fishery has been in operation since, it did not attain the importance and value presently attached to it until about the beginning of World War II. Today it ranks first in size and fourth in value of our domestic fisheries.

The industry on both the Atlantic and gulf coasts owns and operates 30 large manufacturing plants, approximately 400 vessels and 60 aircraft having a total value in excess of $100 million. People engaged in the industry, including vessel and shore crews, number about 6,000 and many more receive employment indirectly from allied industries and businesses, such as shipyards, plant and machinery manufacturers, net and twine manufacturers, fuel companies, transportation companies, and many others.

Although menhaden is not used directly for human food, they are converted into some of our best known foods, such as chicken, turkey, and pork. In fact the inclusion of fishmeal and fish solubles, which are high in protein and the essential amino acids in poultry feeds, has meant a great deal in revolutionizing the poultry industry which today ranks high in dollar value in many of our States. Our problem, with this decline in the Atlantic fishery, is being able to supply our domestic needs, and as a result the poultry and feed industries are having to rely more and more on imported fishmeals.

Fish oils are used in the manufacture of paints and other protective coatings, for caulking compounds, lubricants, tempering of metals, and for many other purposes. It is the largest U.S. fishery export item with a value in some years as great as $6 to $8 million. Its export use is mostly for the manufacture of margarines.

Gentlemen, today the Atlantic menhaden fishery is in serious difficulty. For many years, it produced in excess of 1 billion pounds with an annual value to the fishermen of approximately $12 million. Wtihin the past 3 years, this fishery has declined 50 percent in catch and landings with a corresponding direct loss to the fishermen, but with even greater loss to the industry and those people in the local fishing areas effected, who depend upon this resource and industry as their principal means of livelihood. The gulf menhaden fishery in recent years has produced almost a billion pounds annually and we are pleased to say has not yet shown any particular signs of decline. However, it is a much younger fishery than the Atlantic menhaden fishery.

Just what the cause or causes were that brought about the drastic decline of the Atlantic menhaden fishery, neither the industry nor the Government knows. Perhaps the main reason this lack of information exists today is because an adequate biological research program for the study of the fishery and resource has never been financed and provided.

Because of the migratory habits of the menhaden it is not native to any particular State and, therefore, does not lend itself very well to study by the individual States. Federal funds for this purpose did not become available until 1955 when $38,000 was first appropriated for the Atlantic. Total funds for the Atlantic through fiscal year 1964–65 have averaged only approximately $97,000 per year. For fiscal year 1964–65 we obtained $209,000.

For the gulf, it was not until fiscal year 1963–64 that regular funds were first appropriated for the establishment of a gulf menhaden research program. This was in the amount of $125,000 and has continued since. Other than this $110,000 was expended in 1 single year, in 1957, on a contract basis for the gulf.

For a resource and industry that has an average annual value at the fishermen's level of approximately $25 million, and whose products are perhaps worth twice this amount, we are spending only about 0.6 percent of the average annual value of the products of this industry for research, while 5 to 8 percent would not seem excessive when one considers that a resource such as this may continue forever if wise conservation principles are applied.

RECOMMENDATIONS

Since the Atlantic and gulf menhaden are national resources appearing in abundance in the inshore waters of at least 12 Atlantic Coastal States and 5 gulf States, and because answers to a sound management program require inten-

sive scientific effort, the Federal Government has a responsibility to take the leadership in an adequate research program. In addition to the $100,000 increase in the President's budget, the industry is requesting $450,000 for fiscal year 1967, to be used as follows:

(a) Expand tagging program;
(b) Study physiology and behavior of menhaden;
(c) Study distribution and intensity of spawning and movements of larvae.

These studies would be designed to give information as to maximum sustainable yield of the resource, the effect of natural and fishing mortality, their geographic distribution and routes of migration. Other information needed is on their food and feeding habits, location of spawning areas, time of spawning and early development. At the present time we practically have a void on this type of information regarding the resource.

This would require additional staff as well as funds.

It is estimated that a program, adequate to understand the menhaden resources, will cost $1.5 to $2 million a year. The research programs in both the Atlantic and gulf should be substantially reinforced as above outlined for fiscal year 1967, and in subsequent years the budget should be increased as follows:

	Increase	Total
Fiscal year 1968	$225,000	$1,105,000
Fiscal year 1969	225,000	1,330,000
Fiscal year 1970	150,000	1,480,000
Fiscal year 1971	150,000	1,630,000

Additional facilities required in fiscal year 1968 will include:

Addition to Beaufort Laboratory	$250,000
Research vessel	1,000,000

Thank you.

STATEMENTS OF RALPH C. WIBLE, STATE FORESTER, PENNSYLVANIA; H. E. RUARK, DIRECTOR, GEORGIA FOREST RESEARCH COUNCIL; JOHN D. RITCHIE, REGIONAL VICE PRESIDENT, AMERICAN PLYWOOD ASSOCIATION; W. J. TUDOR, SOUTHERN ILLINOIS UNIVERSITY; JOSEPH S. MILLER, WESTERN FOREST INDUSTRIES ASSOCIATION; AND KYRAN McGRATH, STATE OF ILLINOIS

FOREST SERVICES BUDGET REQUEST

NATIONAL ASSOCIATION OF STATE FORESTERS REPRESENTATION

Senator BYRD. Our next witness will be Relph C. Wible, State forester, Pennsylvania.

Mr. WIBLE. I certainly appreciate this opportunity. I, too, appeared here on a number of occasions and I appreciate your cooperation. I am the State forester of Pennsylvania, but I am here today to represent the National Association of State Foresters. All the State forester agencies including the Department of Conservation of West Virginia are included in the national association. I represent this group, of the 50 States.

I will brief the statement which I have filed with Mr. Eaton.

Cooperative Forestry Programs

One of the bright lights of the cooperative forestry programs across the Nation through the U.S. Forest Service has been the joint efforts of both the States and the Forest Service and their fine work that has to do with the protection of our State forest, private forest of the Nation, and these resources are protected from fire, insects, disease, and so forth.

Forest Development and Conservation

The second thing perhaps is to develop and make more usable and productive these great forests which embrace our Nation. It is significant, as three-quarters of the 435 million acres of State and private forest land are held by 4½ million owners. It is these small holdings that need the technical assistance. It is believed by many this is perhaps the great woodpile of the future.

It lays in this great mass of forest and range across the Nation.

In an ever-changing world where our Nation is called upon to increase our productive capacities we must begin with a basic natural resource, the forest, that has the capacity to reproduce itself under proper management principles. Furthermore, we not only need the wisdom but the financial resources to sustain and strengthen what I would like to call the inner-America.

Neighborhood Youth Corps

Now, to touch on another subject. I would like to mention the most helpful program which was authorized by Congress in the passage of the Economic Opportunity Act of 1964, which I believe, Senator, you were very helpful in. I refer to the National Youth Corps, Neighborhood Youth Corps rather, where youths between the ages of 17 and 21 were employed. The U.S. Forest Service guided us in the participation of this most valuable activity.

It takes great pride in the program which was started last summer when 1,100 boys were employed to work on the State forest and State parks. We are most pleased with the work accomplished but perhaps greater were the social benefits to these youths and their families. A full report of this activity will be placed in the hands of the committee.

I am going to make this very brief. I am going to summarize the brief statement I made right now.

Gradual and Modest Increase Request

We fully realize and recognize that in 1 year, we cannot expect to reach the financial limits authorized by Congress in our cooperative programs. To protect and develop the forest we do realize, we do request your consideration of a gradual and modest increase, to develop the strength of America, in timber, water, wildlife, and natural beauty, we must continue to upgrade our forest resources.

Our Nation's forests play an increasing role in the lives of people. Besides providing the necessities of our economic life they are beginning to take another part. They are called upon to do something which may be the greatest use of all. I refer to the values in healing the social and mental problems that are continually commingling the attention of our Congress today.

Thank you very much, Senator.

Senator BYRD. Thank you very much, Mr. Wible, for a good statement.

(The prepared statement of Mr. Wible follows:)

Gentlemen, my name is Ralph C. Wible, State forester of Pennsylvania, but I am here today as chairman of the Legislative Committee of the National Association of State Foresters.

I am most appreciative of the courtesy which you have extended to me to enable me to present the viewpoint of the State foresters of the 50 States, concerning cooperative forestry programs which appear in the U.S. Forest Service budget.

The joining of Federal and State agencies in cooperative forestry programs as provided by Congress, has each year been one of the bright lights in protecting and developing the forest resources across the Nation. At this point I would like to call your attention to the following budgetary tabulations concerning these Federal and State programs.

Federal-State cooperative forestry budget programs

Program	Present Federal authorization	Fiscal year 1966 Federal appropriation	1966 and 1967 pay supplement	1967 increase (other)	Total President's budget, fiscal year 1967
Clarke-McNary: Sec. 2, forest fire control	$20,000,000	$12,783,000	$28,000		$12,811,000
Clarke-McNary: Sec. 4, seedling production and planting	2,500,000	300,000			300,000
Cooperative forest management: Aid to small woodland owners	5,000,000	3,527,000	11,000		3,538,000
General forestry		903,000	23,000	[1] 322,000	1,248,000

[1] Technical forestry assistance to private forest landowners in the 11 Appalachian States.

CLARKE-M'NARY, SECTION 2—FOREST FIRE CONTROL

This early act of Congress passed in 1924 establishes Federal-State cooperation in the protection of our great forest resources across the Nation. This is absolutely necessary in order to grow quality timber, develop recreational areas, retain wildlife resources, and provide adequate quality water. Because fire has been a great destroyer of forest resources, the Congress gave long and serious attention to this problem in the early 1920's. The early testimony on this bill shows that Congress acknowledged its obligation to the States in helping to prevent and control forest fires. Furthermore, the records show that Congress felt that a 50–50 sharing was an equitable and appropriate division of responsibilities between the Federal Government and the States. Even at the beginning, State and private budgets financed between 60 and 70 percent of the cost. As the years progressed, the Federal share did not keep pace with State and private expenditures and as a result, for the past 5 years, the ratio has been approximately 5 to 1. Based on an ideal concept of a 50–50 sharing of responsibilities, the State Foresters of the Nation, through me, are urging favorable consideration of raising the Federal share in the partnership job of protecting our Nation's forests from fire.

CLARKE-M'NARY, SECTION 4—SEEDLING PRODUCTION AND PLANTING

This cooperative program is more significant than ever since the ending of soil bank, title IV (assistance for tree planting). In this age of protecting the valuable land and soil, and providing new timber crops for the growing forest industries, we need expansion of our tree seedling and planting program.

COOPERATIVE FOREST MANAGEMENT—AID TO SMALL WOODLAND OWNERS

The Cooperative Forest Management Act of 1950 provided matching Federal funds for States to assist private small woodland owners in the better management of their properties. It is significant that three-fourths of the 435 million acres of State and private forest lands are held by 4.5 million owners. It is

these small holdings where technical assistance is valuable and must make poorly managed areas more productive to meet the projected timber needs of the next generation. It is believed by many that the future Nation's "woodpile" may be found in these small ownerships. In an ever-changing world, where our Nation is called upon to increase our productive capacities, we must begin with the basic natural resource that has a capacity to reproduce itself under proper management principles. Furthermore, we not only need the wisdom but the financial resources to sustain and strengthen the "inner America" so that these renewable resources can be depended upon to keep our Nation strong. The State Foresters of the Nation ask that you consider a moderate increase in this program so that the foresters of the 50 States can increase their efforts to get this job done.

I would like to mention a most helpful program authorized by Congress in the passage of the Economic Opportunity Act of 1964. I refer to the Neighborhood Youth Corps, where youth between the ages of 17 and 21 are provided employment. The U.S. Forest Service guided us in our participation in this most valuable activity. Pennsylvania takes particular pride in the program which was started last summer when 1,100 youth were employed to work in our State forests and State parks. We are most pleased with the work accomplished, but perhaps even greater are the social benefits to these youths and their families. A fuller report of this activity in Pennsylvania is being made available to each member of this committee.

In addition, the State Foresters fully support the President's budget in reference to insect and disease control. In past years, this cooperative program has been a lifesaver to many States in combating and controlling the ravages of serious and destructive forest insects and diseases. A case in point occurred last year in Pennsylvania where in 3 successive years the fall cankerworm defoliated several hundred thousand acres of very valuable timber in northern Pennsylvania. Finally, in 1965, after long and careful study of the problem, the Department determined that the only way to save this weakened timber was to apply an approved pesticide spray to the area most seriously attacked. As a result, and with the approval of the Federal Committee on Pest Control and Pennsylvania's Committee on Pesticides, a very light application of DDT was applied. Evidence now shows that this decision was correct. Studies show that no losses were sustained to any animal, fish, or insect life, nor was water affected within the sprayed area. It is most evident that we have recaptured valuable timber which was destined to be destroyed by consecutive attacks of a serious forest insect. In a large measure the economy of northern Pennsylvania is dependent upon the forest resources as well as the recreational and tourist values involved. To repeat our earlier statement, we support the President's budget as it refers to insect and disease control.

SUMMARY

This concludes my presentation as chairman of the Legislative Committee for the Nation's State Foresters. We fully realize that in 1 year we cannot expect to reach the financial limits authorized by Congress, but we do request your consideration of gradual and modest increases. In order to develop the strength of America in timber, water, wildlife, and natural beauty, we must continue to upgrade our forest resources. Our Nation's forests today play an increasing role in the lives of people. Besides providing many necessities in our economic life, they are called upon for what may be the greatest use of all. I refer to their values in healing social, mental, and ecoonmic ills which are continually commanding the attention of the Members of Congress.

May I thank you for this opportunity to appear before you and speak for our Nation's State Foresters.

FOREST SERVICE PROJECTS, GEORGIA

Senator BYRD. Mr. H. E. Ruark, director of the Georgia Forest Research Council.

Mr. RUARK. Senator Byrd, I appreciate this opportunity to appear before you again and this committee.

I am speaking in behalf of Federal funds for the U.S. Forest Service for their research projects in Georgia. Available forest land is

now near a maximum and we can expect gradual reduction in acreage of commercial timberlands in the future as they are diverted to urban development and right-of-way and other specialized uses.

This is why I am here today, to ask for increased funds for three projects: one in Macon, Ga., southern forest tree and seed improvement project of $90,000.

Second one, hardwood management project at Athens, Ga., $70,000; wildlife project, which is part of the multiple resources management project at Tifton, Ga., $90,000, making a total of $250,000 for these three projects.

SOUTHERN PINE TREE AND SEED IMPROVEMENT PROJECT, MACON, GA.

The Macon project, tree improvement, has been in effect for 11 years and there are two scientists on the staff and they have gathered a tremendous amount of data and material that is now ready to be used in actually improving strength of trees.

They are ready to move into the tree breeding program. We are requesting funds to add three additional scientists to this staff so they may carry on this work that has been going on now, on the base that they have laid, in the last 3 years.

HARDWOOD MANAGEMENT PROJECT, ATHENS, GA.

The next area at Athens, hardwood management; for that project at Athens we are asking for $70,000 to add two scientists and geneticists and a plant physiologist to that staff—staff now of three members—and to complete the staff and give them the needed disciplines to do the work in hardwood management research. These three positions need to be filled.

WILDLIFE RESEARCH PROJECT, TIFTON, GA.

The third area is wildlife research at Tifton, Ga.

In our southern area there are many pines, and we are trying to obtain financing, as part of our project, so that we can expand research in the breeding and the management of seed orchards for producing seed of the improved strains.

We realize recreation is important and that people must get into the woods. They want to get into the woods and here is an opportunity to bring about recreation for our people and at the same time increase income for the landowners.

These are the three projects that I ask that you to support. I appreciate this opportunity to appear before you, and tell you about our needs.

Senator BYRD. Thank you, Mr. Ruark. We will see what can be done.

(The prepared statement of Mr. Ruark follows:)

Mr. Chairman, and members of the committee, my name is H. E. Ruark. I am director of the Georgia Forest Research Council with headquarters at Macon, Ga. The council is an agency of the State of Georgia. We are responsible for coordinating, developing, implementing, and encouraging forest research in the State. It is a pleasure to appear before your committee to discuss forest research needs.

Available forest land is now near a maximum and we can expect gradual reductions in acreages of commercial timberlands in the future as they are diverted to urban development, rights-of-way, and other specialized use. As our popula-

tion increases and land is devoted to a multiplicity of new uses, we must greatly increase production on our remaining forest land in order to maintain a healthy and growing economy.

Accelerated forestry research is a must if maximum benefits and production from American forests are to be obtained. It is imperative, that we take the necessary steps now to increase the productivity of the remaining forest land. This is the reason why I am appearing before you today to request that the U.S. Forest Service's budget for fiscal year 1967 be increased as follows:

1. Forest tree and seed improvement, Macon Research Center, Macon, Ga	$90,000
2. Hardwood management, Forestry Sciences Laboratory, Athens, Ga	70,000
3. Wildlife research, multiresource management project, Tifton, Ga	90,000
Total	250,000

SOUTHERN PINE TREE IMPROVEMENT

The 11-year-old, well-established southern pine tree improvement research program, carried on at Macon, Ga., by the U.S. Forest Service is in dire need of additional financing. Ninety thousand dollars are needed to expand research in tree breeding and the management of seed orchards for producing seed of the improved strains.

Applied tree breeding of the southern pines at Macon has passed the experimental stage. The biological basis for the breeding and development of improved forest trees has been firmly established. The job ahead is the highly specialized task of actually creating improved strains of southern pines. The complexities of this task are many: (1) A dozen or more economically important traits must be bred into each strain. These improved strains must exhibit high-growth rates in combination with good form, and they must also contain the desired wood characteristics for the manufacture of paper and paperboard and the production of high-quality lumber and plywood. (2) These trees must also be adapted to the soils and climate of Georgia and the South and resistant to attacks by insects and disease organisms. (3) Improved strains of southern pines created by researchers must then be multiplied on a sufficiently large scale in seed orchards to produce seed in commercial quantities. In Georgia alone 15,000 pounds of improved pine seed is needed yearly to produce the 100 million seedlings required for reforestation of cutover and idle land.

Three addition scientists, with the support of technicians and aids, are needed to carry out the necessary research in tree breeding. Funds are urgently requested for 1966–67 to finance the southern pine tree improvement project at Macon, Ga.

HARDWOOD MANAGEMENT

The growing demand for furniture, cabinets, paper and paperboard, tool handles, baseball bats, skis, and many other uses has caused a tremendous drain on hardwood timber in the Southeast. Quality hardwoods are bringing premium prices and are difficult to obtain.

Many manufacturing plants and their employees in the Appalachian section are dependent on quality hardwoods as a source of raw materials. Consequently, it is imperative that steps be taken now to assure a future supply of quality hardwoods to meet the growing needs.

These additional research funds would be used at the Forestry Sciences Laboratory, Athens, Ga., to add a highly trained forest geneticist and a plant physiologist to the present research team consisting of a silviculturist, a soil scientist, and a plant anatomist. This five-man team, working in cooperation with botany and forestry faculties at the University of Georgia at Athens, Ga., will be able to exploit the promising research leads uncovered to date.

Particular emphasis will be given to selecting and breeding genetically improved strains of the important hardwood species in the Piedmont section of Appalachia and to determining factors that affect the growth of these superior strains, such as modifying stand and soil conditions to maximize timber growth and quality.

The present three-man team has discovered methods of vegetatively propagating yellow-poplar and sweetgum, has developed improved methods of planting and fertilizing hardwoods, has related tree growth by species to topography and

soils, and has made progress in determining the origin and development of epicormic branches that degrade hardwood timber.

The requested $70,000 would be used to add a forest geneticist and a plant physiologist with technical assistance to the present staff, thereby providing the required skills needed to capitalize on this productive research.

WILDLIFE RESEARCH

These are times of stepped-up demands for recreation on commercial forest lands. Expanded research in wildlife management will provide southern landowners with the know-how to obtain additional revenue from their forest lands and will provide the growing population from urban areas with much-needed recreation and hunting possibilities.

The Southeastern Forest Experiment Station's multiresources project at Tifton, Ga., needs $90,000 to add three scientists and technicians to establish the necessary base for this project. The results from this program will enable the South's tree farmers to realize millions of dollars of additional income from their forest lands. Profits exceeding $1 per acre per year from quail alone can be achieved by developing techniques to improve pine-land habitat without reducing timber potentials. With new management methods the profit potential and recreation benefit from other game such as deer and turkey are also very high.

Game habitat research is a major and most vital function of the multiresource management project at Tifton. The strengthening of research in this area is necessary to implement this U.S. Forest Service program aimed at finding ways of utilizing southern forest lands for both timber and game production. The benefits from such a program will provide a boost to the economy of the South and a source of recreation for her people. The enlargement of the Forest Service program at Tifton now would permit an immediate and vigorous attack on the key problem of increasing game in natural and planted stands of slash and longleaf pine.

ASSOCIATION INDUSTRY REPRESENTATION

Senator BYRD. Mr. John D. Ritchie, regional vice president, American Plywood Association.

Mr. RITCHIE. Thank you, Senator, for this opportunity. This is the first opportunity for me and it is a pretty exciting experience.

Senator BYRD. Thank you.

Mr. RITCHIE. First, on our organization, the American Plywood Association is composed of some 95 firms which operate about 160 plywood plants in 12 Western and Southern States, and which represent in their total production almost 90 percent of all softwood plywood produced in the United States.

MAY 23 1966

FOREST PRODUCTS LABORATORY, MADISON, WIS.

I am here today to add the support of my industry to plans for expanding and improving the facilities of the U.S. Forest Products Laboratory at Madison, Wis.

The two specific items in which we are most interested are an appropriation of $1,190,000 for construction of a wood chemistry research unit, and a separate planning appropriation of $190,000 needed for the remodeling of areas of the present laboratory that will soon be vacated by the pulp and paper unit.

My complete statement is available and I can go pretty fast from here on.

To begin with I think it is recognized that the Government has a large interest in this kind of research because they remain the largest single timber owner, so if we can develop with the help of the Forest Products Laboratory new products and new markets we would expect to increase the value of the timber.

Better and more complete utilization should reduce the cutting rate and hopefully enable us to retain wilderness and recreation areas longer on private as well as Government lands. Our relationship with the Forest Products Laboratory is over 25 years old. We have worked as partners on many occasions since then.

Joint Undertakings With Laboratory

The Laboratory continued the first test which demonstrated that plywood really is a structural term, not just a furniture item for drawer bottoms and furniture backs.

Now, 3,800 square feet is the average amount of plywood in a new home today. Later on cooperative studies were required on adhesives or waterproof adhesives. Later than that further studies in cooperation with the association on the usability of new and lower quality in some cases raw materials, new species.

I had a personal experience in 1940 with the Laboratory at which time I supervised the selection and shipping of hemlock blocks which were peeled into veneer and made into plywood by the Laboratory. And hemlock was then the second species to come along.

Up until then it was all Douglas-fir. Now, then, there are 26 species from which we manufacture, and we are currently producing in Washington, Oregon, California, Idaho, Montana, Colorado, and throughout the southern pine region.

The Forest Products Laboratory assistance on southern pine is particularly significant. Before we could get into production from this species, we had to learn how to glue it because it is a very resinous wood and not the same as the woods we had experience with. We had to learn how to manufacture efficiently from a very small diameter log compared to what we were used to.

And, also, there had to be density, evaluation throughout the region because the stands of southern pine are not the same as every other stand and this affects the strength of the product. All of these projects have been pointed up by the Forest Products Laboratory.

I think you will be interested to know that by the end of 1966, there will be 34 plants in the southern pine region and this capacity will be in the neighborhood of 2 billion square feet. I can remember not too many years ago when that would be more than all of the structural plywood made in the country.

Current Explorations

None of this type of work in my opinion is over. We are currently exploring 21 further new species in half of the States in the country. This means that the diameter of the log from which we work must become ever smaller. It is a fact right now that in the days that I was going to school and working in a plywood plant a 48-inch log was the average for structural plywood.

Now, 13 inches is closer to the average. It will get smaller. When you think of the 13 inches that is a lower diameter than what we used to throw away or use for fuel. It is smaller than the chuck we used to hold the block in the lathe a few years back.

We had to expect that the quality of the raw material will be less than it has been in the past and yet our end product must remain basically sound.

REASONABLENESS OF REQUESTS

So these experiences and what we know is coming in the future makes us feel that the current requests are reasonable and timely. The 1,190,000 for the wood chemistry is very important because we must realize that still about 50 percent of the raw material is left in the woods in terms of limbs, needles, stumps, and roots.

A very reliable and good recent Ford Foundation study has revealed that by the year 2000 our industry will produce at least five times what is being produced at present. Now, if this is the case, we must find a way to use much more of the raw material than we are using today.

This means research and largely perhaps wood chemistry.

More current and very practical consideration I believe is the fact that already $2,000 have been spent on plants for this new investment and we all know that plans get obsolete in kind of a hurry and it would be a shame to have delays resulting in extra cost, to replan or update.

The $190,000 which is requested to redesign the old pulp facility, to turn it into a research facility for solid wood, I think, is a practical request because this space is going to be vacated and will be empty, so it needs to be put to use and to that extent I would say that is a wise recommendation.

We feel these are sound investments in the future, and I respectfully urge that you look with favor upon the plans of the U.S. Forest Products Laboratory to seek the knowledge which is so important to all.

Thank you very much, Mr. Chairman.

Senator BYRD. Thank you very much, Mr. Ritchie. You scored pretty high in your first appearance. We look forward to having you back again.

(The prepared statement of Mr. Ritchie follows:)

My name is John D. Ritchie. I am regional vice president of the American Plywood Association. Our association is composed of some 95 firms which operate about 160 plywood plants in 12 Western and Southern States, and which represent in their total production almost 90 percent of all softwood plywood produced in the United States.

I am here today to add the support of my industry to plans for expanding and improving the facilities of the U.S. Forest Products Laboratory at Madison, Wis. The two specific items in which we are most interested are an appropriation of $1,190,000 for construction of a wood chemistry research unit, and a separate planning appropriation of $190,000 needed for the remodeling of areas of the present Laboratory that will soon be vacated by the pulp and paper unit.

The remodeled space will be used for an expansion of the Laboratory's research on solid wood products. This is of direct benefit to the plywood and lumber industry, but the reasons for more and better research in wood go much further.

The whole forest-based economy benefits when research makes it possible to broaden either its product lines or its markets.

The Federal Government, as the largest timber holder in the United States, benefits through higher bids for timber.

The public benefits from new industries, and new jobs.

Finally, more economical use of forest products means that we can get more value from a single tree. This, hopefully, will allow us to reduce cutting rates and retain more forest acreage for wilderness and other recreational facilities available to the public.

The experience of the plywood industry is a good case in point.

Softwood plywood was first produced on the west coast from practically clear, old-growth Douglas-fir. It was sold for drawer bottoms, door panels, furniture backs, and even running boards.

Before the industry had any research capability, and before it appeared we would ever grow large enough to have any at all, scientists at the U.S. Forest

Products Laboratory demonstrated that plywood had what are called "racking" properties; strength and stiffness within the panel itself which are imparted to a plywood structure. As a result, most plywood today is used in structural applications. In fact, the average new home requires about 8,000 square feet of plywood for these uses.

It is fair to say that this structural data developed by the Laboratory is the foundation of what today is a billion-dollar industry. But it was only the first step.

To fulfill our potential, it was necessary for us to develop competence in two different areas; gluing and efficient use of a wider range of raw material. A third area, of course, was in devising techniques to mass produce our product.

Without the cooperation of the Forest Products Laboratory in these areas, and without the Laboratory's help in winning acceptance of new construction techniques by building officials, there would be no plywood industry of any size.

Our association with the Laboratory goes back more than 30 years, so there is a lot to talk about.

In 1940, when my responsibilities were in the research and technical area, I supervised the selection of a number of blocks of hemlock that were shipped to Madison. The Laboratory turned these logs into plywood and demonstrated that we could use this second species.

Today, Douglas-fir is still most important, hemlock is important, too, but so are the 24 other species that my industry uses.

In 1945, softwood plywood was made in Oregon and Washington.

By 1955, California had been added—largely because research conducted by the Forest Products Laboratory and our association had shown that the wood species there could be used.

During the next decade we added Idaho, Montana, Texas, Arkansas, Louisiana, Georgia, Mississippi, the Carolinas, and Virginia.

In the last few months, we have begun to study 21 new species that grow in more than half the States of the Union, and mills are being actively considered in States as different as Maine and Arizona.

Idaho and Montana have plywood industries because of research performed in our laboratories in Tacoma, Wash.

The Southern States have plywood industries because of research in gluing conducted by the Forest Products Laboratory at Madison, and confirmed and expanded in our laboratories and those of some of our member companies.

A revolutionary house is just being completed at Carderock Springs in Maryland. It is a joint project of the National Association of Home Builders and a number of other organizations. We were the structural consultants for the house, as well as a sponsor.

The studs on the second floor of the house are 4 feet apart; the roof trusses—the rafters, in other words—are only made of 2 by 4 lumber, but span 28 feet. The roof sheathing is a new plywood product.

That house is an engineered structure—it isn't built the way houses used to be built, but it's a good bet it's built the way houses will be built in the next decade. The old way takes too much time and too much material, and doesn't produce a house a bit better.

The science of homebuilding is becoming more and more complex, and we are building better homes. But without the basic work done on wood properties by the Forest Products Laboratory, we couldn't even begin to develop the techniques.

By the standards of even 5 years ago, our utilization of timber is nothing short of phenomenal.

In plywood, for instance, we used to begin with logs averaging 4 feet in diameter and peel it down to 12 to 14 inches. The remainder first went for fuel, later chips or 2 by 4's.

Today we put logs into the lathe that are smaller than what we used to reject as cores. A 13-inch log goes into the lathe and is peeled down to 4 inches. But, by tomorrow's standards, we still are wasting quite a lot. We use only a fraction of the bark, branches, and needles are left in the woods.

Not so long ago, however, we were leaving whole trees in the woods. Today, because of research at the Forest Products Laboratory and research supported by industries, there are virtually no unusable trees.

The current requests for funds by the Laboratory are, it seems to us, both reasonable and timely.

A new pulp and paper facility is under construction now. It will be completed in about a year, and that section of the Laboratory will move from its present quarters. The Laboratory has asked for $190,000 to produce designs that will

make it possible to convert the present pulp and paper facilities into suitable space for the solid wood group.

The pulp and paper section will move whether the old quarters can be used by others or not. If this money is not available, a large amount of valuable Laboratory space will be unused.

There is a similar situation involving the $1,190,000 requested for the wood chemistry unit. The planning for this building has been done at a cost of $200,000. If construction is delayed very long that money will be largely wasted. After only a brief time plans must be updated or completely redone because of changing conditions and prices.

It seems to us, however, that the reasons for seeking more research in wood chemistry are particularly compelling.

It has been estimated that we use only about 50 to 60 percent of the fiber in a tree. The remainder is lost in the form of limbs, tops, stumps, roots, neeedles, or leaves, and so on. If we are to recover this fiber, basic research is the first step, and that step cannot be taken without this facility for the Laboratory.

President Johnson's words on building a second America offer an exciting and challenging task.

There have been several recent studies based on materials requirement projections to the year 2000. One of the most thorough is "Resources for the Future," a Ford Foundation-supported study. That study gives three materials projections for 2000 A.D.—a high figure, a medium figure, and a low figure. The projected low figure for plywood is 25.8 billion square feet—about twice what was manufactured last year.

However, our association figures indicate we'll hit that level of production by 1975, so we anticipate that the medium figure given by Ford is closer to being accurate. The medium figure is 62.7 billion square feet—almost five times what we produced in 1965. The high figure is 137.4 billion square feet.

Obviously we can't make the same products the same way and produce that much material. There just aren't enough trees. Basic research such as that conducted by the Forest Products Laboratory can lead to developments that will allow wood products industries to come closer to realizing full utilization. In short such research promises to show us how to produce more building materials from fewer trees.

It's a sound research investment. Timber is a renewable resource. Careful cultivation, careful harvesting, careful renewal, and full utilization can provide us with a never-ending source of construction materials to build that second America the President has described so well.

The more we know this material the easier our job, and the country's job, will be.

I respectfully urge you to look with favor on the plans of the U.S. Forest Products Laboratory to seek out the knowledge that will be so important to us all.

Thank you, Mr. Chairman.

Association Industry Representation

Senator Byrd. Mr. Joseph S. Miller, representing the Western Forest Industries Association.

Mr. Miller. Thank you.

Senator Byrd. We are glad to see you here.

Mr. Miller. I will make this as brief as possible.

The association I represent is composed of about 100-odd members in the States of California, Oregon, Washington, Idaho, Montana, and Colorado. Our members process about 3.5 to 5.5 billion board feet of lumber a year depending on the type of economic activity which now is high, and they are bound together primarily by their dependence upon the public forests for their supply of timber.

Log Exportation to Japan

In the last few years our organization has had a number of problems in the coastal areas of the West, most particularly the increasing export of logs to Japan. In the last year, I think the figures are over

800 million board feet of logs exported, which cuts down our supply considerably.

The Senate Commerce Committee in 1962 held hearings in which the Chief of the Forest Service reported that the 42 western national forests did not have annual timber offerings adequate to meet the installed capacity and industrial demand.

In the last few years with the Japanese taking more and more logs this has made it even tougher.

Area Yield Unit Desirability

A couple of years ago the group of lumbermen in the Northwestern States joined together to attempt to get a Federal sustained yield unit for the whole region from the Secretary of Agriculture. He turned it down September 17, 1965, but in rejecting it he did say that he was directing, and I am quoting directly:

> I am directing the Forest Service to use every means available to it to maintain timber harvesting at allowable cut levels and to accelerate offerings of timber not normally included under allowable cut limitations.

I will come back to this in a second, Senator.

On December 9, 1965, Secretary of Commerce Connor, in response to a request from Chairman Manguson of the Senate Commerce Committee—excuse me, Magnuson asked for a review of this log export situation—but Secretary Connor replied that "a positive program is indicated including increasing the log supply in the Northwest through intensified management."

Now, with these two policy directors to the Forest Service, that group has undertaken a lot of analysis and search for opportunities to find more supplies of timbers, and they have developed two programs, one which needs a lot of research and the other which can be put immediately into effect.

Balloon and Skyline Logging Research

The program needs research in balloon and skyline logging. Now, as you know in West Vrginia, Senator, there is a lot of high areas where it is just impossible to get access roads in except at tremendous cost and they have developed this balloon logging concept to a degree where they figure 3 or 4 years of research can really make it operable.

If so, it can add 360 million board feet to the Douglas-fir timber supply alone.

If this is done, this could return 72 million a year to the U.S. gross national product.

This program would require about 500,000 a year for the next 4 years in research. The gains, as I pointed out, could be quite spectacular, both to the Federal economy and also in providing this supply of logs that our western mills desperately need.

Forest Management Intensification

The second program that can be put into effect immediately is in intensified management in the western national forests. This suggested intensity of management offers the opportunity to increase the

national forest allowable cuts in Oregon and Washington alone by as much as 390 million board feet annually through the increased salvage and small timber sales.

Figuring this at $20 per thousand board feet, this could bring $6 million a year to the Federal Treasury and $2 million to the local governments in Oregon and Washington just in direct stumpage receipts. It would add, 2,500 full-time jobs to the total employment.

This could be done right now, especially with the great increased demand for lumber through the war in Vietnam and on the defense stepups. In fact, I noticed in last night's Star that the Defense Department is buying $4 million worth of lumber every month instead of the average $2 million from the lumber industry, for Vietnam and other things.

REQUESTED FUNDS

So I have roughly summarized this, but these are the two main points. We are asking $500,000 a year for balloon and skyline research and putting this intensified management program into effect.

These forests which will cost a little more money, will bring large and rich returns.

Thank you.

Senator BYRD. Thank you for your fine statement.

I first met you, I think, about 8 or 9 years ago and I am glad to see you again.

Mr. MILLER. Thank you.

(The prepared statement of Mr. Miller follows:)

I am Joseph S. Miller, representing the Western Forest Industries Association, a trade association comprised of approximately 100 members. The membership is located in the States of California, Oregon, Washington, Idaho, Montana, and Colorado. Our members process, depending upon the year and level of national economic activity, from 3½ to 5½ billion feet of logs each year into lumber, plywood, and allied forest products. Furthermore, our members are primarily dependent upon the timber sale offerings from the public lands for their log supplies.

Our forest products industry is one of the cornerstones of our western economy. This forest products industry is divided primarily between those few having adequate timber supplies in their own ownership or contracted from other private sources, to supply their predominant needs and our segment of the industry composed of producers like our members, primarily dependent on the public timber supply. During the last few years our rough and tumble competitive industry has been beset by a number of additional problems. This is particularly true of that part of the industry dependent upon the public timber for its raw material supply. Among these problems has been the shortage of raw materials. Basically the installed capacity and the need for raw materials is greater than that available as annual allowable cut from the public lands and from private sources.

This record was well established during 1962 when the Senate Commerce Committee conducted extensive hearings during which the Chief of the Forest Service reported that the 42 western national forests located in Montana, Idaho, northwestern Utah, Washington, Oregon, and most of California did not have annual timber offerings adequate to meet the installed capacity and industrial demand. In 1963 and in 1964, additional demand was added with the Japanese purchasing ever-increasing volumes of softwood logs from Oregon and Washington. This additional log demand on our already existing short supply has increased from 311 million board feet in 1962 to 901 million board feet in 1965; most of this volume went to Japan.

Becoming fearful with the increased drain caused by log export from the already short softwood log supply, a committee was formed in Oregon and Washington of persons whose processing plants were dependent upon national Federal sustained yield unit. This unit, if formed, was to encompass the na-

tional forests of Oregon and Washington and was to provide for domestic manufacture of all national forest logs originating from the national forests of the two States.

On September 17, 1965, Secretary of Agriculture Freeman rejected the request for a Federal sustained yield unit. In Secretary Freeman's letter rejecting the committee's request, he stated, in part:

"I am directing the Forest Service to use every means available to it to maintain timber harvesting at allowable cut levels and to accelerate offerings of timber not normally included under allowable cut limitations such as material from prelogging salvage operations and thinning of young growth stands."

Similarly, in a letter of December 9, 1965, from Secretary of Commerce Connor to Senator Warren G. Magnuson responding to a request by Senator Magnuson that a review of the log export situation affecting the Pacific Northwest be made, Secretary Connor said, "* * * a positive program is indicated including increasing the log supply in the Pacific Northwest through intensified management * * *" and further, "* * * it would appear that a positive approach should be taken leading toward an overall increase in timber supply."

With these two policy directives to the Forest Service, they have undertaken considerable analysis, searching for opportunities to increase the available supply of timber.

Two such programs have been developed, one needing some research and offering tremendous returns as this applied research bears results. The other is a program that can immediately be put into effect that would produce annual benefits, when implemented, far in excess of the minimal financing and additional manpower needed.

Timber volumes available in presently inoperable areas requiring some aerial logging system

The program requires some developmental research in aerial logging systems or, as we know it, in the Pacific Northwest, balloon and skyline logging. This is a type of forest engineering research that, if implemented, should be operational within 2 to 4 years. These types of aerial logging systems would add immediately, upon becoming operational, an additional annual harvest of 100 million board feet from national forest lands and 150 million feet from other ownerships, public and private, from mature timber now considered inoperable in western Oregon and western Washington because of difficult terrain, unstable soils, high road construction costs, etc. In addition, an estimated 110 million board feet of logs from young growth thinnings not now available on the national forest lands could be placed on the market. This 360 million board foot addition to our Douglas-fir timber supply, if processed domestically rather than merely exported to satisfy Japanese softwood import needs, would return each year $72 million to the gross national product of the United States. This 360 million board feet available upon the satisfactory completion of this operational research is only a portion of the total 840 million board feet of current annual losses from all unloggable lands of the region. The following table illustrates the importance of this program to public timber receipts and the national forest program:

I

National forest lands, western Washington-western Oregon

Presently unloggable lands needing—	Total potential annual yield (in board feet)	Possible increase with aerial logging systems (in board feet)
Harvest of mature timber	186,000,000	110,000,000
Young growth thinning	148,000,000	100,000,000
Total	334,000,000	210,000,000

Annual economic returns when operational (including Forest Service and other Federal)

Total Federal timber stumpage return	$3,800,000
Receipts to U.S. Treasury	3,000,000
Receipts to counties	800,000

Also, these aerial logging systems would make possible the addition of more than $1 million per year to timber receipts from Alaska's national forests and significant increases in the balance of our western national forests, all having millions of acres of timberland currently classified as "mature," "needing harvesting," and "inoperable."

For this research program an estimated $500,000 per year is needed, for 4 years. We urge that, if granted, this committee instruct the Forest Service by the end of the 2d year to present a detailed progress report: if the aerial systems continue to be promising and if progress has been made that, before receiving appropriations for continuing into the 3d year of the program, the Forest Service at that time include all or most of this additional 210 million board feet of annual allowable to cut to the already allowable cuts of the respective national forests of western Oregon and Washington.

IMMEDIATE ACTION PROGRAM

The Forest Service's report entitled "Timber Trends in the United States" referred to several technical forestry measures that could be strengthened to increase supplies of timber now and in the future. Similar references occurred in both Secretary Freeman and Secretary Connor's letters, previously cited. Among these techniques mentioned were thinning, prompt reforestation, increased protection, closer utilization, greater mortality salvage and accelerated road construction. This increased intensity of management offers a significant opportunity to increase the national forest allowable cuts in Oregon and Washington by as much as 390 million board feet annually merely by increasing thinning, salvage and small timber sales. This is certainly the kind of potential our forest industry needs and must have to continue contributing to the economic growth of the Pacific Northwest and the Nation. At just $20 per thousand board feet, this would bring in almost $6 million to the Federal Treasury and $2 million to the local governments of Oregon and Washington in direct stumpage receipts. Even more important it would, if logged and processed into lumber and plywood, add over 2,500 direct full-time jobs to the total employment. This program with financing and a slight modification of the manpower ceiling could, we understand, be instituted immediately on the national forests of Oregon and Washington.

II

Marketable timber outside annual allowable cut available for disposal

	Without supplemental road needs					With supplemental road needs			
	Estimated volume, MMBF	Currently offered, fiscal year 1965, MMBF	Net volume gain, MMBF	Financing needs	Manpower needs	Volume, MMBF	Additional road-financing needs	Sale financing needs	Manpower needs
Western Oregon	121.2	32.1	89.1	45,600	24	50.2	534,000	44,300	9
Western Washington	25.4	5.6	19.8	23,100	5	21.2	540,000	86,000	7
Eastern Washington	11.1	3.6	7.5	215,200	3	14.5	110,000	23,300	3
Eastern Oregon	91.5	14.5	77.0	183,400	20	56.0	431,200	113,200	17
Total	249.2	55.8	193.4	461,300	52	141.9	[1] 1,615,900	266,800	36

[1] Needed annually only for 5 years of program.

Good forest management is something with which this association has long been concerned. We are fully aware that there is more behind the allowable cut than just building roads and making timber sales. Also, we are well aware that the reforestation program of the Forest Service, other than reforestation of current timber sale areas, has fallen substantially behind the 1961 program level and that we cannot enjoy the total benefits of increased timber harvesting unless the reforestation program instituted under the Kennedy administration is more adequately financed.

We are equally aware that this program of intensified forest management through increased salvage, logging and new thinning-harvesting programs developed by the Forest Service and described above are merely a small fragment of the volumes possible if true intensive management were applied to national

forest lands. This beginning program announced by the Forest Service is a step in the right direction and we urge the Forest Service to rapidly proceed with providing the price tag and guidelines to achieve a truly realistic high-level intensive management program for national forest lands.

EASTERN OREGON AND THE IMMEDIATE ACTION PROGRAM

Future growth of eastern Oregon's economy will depend upon maintenance of a healthy timber industry. Good forestry cannot be practiced without a sound forest industry in partnership. Eastern Oregon has a particular challenge because it now lacks the degree of diversification of its timber industry necessary to take full advantage of its excellent forest resources. The additional allowable cut referred to in table II, page 7, is primarily (over 90 percent) on the Wallowa, Whitman, Malheur, and Umatilla National Forests. Additional knowledge about the processing costs and products recovery from thinning, salvage and from species not now being used would be most helpful. The industry needs and wants the additional timber supply.

One of the ways I know to assist the industry of eastern Oregon to utilize this material is through the log and tree quality research program at the Pacific Northwest Forest and Range Experiment Station. This program should be expanded to include the problems and potentials of manufacturing products that would be developed under this intensive management program in northeast Oregon. The benefits of these findings would be westernwide because these problems are westernwide. An expanded program of this research has been planned by the Forest Service and to the best of our knowledge never funded.

The thinning and salvage that result in increased allowable cuts also are the tools of intensive forest management. Knowledge of how best to apply these tools in the associated species types of eastern Oregon is meager indeed. The limited silvicultural research in the past has been on the major species of the region, ponderosa pine. An excellent new silvicultural laboratory at Bend, Oreg. was provided by congressional appropriations just a few years ago. This facility should receive adequate funding and staffing to take advantage of this eastern Oregon leap into more intensive forest management.

Finally, this association is concerned with the cost of public timber sale administration involving thinning and salvage such as is being proposed for northeastern Oregon. Intensively managing timber is truly a big business and requires marketing research to be done efficiently at less cost to the taxpayer and with less burdensome requirements to the industry purchasers. The Forest Service marketing research program in Oregon and Washington is inadequate to carry out needed studies of stumpage marketing. Thinning and salvage sales are particularly troublesome because of the scattered nature of the timber, lower than normal volume per acre and special sale requirements. We recommend that the marketing research be brought up to a level commensurate with these problems.

In summary, this eastern Oregon-Blue Mountain project offers the opportunity to harvest annually additional timber needed by local industry and at the same time develop necessary scientific timber management information, all in concert with a handsome return to the Federal Treasury for the amounts invested. Additional timber supplies, jobs, industry, and economic activity at home will be benefits from this program.

We urge the funding and manpower needed for the aerial logging systems research program, and as I have named it, the immediate action program be provided the Forest Service.

Thank you.

GEORGE ROGERS CLARK RECREATION WAY, ILLINOIS

Senator BYRD. Mr. Kyran McGrath is next. He will testify on behalf of the Illinois Department of Business and Economic Investment.

Mr. MCGRATH. The particular project that I am here on behalf of is the George Rogers Clark recreation way which would extend through southern Illinois between the Ohio River and the Mississippi River.

I have a prepared statement which I have submitted to you.

Senator BYRD. I have it.

BUDGET REQUEST

Mr. MCGRATH. I will just touch on the highlights of it. We are seeking $260,000 to begin the planning for this recreation way. The Forest Service requested in the budget an amount to purchase 1,420 acres. They are keeping the amount of that rather quiet to preclude unusual speculation, et cetera, which is within their prerogative.

This would be a request to actually begin the planning for the roads for the scenic highway which has universal acceptance, local, State, and within the Forest Service levels.

Before all of the land is acquired that would affect the eastern section and the western section of the national forest, we would like to have—we feel rather desperate—a move to have the planning begin on this highway because it will take some time.

This $260,000 would be enough to initiate the planning for the construction of the site location, corridor designation. For this reason I am here today.

AREA ECONOMY

The economy in the area is far behind the States economy. Unemployment throughout Illinois is estimated at 3.4 percent. Up in the Metropolitan Chicago area it is about 0.09. They are overemployed down in this area, the six counties encompassing this area. It is about 13 percent.

The economy of the States of the Midwest is not benefiting the southern section here. This highway would get an access into the natural beauties of historic importance to the area. Many people will travel there from Chicago, from St. Louis, from Evansville, from the metropolitan areas within the Midwest, but there are no places to stay overnight. So they leave.

They come in the morning and either they camp at the national forest or they go back to their homes.

As such, the economy has not been able to benefit from this tourism. traffic. This is why we are here. This is why we feel a very strong economic urgency about that. That is our request.

Senator BYRD. Thank you, Mr. McGrath.

(The prepared statement of Mr. McGrath follows:)

I am here on behalf of the Illinois Department of Business and Economic Development to testify in support of a project which is before your subcommittee—the George Rogers Clark recreation way in the Shawnee National Forest. This proposed scenic highway would stretch from the Ohio River through the Shawnee National Forest to the Mississippi River. It holds great significance for the economic growth of southern Illinois. This scenic highway would unite the recreational assets of the Shawnee Hills along a 100-mile corridor at the lower end of our State.

Seeking $260,000 for preliminary planning

The Budget Bureau has included an item in its request for fiscal year 1967 for the addition of 1420 acres to the Shawnee National Forest. What we are asking you to consider today, along with the Budget Bureau's request, is an additional $260,000 to be used for preliminary planning of the road, location and mapping of scenic boundaries, and the initial steps for acquiring rights-of-way and easements. The State of Illinois regards this project vital not only to the recreational development of this section, but also to the economic development as well.

Declining economy in area

The economy of southern Illinois has been on the wane for over two decades. The advancements in technology within the basic industry, coal mining, has

served to eliminate much of the employment needed to produce a constant supply of coal for shipment to the metropolitan areas of the Midwest. According to the Department of Labor, the average unemployment rate in the six counties through which this scenic highway would extend amounted to 13 percent. These counties are Gallatin, Hardin, Saline, Pope, Johnson, and Union. They contain what many people throughout the State consider to be the most beautiful topography in the Midwest. But, to date, this beauty has remained relatively inaccessable to the public because of most limited highway access. The rugged hills and valleys are more suited to recreational development than to any influx of industry. In order to utilize these natural assets, Illinois has turned to professional economic advice for guidance. All the advice gathered to date stresses the need for a scenic highway linking the Shawnee Hills to the rest of the Midwest.

Scenic highway would stimulate private investment

The Outdoor Recreation Resources Review Commission, the Bureau of Outdoor Recreation, Southern Illinois University, and many private consultants have unanimously reported from their studies of the proposal that such a highway as we propose would be the most likely single project to bring economic health and stimulation to the area. People from the metropolitan portions of the entire Midwest could then visit Shawnee Hills. At present, a very few overnight facilities exist along this 100-mile corridor, except for the expanding camping locations in Shawnee National Forest. Businessmen are reluctant to invest capital in recreational facilities when they can see for themselves the very limited highway facilities serving the area. According to the report which Checchi & Co. recently finished for the Economic Development Administration:

"The construction of a scenic highway in this tourist growth center of southern Illinois would be of major national significance * * *. It would help unify the Shawnee National Forest * * *. No existing road system in southern Illinois is now adequate to meet these needs, even with extensive renovation."

Mr. Chairman, the appropriation we are requesting today would stimulate private investment which is so desperately needed. Hotels and motels would spring up. At present, there are very few overnight facilities where tourists can stop and enjoy nature's topographical wonders as well as the historical contributions of the Midwest to the growth and unification of our Nation. The initiation of planning for this proposed George Rogers Recreation Way would signal the economic revival of Shawnee Hills, would cause swift, private investment in a section of Illinois which needs it very much. This would serve the local, State, and National interest by making more accessible this natural beauty in the Midwest, and at the same time bringing economic relief to southern Illinois.

I thank you for giving me the opportunity to testify this morning and I hope you and your committee will look with favor upon our request.

SUBCOMMITTEE RECESS

Senator BYRD. The subcommittee will stand in recess until 2 o'clock this afternoon, at which time we shall convene in room 1223.

(Whereupon, at 12:30 p.m., the subcommittee recessed, to reconvene at 2 p.m., the same day.)

(AFTERNOON SESSION, 2 O'CLOCK, WEDNESDAY, MARCH 16, 1966)

The subcommittee met at 2 p.m., in room 1223, New Senate Office Building, Hon. Robert C. Byrd, presiding.

Present: Senators Byrd, Proxmire, and Young.

DEPARTMENT OF THE INTERIOR

NONDEPARTMENTAL WITNESSES

STATEMENT OF HON. QUENTIN N. BURDICK, A U.S. SENATOR FROM THE STATE OF NORTH DAKOTA

SUBCOMMITTEE PROCEDURE

Senator BYRD. The subcommittee will be in order.

The subcommittee will continue hearing nondepartmental witnesses on matters of interest to them included in the Department of the Interior and related agencies appropriations bill.

All of the witnesses have been requested to prepare written statements for the record, and I ask that each of you file your statement and then summarize the statement rather than read it.

This afternoon Senator Young, who is a member of this Appropriations Committee, and Senator Burdick, are present. They have some constituents who are here and I would like to give Senator Burdick and Senator Young an opportunity at this time to address themselves to whatever subject they may have in mind and also to present the people who are here to be heard.

ST. JOHN PUBLIC SCHOOL, ST. JOHN, N. DAK.

Senator Burdick, I will call on you first.

Senator BURDICK. Mr. Chairman and members of the committee, I want to thank you for the opportunity to appear before your committee on behalf of St. John Public School, St. John, N. Dak.

Mr. Leonard Bearking, superintendent of that school, comes before you today seeking funds for desperately needed new facilities. In his prepared statement, he has outlined the many and varied difficulties the school has encountered in providing competitive education for its 279 elementary and secondary pupils.

I would like to call two important points to your attention because I think they will have a very important bearing on your decision.

TAX EXEMPT LAND AND INDIAN ENROLLMENT

First, the school district has many economic problems, not the least of which is the fact that 38 percent of its land area is tax exempt. Second, of the total enrollment at St. John School, 43 percent are

Indian children. In this regard, I would like to quote from a recent report I received from the Bureau of Indian Affairs:

> We are aware of the need for educational facilities at St. John * * * however, the Bureau has no authority to provide funds for the construction of public school facilities * * *. The school does enroll a large percentage of Indian children and much of the land in the district is nontaxable. Unfortunately, the district has exhausted its entitlement under Public Law 815 and is bonded to the limit permitted by the State.

In addition, Mr. G. B. Nordrum, director of the North Dakota State School Construction Fund, has informed Mr. Bearking that, because of their current indebtedness—

> (A) new contract could not be entered into until the existing contract had been paid in full with interest. No school district may have more than one contract with the State school construction fund at one time. To be eligible, the district must be bonded to the limit and have a 10 mill building fund.

You can readily see from the above that the minimum needs of the children can only be met through favorable consideration by this subcommittee.

SUGGESTED APPROPRIATION

I notice, in reading over Mr. Bearking's testimony, that he is requesting $275,000 to construct two general classrooms, one library room, one industrial art classroom and shop, one guidance area, and one mechanical room. He suggests that this is the minimum requirement.

GYMNASIUM CONSTRUCTION

I suggest, Mr. Chairman, that you might also want to consider adding additional funds to allow for the construction of a gymnasium. At the present time, for lack of adequate physical education facilities, St. John High School is not able to participate in home-winter indoor games such as basketball. I personally believe that a satisfactory physical education plant is an important right arm of any elementary and secondary school.

Here we have a situation, Mr. Chairman, where we have facilities used jointly by Indian people and white people, the ratio of Indian people is 43 percent, the participation by the Bureau of Indian Affairs in this case, I think, would be very necessary and very equitable, and we would urge your consideration of this amount of money.

Senator BYRD. Thank you, Senator Burdick. I am sure the subcommittee will give very careful consideration to your request.

MADDOX PUBLIC SCHOOL, MADDOX, N. DAK.

Senator BURDICK. Now, Mr. Chairman, if it is not out of order, I would like to just briefly refer to a situation involving another public school in Maddock, N. Dak.

The situation there is very much the same. They are desperately in need of new facilities, the only difference is that in the Maddock school they have a little lower percentage of Indian students attending than at the St. John School that I have just referred to.

In Maddock they have had about a 20-percent ratio between Indian students and white students. The birth rate is rising, and the school officials tell me they are expecting more and more Indian students.

The problem here is that the Indian reservation 20-some miles away, has no high school, and so these Indian students attend schools out of the State. One or two go to other towns, but the majority go to Maddock, N Dak. So here again we have the same kind of a blending. I do not know what the Bureau of Indian Affairs intends to do about a high school on the reservation; they have none now.

It has been reported to me that the number of students there will not be adequate or justify the expenditure of funds for a high school. If a high school is planned or in the making for on the Fort Totten Reservation, it is an entirely different situation. If it is true it is not feasible, then these other schools are going to take up the burden for educating these Indian children. I also ask your favorable consideration for Maddock.

Senator BYRD. That is a very fine statement, Senator Burdick. You may be sure that we will be glad to hear these who are here today to present their testimony in this regard.

STATEMENT OF HON. MILTON R. YOUNG, A U.S. SENATOR FROM THE STATE OF NORTH DAKOTA

INTEGRATION OF NORTH DAKOTA INDIAN POPULATION

Senator BYRD. Senator Young, would you like to say something at this point?

Senator YOUNG. Mr. Chairman, we have approximately 16,000 Indians on our reservations in North Dakota. In recent years many of them have been moving off the reservation and living in little towns and cities around the reservations.

I think this is good. There is little opportunity or future for them on the reservation. When they move off the reservation and go to these little towns, the people welcome them and would like to educate their children. The local schools, however, do run into some very severe financial problems. They get some Federal funds for operating costs but there has been no general legislation to help these little towns build the school buildings that are necessary.

I have sponsored several amendments to appropriations bills to help these little towns build additional school facilities to meet these new demands. In every instance these little towns had already bonded to the limit. That is the case of the two schools represented here today.

OFF-RESERVATION EDUCATION OF INDIAN CHILDREN

I think the best way to educate the Indian children is off the reservations. We have, as the first witness today, Mr. Leonard Bearking, the superintendent of schools at St. John, N. Dak. He is an Indian himself and a very fine educator. I do not know of anyone who knows better how to educate Indian children than Mr. Bearking. With him is Mr. Arda Roy, who is on the St. John, N. Dak., School Board.

Senator BYRD. Yes; come over, Mr. Bearking and Mr. Roy.

May I say that these two Senators are always very zealous in their efforts to do something for their constituents; and I am confident that the subcommittee is going to give consideration to the statements and expression of views made here by Senators Burdick and Young.

Senator YOUNG. I wish I could do as good a job representing my constituents in North Dakota as you do in West Virginia.

Senator BYRD. Thank you, Senator Young.

Does this complete your formal statement?

Senator YOUNG. Yes.

STATEMENT OF LEONARD BEARKING, SUPERINTENDENT OF SCHOOLS, ST. JOHN, N. DAK., ACCOMPANIED BY ARDA J. ROY

PREPARED STATEMENT

Senator BYRD. All right, Mr. Bearking, would you begin? I see you have a prepared statement. Suppose we include this in the record and you summarize it. Would you do that for us?

(The prepared statement follows:)

My name is Leonard Bearking; I attended grade and high school at the Government Indian school at Fort Yates, N. Dak. I graduated from Mayville State College in North Dakota. I have also attended the University of Minnesota, University of Utah, Claremont Graduate School, Claremont, Calif., and Western College in the State of Montana. I presently have a master's degree in educational administration and I have 93 postcollege graduate credit-hours looking toward my doctor's degree. I am presently superintendent of the public schools at St. John, N. Dak.

St. John is located 4½ miles south of the Canadian border and about equal distance between the States of Montana and Minnesota.

As is probably the case with all other witnesses appearing before your committee, we believe our isolated geographic location and the unmet need of our children results in a unique situation warranting your consideration.

In somewhat general terms, the St. John School District is bordered on the north by Canada. About 3 miles east from St. John is the Mount Pleasant School District. About 10 miles to the south we have the large and overcrowded recently constructed Government Indian school at Belcourt. Our western boundary is in the Turtle Mountains about 14 miles west of St. John.

The eastern one-fifth of our school district consists of an area devoted to dryland wheat farming and produces 45 percent of our locally raised school revenue. The other four-fifths of our district is in the Turtle Mountain area which is largely an area of second-growth poplar and scrub oak of little economic value and produces 55 percent of our locally raised school revenue. In this area there is little economic opportunity for our young people and practically no tax revenue because of the low value of the land and the tax-exempt status of Indian aid federally connected game and wildlife area.

Our school district consists of 106⅔ sections of land having a total assessed valuation of $408,794. Our State law authorizes our school district to levy 27 mills which in 1965 produced for our district $14,607 of operating expense. Our other operating revenue is from State grants, Federal impact, and Johnson-O'Malley funds.

Our elementary system has 205 pupils of whom 55 percent are federally related students. Our high school consists of 74 pupils of whom 43 percent are federally rleated students. The parents of our federally related students have a choice of sending their children to the crowded Indian school at Belcourt or to our public school at St. John. Those federally related students who are now attending our public school at St. John are doing so as a matter of choice as they are eligible; transportation for Indian children who reside in our district is being provided by the Indian service, if and only if, they attend the Indian service school at Belcourt. The Belcourt Indian service school buses presently are providing bus service to the Belcourt Indian school for 92 children residing in our district. We understand and are informed that most of the federally related students residing in our district who are now attending school at the Belcourt school would prefer to attend the public school at St. John if equal facilities and transportation were available. It is in behalf of the parents whose children are presently attending our public school and those Indian parents whose children are presently attending Belcourt but who would

prefer to have their children attend the public schools that appear before this committee today.

The parents of the Indian children are confronted with a dilemma; one horn of the dilemma is to send the children to a public nonsegregated inadequately financed public school which they prefer, and the other horn of the dilemma is sending their children to a luxuriously financed Government school.

In a manner of speaking, our effort to secure integrated facilities for the federally related pupils in our district is to assist the parents of these Indian children being given an open and free opportunity to choose the type of education—public or Government—they want for their children. This is not forced integration where it is opposed by either the community or the parents. It is integration of education where it is acceptable and affirmatively desired by the community and the individual parents of the affected children.

The St. John School District is not a johnny-come-lately in the matter of nonsegregated public school education. St. John was the first settlement in the region. It was one of the first fur trading stations of the fabulous Joseph Rolette in territorial times. St. John had the first school established in the region and Indian children have always been admitted completely on a nonsegregated basis. Over the years the financial drain on the district has been most burdensome. The present dilapidated condition of our physical facilities is perhaps the best evidence of the strenuous financial effort our community has made in the direction of integrated education. Yet the effort has been made with few requests from Washington. It is my understanding the only Federal construction assistance St. John has ever received was in 1955, when Federal impact supplemented some locally raised funds for the construction of a portion of the present buildings which are being used to the fullest.

Under current North Dakota standards and in order to provide our children with facilities comparable with other districts in North Dakota, we believe we need the following buildings: two general classrooms, one library room, one industrial arts classroom and shop, one guidance area, one mechanical room, a water and sewer system, furniture and equipment, and architect fees.

The cost of the facilities needed is, according to the estimate available to us, $275,920. We understand and appreciate this sum seems pretty high even to a congressional committee. It is tremendously high when viewed by the school board of our small tax-based community. Nevertheless, those are the facilities we need. We wish to make clear we will be grateful for any help we can get and in our opinion the desperateness of our situation suggests the very minimum requirements of the following buildings at the following costs. Please note we are leaving out of our minimum request the gymnasium which is near and dear to the hearts of all students, the community, and the teachers, especially one like myself who was a 4-year letterman in college. We know, however, that in this competitive era reading, writing, and arithmetic must come first and we will have to cut our presently inadequate athletic program during the winter limiting the same to cross country in the fall and track in the spring. Also, we would love to have an auto mechanics facility for our naturally included Indian children.

Because of the low evaluation in our district, we can, by special election, and borrowing from State school fund, provide $115,700 leaving the balance not possibly available for us except as we can justify before this committee. May we hasten to add that if this committee cannot assist us in providing needed nonsegregated education of facilities for the Indian pupils, it is our understanding there is now or shortly will be request from the Bureau of Indian Affairs for additional construction funds for the already overcrowded Indian School at Belcourt and at least part and we think a large part of this requested funds will be to accommodate Indian children presently residing in our school district.

The St. John School District is providing for the educational needs of their school-age children who attend our local public school; even through our major plant facilities are in a dilapidated condition we maintain a high percentage of pupil attendance—last school term our percentage of daily membership was 96 percent. Our school dropout ratio was 4 out of 114 pupils in grades 7 through 12, or only 5 percnet of our pupils enrolled in grades 7 through 12 dropped out of school; whereas, the Belcourt Bureau of Indian Affairs school had a daily membership percentage of 90 percent, and a dropout ratio of 61 out of 432 pupils in grades 7 through 12, or 14 percent of their pupils in grades 7 through 12 were dropouts during the last school term.

May I remark that we are vitally interested in those students welfare who presently are residents of our school district but attend the Belcourt Indian School because we realize that we can meet their unmet educational needs at

the St. John Public School. Why should these particular students continue to be encouraged to attend the Belcourt Indian School where their chances of graduating from high school is crucial when we consider the Belcourt Indian School's poor daily membership and their unusually high dropout rate.

The question basically appears to me to be as to whether this committee will provide the necessary funds for our district which goes in the direction of nonsegregated public school education for our Indian children or will provide funds for the Government school at Belcourt which as a matter of geographic necessity goes in the direction of segregated education.

Another point of some possible interest is that if the Government decides to utilize our plan of nonsegregated education, our peculiar school financing system in the State of North Dakota will mean our State will be contributing to the operation costs of the St. John facility which of course will not be sure, if it is necessary for this committee to make the facility available to the Indian School at Belcourt.

I would like to take this opportunity of thanking the members of the committee for their courtesy and I would like to assure the committee that I recognize the committee has problems just as well as the St. John School District. Within the limits of my ability and my knowledge of the situation, I would be pleased to do whatever I can to answer any of the questions the committee or the committee staff would care to ask me.

St. John Public School, St. John, N. Dak.

Mr. Bearking. My name is Leonard Bearking. I am the superintendent of schools of St. John, N. Dak., and I have had 6 years of school administration experience.

Senator Byrd. That is the school in which 43 percent of the students are Indians?

Mr. Bearking. Yes; we have an enrollment of 279 students. Forty-three percent of these 279 students are Indian children. We are using our facilities to capacity and we will be unable to participate in other programs such as the Elementary and Secondary Education Act unless we can find suitable facilities for these children and for the classes or whatever curriculum injections you want to make.

Tax-Exempt Land Area

I would like to point out that our district's land area consists of 106 sections and our evaluation is very low, approximately $408,000. Actually the northeastern part of our district supports 45 percent of our school district expenditures. Two-fifths of our land area is tax-exempt because of the reservation lands, and other Federal lands, such as wildlife protection area. We do receive some school operation moneys from the Federal Government, and Johnson-O'Malley funds for the Indian children.

Federally Related Pupils

Of the 205 pupils in our elementary system, 55 percent of them are federally related, and at the high school level we have 74 pupils, 43 percent are federally related.

Advantageous Public School Education of Indian Children

We feel that we can educate these Indian children better in a public school situation where there is no segregation as you will find in your Indian service school at Belcourt. Presently we have 92 children attending the Belcourt Indian School. These 92 children reside in the

St. John School District and are transported to the Belcourt School on Bureau of Indian Affairs schoolbuses. We feel that should our request be considered favorably we can construct facilities to provide a better educational plant for our present children and for the 92 children that presently attend the Belcourt school. We would be most happy and grateful to do this. We think that we can do a better job because we know that our daily membership percentage is better than it is at the Belcourt Indian School, our dropout ratio is 5 percent, whereas at the Belcourt Indian School it is 14 percent. These are figures from last year's final reports.

So, presently, in a sense, our Indian parents are in somewhat of a dilemma because they must decide whether they should send their Indian children to a public school, that is very likely to be operated as an inadequately financed public school, or they can send them to the Indian school at Belcourt, which is quite a luxurious plant.

The St. John School District believes in an integrated education program. There has never been any segregation of any kind in St. John.

St. John was one of the first fur-trading posts in Rolette County, and they had the first school in the county many years ago.

Impoverished Physical Facilities

Our physical facilities are in quite a dilapidated conditions. Nevertheless, we feel that we are doing a good job for those students that are presently attending our school. We feel that we must improve our physical facilities and that is why we are requesting funds for the construction of additional facilities including two general classrooms, and industrial arts classroom and shop, a library room, guidance area, mechanical room, and furniture and fixtures. We feel that many of our students, particularly in a junior and senior high school, need such a facility as an industrial arts classroom and shop. We feel guidance is very important. Presently our library is a room about 16 by 18 feet, and this needs to be expanded and centralized.

Based on estimates we have received, the cost of the facilities would run in the neighborhood of $275,000.

Senator Byrd. You are able to provide $115,700?

Mr. Bearking. We are able to provide $115,700, but, of course, as Mr. Burdick brought to your attention, we left out the gymnasium which I am sure you realize is most dear and very important to high school students, and as far that goes, to the whole community.

Federal Cost of Sending Indian Pupils to Belcourt

We feel very strongly that we can educate the St. John school pupils and the district pupils that go to Belcourt and we feel that we could educate them at a lower cost per day. Using some old figures that I found in the Federal Aid to Education Bulletin No. 270, 88th Congress, I estimated that it costs the Bureau of Indian Affairs $3.48 per child per day, whereas it costs us $2.46 per day.

Funds Requested

Senator Byrd. Now, Mr. Bearking, what is the amount that you will need?

Mr. BEARKING. Right now we are asking for approximately $160,000.

Senator BYRD. $160,220?

Mr. BEARKING. Yes.

Senator BYRD. Would this supply your gymnasium also?

Mr. BEARKING. No; if we were to request funds for a gymnasium we would have to increase our request by $200,000.

Senator BYRD. But what you need here is the $160,220? Which, when added to the amount you are able to raise by special election, would give you your full amount.

Mr. BEARKING. Not including the gym.

Senator BYRD. Is this the first year this request has been made, Senator Young?

Senator YOUNG. Yes; but there have been, I think, about six other North Dakota schools that have gotten similar assistance.

Senator BYRD. The first year for this school?

Senator YOUNG. Yes.

Senator BYRD. We will have to add this to the budget estimate, would we?

Senator YOUNG. Yes.

(Discussion off the record.)

Senator BYRD. All right, Mr. Bearking.

Mr. BEARKING. Mr. Chairman, on page 9 I bring out the fact that we should not encourage Indian children to continue to attend Indian schools. We feel that it is most important that we tend to these children's welfare.

Senator BYRD. And if you do not get this building, they will have to attend segregated schools?

Mr. BEARKING. They will very likely have to continue attending the school at Belcourt.

Senator BYRD. Do you have any Negroes attending your schools?

Mr. BEARKING. We do not have any Negroes attending our schools.

STATE AND COMMUNITY INDIAN POPULATION

Senator BYRD. What is the overall percentage of the Indian population in the community?

Mr. BEARKING. I would say it is about 40 percent Indian and 60 percent non-Indian.

Senator BYRD. How does this run throughout the county?

Senator BURDICK. This particular county is close to the reservation.

Senator YOUNG. The reservation is in Rolette County.

Mr. BEARKING. Yes; the reservation is in Rolette County.

There are about 6,000 Indians, I think, enrolled and living on or near the reservation.

Senator BYRD. What is the Indian population in your State?

Senator YOUNG. About 16,000.

Senator BYRD. What percent of the total?

Senator BURDICK. That percentage of 630,000.

Senator BYRD. I think you have made an excellent statement, Mr. Bearking, was there anything you wanted to add to it? I did not mean to stop you.

Mr. BEARKING. That is the extent of my presentation.

Senator BYRD. Did you want to add something on this, Mr. Roy?

Mr. ROY. I think Mr. Bearking has covered the situation quite well. I might add I was born in the St. John community and attended grade and high school there and have lived there most of my life. Integration is working there as far as I can see.

Senator BYRD. And your name is Mr. Roy?

Mr. ROY. That is right.

COMPATIBLE INTEGRATION

Senator YOUNG. The best thing about this is that these towns around the reservation, with mostly a white population, want these Indian children in their schools. Here is Mr. Bearking who is an Indian himself and he thinks this is a better place to educate these Indian children. I do, too. I think this is one of the real answers to our Indian problem, educating the young people, particularly teaching them a trade and getting them off the reservation.

Senator BYRD. Mr. Burdick, do you have anything else on this school?

Senator BURDICK. That is true, integration has been complete in the Indian areas, young people go to dances together, to school together, and it is a harmonious situation.

Your request before this committee is a barebones request; is it not? Very few schools in the State of North Dakota that do not have a gymnasium to kind of balance off the educational program; is that not true?

Mr. BEARKING. That is true.

Senator BYRD. And you have come in here and just asked for the minimum?

Mr. BEARKING. The very minimum.

Senator YOUNG. I think I was probably responsible for that.

INADEQUACY OF PHYSICAL FACILITIES

Senator BYRD. Well, Senator Young is accustomed to using that economic scalpel.

If you do not get this this year, how do you suffer? Will there be an increase in cost if it is delayed? Will costs escalate?

Mr. BEARKING. There will very likely be an increase in cost. Last year the expenditures exceeded the receipts, I think, about $3,000. This will continue.

Senator BYRD. I do not understand this.

Mr. BEARKING. The total budget expenditures exceeded the income of the district.

Senator BYRD. But the cost of construction would probably increase?

Mr. BEARKING. Yes. Through Public Law 89–10 we can design projects, but it is going to be very difficult to participate in 89–10 if we do not have the facilities to initiate a remedial reading program or a preschool program. The people in this particular area need these, very much.

Senator BYRD. This amount of money would provide two general classrooms, one library room, one industrial arts classroom and shop, one guidance area, one mechanical room, a water and sewer system, furniture and equipment.

Mr. BEARKING. Yes.

Senator BYRD. Senator Young, do you have anything else on this school?

Senator YOUNG. No; thank you.

Senator BYRD. Mr. Bearking, you made a fine statement. I hope we can be helpful.

Mr. BEARKING. Thank you, Mr. Chairman.

STATEMENT OF LEONARD WICK, SUPERINTENDENT, BENSON COUNTY AGRICULTURAL AND TRAINING SCHOOL, MADDOCK, N. DAK.; ACCOMPANIED BY GORDON SMITH, PRESIDENT OF THE DISTRICT SCHOOL BOARD; AND HAROLD KENNER, MEMBER OF THE DISTRICT SCHOOL BOARD

BENSON COUNTY AGRICULTURAL AND TRAINING SCHOOL, MADDOCK, N. DAK.

Senator YOUNG. Mr. Chairman, we have another quite similar problem in Benson County at Maddock, N. Dak. We have the superintendent and the president of the school board and another school board member with us today. Will you come forward?

Mr. Leonard Wick is the superintendent of Benson County Agricultural and Training School; Mr. Gordon Smith, is president of the district school board. Mr. Harold Kenner is a member of the board.

Mr. Chairman, over the years the Benson County Agricultural and Training School at Maddock has been one of the outstanding institutions of its type. The vocational agriculture department has received national recognition on several occasions. It has received the national Future Farmers of America Gold Chapter Award for 9 out of the last 13 years. Several of the former students here have been recognized as American Farmers—the highest FFA honor that can be bestowed. One of the students is now serving as the president of the North Dakota Future Farmers of America.

They teach vocational education here and I think it is an ideal place to teach and train Indian children. It is off the reservation, and they do have a smaller percentage of Indian children in the system than St. John, but it is the type of school that is ideal for Indian children.

OFF RESERVATION EDUCATION OF INDIAN CHILDREN

Senator Burdick said there is no high school on the Fort Totten Reservation, and I personally would hope they would not build one. I think it is better to educate the Indian children off the reservation, especially those of high school age. I might add, that the job can be done cheaper. This is an old, old school. It was once supported by the State and the county, but this assistance is no longer available. I think Mr. Wick will give you the complete case history. I asked Mr. Wick not to read his whole statement, but to read a part of it and all the summary or conclusion.

Senator BYRD. All right, are you speaking for the group, Mr. Wick?

Mr. WICK. Yes, I am.

Senator BYRD. Will you proceed? You have quite a lengthy statement there and I was glad to hear Senator Young state that you have been asked to abbreviate this, so will you please begin.

(The prepared statement follows:)

We wish to express our sincere thanks for this opportunity to appear before your committee. We respectfully submit to you the following facts, statistics, and explanation in support of our requested appropriation of $467,300 to provide a portion of the funds for constructing and equiping a new high school for Indian and white children.

Background.—Maddock Public School District, No. 9, comprised of area and territory in Benson and Wells Counties, N. Dak., and with a 50-percent tax base of $2,639,672 operated only an elementary school prior to the year 1966. In February of 1966, it became a high school district through the purchase from Benson County, N. Dak., of the property of the Benson County Agricultural and Training School consisting of a high school building, a dormitory, and teacherage located on a 40-acre tract of land adjoining the city of Maddock. (See letter attached, Harry F. Montague, county auditor of Benson County, State of North Dakota, dated February 25, 1966, marked "Exhibit 1.") The grade school building is located in the city of Maddock and approximately one-fourth mile from the high school site. The Benson County Agricultural and Training School was established in 1913 as a county high school to be operated with emphasis on agriculture and vocational training. The high school over the years attracted students from all parts of Benson County as well as surrounding counties and has always had a substantial enrollment of Indian children. This school has been unique in that it is and has been the only public high school in North Dakota with dormitory facilities for both boys and girls. The only other county high school in this State is in Walsh County in the northeastern part of the State.

From the time the school was opened in 1913 to the time it was discontinued as a county high school in February of 1966, it was always the subject of a great deal of controversy and criticism. Several districts within the county have and still do operate their own high schools and the taxpayers in these districts have been bitterly opposed to any countywide tax levy to support this school. Thus, although the high school was originally established as a county school, the major cost of operating and maintaining it, indirectly and increasingly, over the years fell upon the Maddock School District through tuition payments for its high school students. The original countywide levy of 3 mills in the year 1913 was reduced to less than a mill for the period from 1914 through 1959, and after 1959 no levy was made. As a county school it was administered by a five member county school board appointed by the board of county commissioners. Although the members of the county school board were capable and conscientious people, the school plant and facilities were not properly maintained and repaired because of the lack of funds. At the present time, the high school building is far too small to meet present requirements and is in such a poor state of repair that it would not be feasible to attempt to repair and remodel to bring it up to acceptable standards. (See letters attached, Corliss F. Nelson, superintendent of State construction, Department of State, State of North Dakota, dated February 17, 1966, marked "Exhibit 2," and letter from Richard K. Klein, assistant superintended, North Dakota Department of Public Instruction, dated February 8, 1966, marked "Exhibit 3.")

Indian enrollment.—At the present time 41 of the 199 high school students are Indians on the tribal rolls of the Fort Totten Indian Reservation. Maddock is approximately 31 miles from the center of the reservation and 15 miles from the western boundary. The present ratio of Indian students to total students, which is 20-plus percent, has remained fairly constant over the years and from all indications will remain about the same in the future years.

We point out with special emphasis the fact that the Indian students enrolled have of their own choice, elected and chosen to attend this school, rather than federally operated Indian high schools, other area high schools much closer to the reservation, or church schools in South Dakota. At the present time, there is one Indian student attending high school in Minnewaukan, N. Dak., and this student is in a foster home in that city. The following is a breakdown of the Indian high school attendance in various schools in 1964–65. These are figures released by Mr. David C. Fisher, principal at the Fort Totten Community High School:

Warick, N. Dak	7
Devils Lake Central; Devils Lake, N. Dak	2
Stephan; Stephan, S. Dak	7
St. Mary's Academy; Devils Lake, N. Dak	5
Oberon, N. Dak	4
Maddock, N. Dak	31
Flandreau Indian School; Flandreau, S. Dak	19
Marty, S. Dak	4

We further submit that the long history of operating this school with a constantly increasing Indian enrollment speaks well for biracial education in schools outside of the boundaries and away from the atmosphere and influence of reservation home and social conditions. The Indian students are housed in dormitories during the school week and transported by bus to their homes on Friday afternoon and back to school on Sunday evening. At the present time there are 26 Indian girls and 15 boys. They are and always have been accepted and welcomed by the community and by the white students. The relationship between the Indians and white students is excellent and they participate in all phases of school and community activities. The Indian students thoroughly enjoy and make full use of the dormitory facilities. The Indian children quickly acquire and exhibit good health habits and a desire to be clean and neat in appearance. We have noted that one of the last things they do before going home for the weekend and one of the first things they do on returning weekends is to take a good hot bath. We enjoy our Indian students and feel that they must feel wanted and welcome or they would not care to attend here. Our daily attendance records indicate the average daily attendance of Indian students compares favorably with the average daily attendance of white students. Indian parents have been pleased with our school program and repeatedly inform us that they prefer to send their children to a public school.

Present building requirements and problems.—Maddock Public School District No. 9 has for a number of years been aware of the fact that one day the Benson County Agricultural and Training School would be discontinued as a county school and that it would be necessary for the district to establish, operate, and maintain its own high school. Knowing this and realizing the problems it might create, steps were taken to evaluate and study the advisability of purchasing the Benson County Agricultural and Training School plant, site, and facilities. The report of an inspection made by Corliss F. Nelson, superintendent of State construction, North Dakota Department of State, see letter exhibit 2, and the report of a visit by Richard K. Klein, assistant superintendent, North Dakota Department of Public Instruction, see letter exhibit 3, confirmed the opinion of the school board that it will be necessary to construct a new grade school and in addition construct a new junior and senior high school. Present dormitory facilities appear to be adequate for present and future needs.

The potential building capacity of Maddock Public School District No. 9 is as follows:

Maximum potential bonding capacity	$527,900
Balance in building fund	63,900
Potential 1965, five mill building fund levy	12,000
Total, potential local funds	603,800
Maximum potential loan from State school construction fund	263,900
Total, State and local funds	867,700

(See letter attached, G. B. Nordrum, director, State school construction fund, dated March 19, 1965, marked exhibit 4.)

Based on requirements and recommendation of the North Dakota State Department of Public Instruction, Seifert and Stassko Associates, Inc., architects of Fargo, N. Dak., has estimated that the construction costs for a grade school would be $322,000 and the construction costs of a high school would be $1,013,000 or a combined total cost of $1,335,000. (See letter attached, Seifert and Stassko Associates, Inc., dated February 23, 1966, marked exhibit 5.)

By bonding to capacity and utilizing all available potential local and State funds, the district can raise $867,700, which would provide $322,000 for construction of a grade school and leave $545,700 available for a high school building, or $467,300 short of the architects' estimated cost. This leaves us with a very real and serious problem. We must build and it is not a matter of choice as between grade school or high school. The need for each is equally immediate and critical. Just as the Indian children have chosen and consider our school to be their school, we have considered them as part of our school in planning present and future building needs of the district. We could very well scale down our building costs and requirements a great deal by eliminating the educational needs of these Indian children and design our plans and needs to accommodate local students only, but in view of our long history of about 20 percent Indian enrollment, we realize and accept the fact that we have an obligation to these students. We do not want to be responsible for having history repeat itself and shoo the Indians back to the reservation.

We do not want to disregard them in our building plans and in effect deny them their right and privilege to attend a school of their choice. In this regard we feel that our situation is an excellent example of the desire of Indian parents to educate their children in integrated biracial public schools located outside the reservation boundaries, and an example of the desire of Indian children to attend such schools.

Attached hereto, marked exhibit 6 (withdrawn for committee files), is a group of pictures taken at various times and places at our school. These pictures are typical of every day scenes in the halls, classrooms, and shop at the school. One of the pictures is that of the king and queen candidates at the school's 1965–66 homecoming festivities. The queen is a white girl, the king an Indian boy.

Comparative costs

Benson County average cost per pupil (high school)	$789.11
Less State foundations payments	232.00
Total cost per pupil at Maddock, N. Dak	557.11
Board and room based on present payments	225.00
Transportation	111.71
Total cost of boarding school at Maddock, N. Dak	[1] 893.82
Operational cost at Flandreau Boarding School; Flandreau, S. Dak. for a school year of 190 days	1,409.14
Operational cost at Flandreau based on 180 days	1,335.60
A savings per school year of	441.78

[1] The above figures based on 180-day school year.

Conclusion.—In conclusion and summary, we submit:

1. That the Maddock Public School District is faced with an immediate and critical need for construction of a new grade and high school. The building program must get underway in 1966.

2. Architects' estimates based on the requirements and recommendations of the North Dakota Department of Public Instruction place the total cost of construction at $1,335,000. By utilizing every available source of local and State finances, the district can potentially raise $867,700. This will provide funds for grade school construction but leaves only about $545,700 available for high school construction, or approximately $467,300 short of the architects' estimate. This amount will have to be secured from some other source in order to complete the building program.

3. Present Indian high school enrollment is 41. This represents 20-plus percent of total high school enrollment and we do not expect this ratio to decline as long as we have adequate space and facilities to educate these children. The high school building program is designed to meet the needs of these Indian students as well as our own local white children. We do not want to push them out of our schools nor do we want to turn them away in the future. We believe that our long history of approximately 20-percent Indian enrollment is justification for a Federal appropriation of $467,300 to assist in the construction of a new high school.

4. Summary of comparative costs per pupil: Total cost of boarding school at Maddock, N. Dak., $893.82. Operational cost at Flandreau, S. Dak. (based 180 days) $1,335.60. A savings per school year of $441.78.

5. We believe that much more important than comparative per-pupil operational costs and other dollars and cents matters are the benefits derived and values received. We submit that the social values and benefits derived by these children would alone be justification for Federal funds to assist in the building program.

6. This school has always been operated with emphasis on agricultural and vocational training and this emphasis will be continued and even expanded to some extent under the new building program. Some of the vocational courses for which allowance has been made in the building program are as follows:

1. Business education.
2. Vocational shop.
3 Vocational agriculture

4. Vocational homemaking
5. Industrial arts
6. Arts and crafts

This covers the vocational areas in which the tribal council has recommended specific attention.

7. Maddock School District has always operated on a sound financial basis and although we are confronted with a very serious building problem, we do not anticipate or foresee any problems with regard to operating expenses. Some funds for operating expenses are received each year from State and county on per pupil basis but none for construction.

8. Maddock School District proposes to bond and borrow to the full extent of its resources and ability for the purpose of a building programs to educate Indian and white children. Is it unreasonable to expect and request that the Federal Government join with the school district in this project by providing a portion of the construction funds as herein requested?

We wish to thank you for your time, your kind attention to this presentation of our request, and for your favorable consideration of the same.

GORDON SMITH, *President.*
RUBEN TOGSTAD.
MRS. THELMA PAULSON.
EDWIN SIMANSON.
HAROLD H. SENNER.
E. MINDAHL, *Clerk.*

AUDITOR'S OFFICE, BENSON COUNTY, MINNEWAUKAN, N. DAK.

Copy of minutes of meeting held by the Board of County Commissioners of Benson County, N. Dak., on February 25, 1966.

It was moved by Commissioner Berg to accept the bid of $25,000 of the Maddock Public School District No. 9 for the following described property of the Benson County Agricultural and Training School at Maddock, N. Dak., SW¼SE¼ sec. 20, T. 152, R. 69 in Benson County, N. Dak., lots 13, 14, 15, 16, 17, 18—block 3, Sheimo's addition to Maddock City, including buildings and any personal property that may belong to Benson County on these descriptions.

Also any delinquent taxes that may be collected for the year 1958 and prior, and any other funds in which the agricultural school has an interest.

The motion was seconded by Commissioner Toso and carried.

It was moved by Commissioner Johnston that the $25,000 received from the sale of the agricultural and training school at Maddock, N. Dak., be set aside for the special education for retarded children in Benson County, and that the fund be deposited in the bank to draw interest until needed. The motion was seconded by Commissioner Berg and carried.

STATE OF NORTH DAKOTA,
County of Benson, *ss*:

I, Harry F. Montague, county auditor in and for Benson County, N. Dak., do hereby certify that the above and foregoing is a true and correct copy of the minutes of the Board of County Commissioners of Benson County, N. Dak., held on February 25, 1966.

Dated at Minnewaukan, N. Dak., this 25th day of February, A.D., 1966.

[SEAL]

HARRY F. MONTAGUE,
County Auditor, Benson County, N. Dak.

STATE OF NORTH DAKOTA,
DEPARTMENT OF STATE,
Bismarck, February 17, 1966.

MR. LEONARD WICK,
Superintendent of Schools,
Maddock, N. Dak.

DEAR MR. WICK: After making an inspection of your vocational agriculture building at Maddock, N. Dak., February 16, 1966, I am submitting a list of things I observed along with recommendations which I hope may guide you in your future planning:

Exterior walls: Although the foundation appears to be reasonably good with no excessive settlement the brickwork is in very poor condition. All mortar joints would have to be retucked and painted. The north wall leaks badly.

Interior walls: The plaster on all walls is reasonably good except areas below grade where moisture from outside has rotted the plaster and makes it impossible to hold paint.

Floors: Floors throughout the building are very bad. The roof has leaked for so many years and the water has all but ruined the floors. The flooring has heaved and in some places rotted underneath. The bathroom floors are badly worn in the basement area.

Roof: The roofing except the portion over the gym area would have to be replaced. Water has been leaking through in many areas and plaster has had to be replaced in the ceiling where the leaking has occurred.

Windows: Some of the windows have been replaced with glass block and ventilators, however the old windows have single glazing and are in poor condition. Ventilation throughout the building is very inadequate.

Plumbing: All plumbing is exposed throughout the building. The majority of all plumbing is as old as the building and any that hasn't been replaced cannot be expected to hold up much longer.

Electrical: Much of the electrical has been remodeled but much remains to be done. There are no outlets in any of the classrooms. I noticed some of the original arc-light fixtures still remain in some rooms with wire run through them to accommodate light bulbs.

To sum it all up I definitely feel it would be a waste of money to try and remodel this structure. To bring it anywhere near a good job of remodeling would cost from $150,000 to $200,000 and you would still have a facility far too small for your requirements.

The grade school built in 1913 would fall in roughly the same category as the vocational agriculture building, although it has apparently stood up better through the years it is evident that extensive remodeling would be required before too long and again it is far too small for your enrollment.

I sincerely hope this covers some of the information you requested. I enjoyed my visit with you and if I can be of any further help please feel free to call me.

Yours sincerely,

CORLISS F. NELSON,
Superintendent of Construction.

DEPARTMENT OF PUBLIC INSTRUCTION,
Bismarck, N. Dak., February 8, 1966.

LEONARD WICK,
Superintendent, Benson County Agricultural High School,
Maddock, N. Dak.

DEAR MR. WICK: This letter is written as a result of my visitation to your school yesterday, February 7.

My purpose for this visitation was to review and evaluate the school plant space and facilities which you now use in terms of its adequacy and acceptability of operating the kind of program which you are now attempting and particularly the program which will need to be planned for in the immediate future.

First I will make general statements concerning the space and facility evaluation by departments and conclude with the general overall viewpoint along with some recommendations.

Something of the characteristics which are pronounced, evident deficiencies in all of the departments are space, lighting, ventilation, and arrangements for adaptability to a present secondary high school program.

A review of each department reflects the following:

1. English department

(*a*) Very little available space for storage of teachers aids and teaching materials for both pupils and the teacher.

(*b*) Teachers are unable to use devices needing electric power since there is a lack of electrical outlets. Light fixtures are of such a nature that the complete wiring job is necessary to correct lighting and electricity availability.

(*c*) Rooms now used are much too small.

2. Mathematics

(*a*) No electrical outlets for the use of equipment needing electricity. (See Otter Tail Power Co. report.)

(*b*) Lack of sufficient blackboard space.

(c) Teacher unable to find storage space for teachers aids as well as not being able to provide for its use when in operation.
(d) Limited room space.

3. Social studies

(a) The same deficiency as in other departments, namely: space, lack of electrical outlets, inability to use overhead projectors and other equipment.
(b) Lack of storage for teachers aids and the other necessary equipment such as maps, globes, and supplementary instructors.

4. Science

(a) Insufficient space for both the physical sciences as well as life science (biology).
(b) Storage for science equipment is entirely inadequate. Instructors are unable to organize facilities which are available so as to make them readily available.
(c) No arrangement for a hood in the preparation of chemical gases.
(d) Lighting space and electric deficiencies are lacking as in other departments.

5. Business education

(a) Insufficient room space. Unable to house and use business machines for lack of space and available electrical outlets.
(b) Inadequate lighting.
(c) Inadequate storage space.

6. Homemaking

(a) Lack of storage space. Should provide for individual student lockers to keep their garments while in process of preparation.
(b) Lighting very poor.
(c) Ventilation poor.
(d) Need additional pupil stations for the foods program.
(e) Availability of electrical outlets. (See report by the Otter Tail Power Co.) This indicates the extreme inadequacy of available electrical energy.

7. Vocational agriculture

(a) Lack of insufficient space, particularly for carrying out experimental laboratory work in the area of seed testing, weeds, soils, etc.
(b) Definitely inadequate for storage of the necessary instructional material.
(c) Lighting and electrical outlets same as in other departments.

8. Shop

(a) This space is entirely inadequate. There are no arrangements for holding conferences or classwork.
(b) The shop is "stacked" with equipment and materials to such a degree that there is practically no space left for students to carry out their work.
(c) Lack of space for general classwork or conferences.
(d) Here the lack of availability of electrical ability is particularly pronounced. The Otter Tail Power Co. report in this respect indicates the present availability of 3,500 wattage now available as against the proposed need for 7,400 wattage.

9. Music

(a) The space assigned presently to the band is in a room on the second floor. Because of its location, it is impossible for the other classes in the same building to be in session during band practice because of the reverberation seeping through the entire building. Thus it has become necessary to schedule band practice during the noon hour or at a time when there are no regular classes in session in the building.
(b) Storage for instruments and instructional materials entirely absent.
(c) No space available for instructor's office and for storage of music, recordings, tapes, or even individual practice rooms.
(d) Vocal music is carried out in one of the regular classrooms and is, of course, unsatifactory.

10. Physical education

(a) The physical education gymnasium is too small to accommodate the present student body. Classes need to run as high as 100 at a time. The handicap in the use of this facility is because of its location. The old gymnasium floor is above the study hall and student classrooms. Again, this necessitates the scheduling of the gymnasium floor at such times when other classes are not attempting to hold their conferences at the same time.

(*b*) No space to properly store physical education equipment.
(*c*) Lighting below standard. (See Otter Tail Power Co. report.)

11. Library

(*a*) The so-called library is located on the stage of a study hall. This assigned space and location is entirely unsatisfactory and inadequate from every standpoint. The limitations in this respect are a definite deterrent to any attempts to provide the minimum collection along with the necessary library services to both pupils and teachers.

Since the library and the services which should be provided to students are a major part of bringing about effective instruction in a school system, it will be necessary to discontinue its present operation in favor of relocation to a suitable space elsewhere.

The present plant does not seem to suggest that this improvement is possible.

12. Lunchroom

(*a*) The space assigned for this service is much too limited for the enrollment. Even so, as many as three regular class conferences are held in this space. This makes it necessary for students and teachers to carry their instructional materials into this space, every time the class meets there.

(*b*) The space provided for the kitchen is entirely inadequate. Because of the limited space, it will not be possible to either expand or rearrange the present space so as to serve more satisfactorily.

GENERAL SCHOOL BUILDING

This building is a brick-frame building—the first addition having been constructed in 1913. It is now in a condition which seemingly makes it questionable as to the continuation of its use, especially if one would consider the remodeling and expenditure it woud necessitate to put the building into acceptable condition.

Its design and organization of space makes it obsolute for operating a present and future program.

A brief study on the background of this building reveals that it was built in three stages. A portion was built in 1913, another in 1928, and another in 1947. It appears that not much planning took place in attempting to coordinate the structure for use as one unit.

Some specific other observations might be in the following areas:

(1) The hallways seem very congested during the passage of classes.

(2) Electric wiring and fixtures much below standard. (See Otter Tail Power Co. report.)

(3) Much evidence of cracked plaster, leaking ceilings, and earmarks ordinarily characterized with old buildings.

(4) The number of classrooms and suitable space to operate the secondary program is entirely inadequate and available space too limited.

GENERAL RECOMMENDATIONS

In light of the limitations which the present school plant provides, the school district should plan for a complete new high school facility for an enrollment of 250 students.

The Federal Government definitely should assume a portion of the responsibility for providing these needed new facilities in that approximately 20 percent of the children now attending Benson County Agricultural High School are of Indian descent.

It is our recommendation that the Maddock school district in planning for new high school unit take into consideration that of providing space and facilities in the following areas:

1. A space for library to accommodate an enrollment of 250 students. Included in this should be space for storage of additional materials and a collection of books and instructional materials which meet standards of an accredited high school.

2. Music room—vocal and instrumental. This should include space for storage of instruments, an office for the director, and some individual practice rooms.

3. Complete space and facilities for the physical education and interscholastic programs.

4. Administration—offices for superintendent, school board, high school principal, guidance director with conference room.

5. Teachers lounge—workroom for preparing instructional materials and school publications.

6. Complete shop and vocational agriculture rooms including space for classroom instruction, as well as carrying out laboratory experiments.
7. Business education—2 classrooms.
8. Social studies—3 classrooms.
9. English and communications—2 classrooms.
10. Mathematics—2 classrooms.
11. Homemaking—both clothing and foods.
12. Special education—at least one room. Several spaces for small groups or pupil corrals.
13. Physical science and life science (biology)—3 classrooms.
14. General arts and crafts—space for this area of instruction.

Before school space and facilities are planned, it is definitely necessary to determine the kind of curriculum which is needed for the kind of students who will attend this school.

Since quite a number of the children attending are of Indian extraction, there is a need to consider that emphasis be placed on the vocational course areas.

As is reflected in some of the recommendations by the tribal council, specific attention should be given to students who would wish to pursue courses in such vocational areas as:

1. Business education.
2. Shop.
3. Vocational agriculture
4. Homemaking.
5. Industrial arts.
6. Arts and crafts.

Consideration might well also be given to provide for facilities to effectively teach some modern foreign languages.

The evaluation, as it is presented above, is basically premised on standards and criteria for high school accreditation.

Unless improvements are forthcoming, this school is unable to rate more than the lowest classification in accreditation or even that of a nonaccredited high school.

For any further assistance we can give you, please feel free to call on our office.

I wish to express my appreciation for the cooperation and hospitality which I received while visiting your school.

Sincerely yours,

NORTH DAKOTA STATE COMMITTEE,
RICHARD K. KLEIN, *Chairman.*

SEIFERT & STASZKO ASSOCIATES,
Fargo, N. Dak., February 25, 1966.

Re proposed school construction, Public School District No. 9, Maddock, N. Dak.

MR. LEONARD WICK,

Superintendent, Benson County Agricultural High School, Maddock, N. Dak.

DEAR MR. WICK: Complying with your request, we are submitting herewith our estimate of space requirements and construction costs for complete school facilities for grades 1 through 12. The estimate is divided to note grades 1 through 8, and 9 through 12, in accord with your request, and is based upon current construction practices and costs throughout the area, and would be of fire resistant construction. The facilities noted are as recommended by the State of North Dakota, and are based upon our experience in the field of school design, and are computed on the basis of a single structure:

Elementary school (grades 1 through 8)

1. Twelve classrooms (including special education).
2. One kindergarten.
3. Administration.
4. Corridors, storage, mechanical, and toilets.

Total estimated area: 17,000 square feet; total estimated cost (includes fees, construction, sitework, and contingency): $304,000; and equipment cost: $18,000.

High school (grades 9 through 12)

1. Five classrooms.
2. Two business education rooms.
3. Art room.
4. Science department.
5. Homemaking department.
6. Music department.

7. Physical education department (includes shower-locker facilities).
8. Food service.
9. Cafeteria-commons area.
10. Shop and vocational agriculture.
11. Library.
12. Administration facilities.
13. Corridors, storage, mechanical, and toilets.

Total estimate area: 52,000 square feet; total estimated cost (includes fees, construction, sitework, and contingency): $929,000; and equipment cost: $84,000.

Summary

Elementary school:	
Construction	$304,000
Equipment	18,000
Total, elementary	322,000
High school:	
Construction	929,000
Equipment	84,000
Total, high school	1,013,000
Total cost (includes fees, construction, sitework, contingency)	1,335,000

We trust the above information will be of value to you. If there are any questions, please do not hesitate to call upon us.

Very truly yours,

SEIFERT & STASZKO ASSOCIATES, INC.,
JAMES J. BOFFERDING, A.I.A.

DEPARTMENT OF PUBLIC INSTRUCTION,
Bismarck, N. Dak., March 1, 1966.

Re proposed school construction, Public School District No. 9, Benson County, Maddock, N. Dak.

Superintendent LEONARD WICK,
Benson County Agricultural High School,
Maddock, N. Dak.

DEAR MR. WICK: In checking your potential building capacity, we find that you have the following ability:

Your 50-percent tax base is $2,639,672. Your 100-percent assessed valuation is $5,279,344. Potential bonding capacity (10 percent of 100 percent assessed valuation) would be $527,900. Amount of money in present building fund—$63,900 (5 mill building fund—5 mills). The potential 1965 levey is $12,000. This makes a total of:

Potential bonding capacity	$527,900
In building fund	63,900
Potential 1965 building fund levy	12,000
Total	603,800

The potential borrowing ability from the State school construction fund, 10 percent of the 50 percent tax base would be $263,900, making a total potential of local and State funds as follows:

Local funds	$603,800
From State school construction fund	263,900
Total	867,700

The architect for the district has estimated that the district will need $1,335,000 for a school building to house grades 1–12, and which will include the fees, construction work, sitework, contingency fund, and equipment. It would appear that this district will need approximately $470,000 from some other source to complete the project.

Sincerely yours,

G. B. NORDRUM,
Director, State School Construction Fund.

U.S. DEPARTMENT OF THE INTERIOR,
BUREAU OF INDIAN AFFAIRS,
FORT TOTTEN SUBAGENCY,
Fort Totten, N. Dak., January 26, 1966.

Mr. LEONARD WICK,
Superintendent, BCATS.

DEAR MR. WICKS: This is a followup of the conference that you, Mr. Mickelson, and I had on January 19 dealing with expansion of the BCATS. At that time you stated that you were interested in some education facts in regard to the reservation student body. Since returning from this conference I have obtained the following information and data which might be of interest and help to you.

I have checked the birth certificates filed in the realty office of the Fort Totten Subagency and find that the figures below give the birth rate from 1955 through 1965:

Births on reservation

1965	76
1964	66
1963	68
1962	59
1961	65
1960	65
1959	65
1958	83
1957	61
1956	60
1955	60

In 1959 the Fort Totten High School closed down and our high school students started to attend the BCATS. From 1960 on until the present time, the Fort Totten Reservation has supplied each year to the BCATS, between 30 and 50 Indian students per year.

Assuming that there is not much shift in population and that all of these children graduate from the eighth grade, the number of eighth-grade graduates from the various elementary schools that educate Fort Totten children each year on the reservation should correspond to the birth rate. In fact, the statistics that we gathered in the last 4 years in our educational survey show that the number of eighth-grade graduates follows this birth rate trend.

Any schools that educate Fort Totten children should have a diversified or comprehensive curriculum which would provide offerings along the vocational lines, shop, home economics, commercial, etc., rather than a strict academic program.

We cannot guarantee that a certain number of Indian children will attend the Maddock school each year; however, we can counsel and guide such students in that direction who would benefit from attending this institution.

Sincerely yours,

DAVID C. FISCHER, *Principal.*

SCHOOL DISTRICT PURCHASE OF SCHOOL PROPERTY

Mr. WICK. Maddock Public School District No. 9, is comprised of area and territory in Benson and Wells Counties, N. Dak. We have a taxable valuation of $2,639,672. Up until 1966 the district operated just an elementary school. In February of this year the district purchased from Benson County, N. Dak., the property of the Benson Country Agricultural and Training School. This consisted of a high school building, a dormitory, and teacherage located on a 40-acre tract of land—this is all documented in the county auditor's auditing statement which is attached.

The grade school building is located in the city of Maddock, approximately one-fourth mile from the high school. The Benson County Agricultural and Training School was established in 1913 as a county high school to be operated with emphasis on agriculture and vocational training. The high school over the years attracted

students from all parts of Benson County as well as surrounding counties and has always had a substantial enrollment of Indian children. This school has been unique in that it is the only public high school in North Dakota that I know of that has boarding facilities for both boys and girls. The only other county school in the State is in Walsh County in the northeastern part of the State.

Indian Public

Senator Young. The Indian children that attend your school stay at the boarding school?

Mr. Wick. They stay on the campus.

Senator Byrd. I believe you said 20 percent of the school population was Indian at this school.

Mr. Wick. Indian children comprise 20 percent of the high school enrollment.

The school opened in 1913 and has always been subject to great controversy and criticism. Several districts within the county have operated and still operate high schools, and the taxpayers in these districts have bitterly opposed countrywide mill levying.

School Operating Costs

Although the high school was originally established as a county school, the major cost of operating and maintaining it over the years fell upon the Maddock School District.

The original countywide mill level was 3 mills. This started in 1913 and was reduced from 3 mills to less than 1 mill until 1959. Since 1959 there was no levy made at all.

School Plant Disrepair and Economic Status

The school plant and facilities are not large enough at the present time. It is too small to meet our present requirements and is in such poor state of repair it would not be feasible to attempt to repair and remodel it, and bring it up to date.

Senator Young. Mr. Chairman, I visited this school last fall. What Mr. Wick is saying is certainly true. It is an old, old school. You could hardly build onto it or remodel it. As he said, they have lost their status as a county school. At one time got some county and State assistance, but without this assistance they will have a hard time keeping going, educating their own children, much less taking care of Indian children unless they get the assistance being requested today.

Mr. Wick. This again is documented by the superintendent of State construction in Bismarck at the end of the report.

Present and Potential Indian Enrollment

The Indian enrollment this year was 49 of the 199 high school students. We could take care of more, but our facilities limit this. I think there are 79 Indian students from Fort Totten being educated in several schools off the reservation.

We are about 15 miles from the western edge of the reservation. Our Indian enrollment has continued to be about 20 percent, and I think with the proposed curriculum we are going to attract more students from the reservation.

FUNDS REQUIREMENT

Senator BYRD. What is the amount of money we are talking about here?

Mr. WICK. $467,300.

Senator BYRD. That is the total cost?

Mr. WICK. Yes.

Senator BYRD. Can you raise some of this locally?

Mr. WICK. No; this above and beyond what we can raise locally.

Senator BYRD. How much will you raise locally?

Mr. WICK. This has been worked out by G. B. Nordrum, director of the State school construction fund. We have maximum potential bonding capacity $527,900, and the balance in the building fund is $63,900.

Senator YOUNG. That is the State building fund?

Mr. WICK. No; our local building fund. Then we have a potential in the 1965 building fund levy which we will collect this year of $12,000. The total potential local funds would be $603,800. We can borrow $263,900 from the State school construction fund. State and local funds would total $867,700. The architect's estimated cost for the grade school is $322,000.

The grade school also was constructed in 1913 and is in bad repair.

Senator BYRD. $322,000?

Mr. WICK. Yes.

Senator BYRD. How do you arrive at the figure of $467,300?

Mr. WICK. We went to the architect and he took the educational specs of Mr. Klein of Bismarck, and interpreted these into dollars and cents and came up with these figures of $322,000 for the grade school, $1,013,000 for the high school, or a combined cost of $1,335,000. The $467,300 is the difference between what we can raise and what the architect has estimated.

Senator BYRD. This would allow you to have both the grade school and the high school.

Mr. WICK. Yes.

Senator BYRD. The $467,000 would be applied to which?

Mr. WICK. To the high school.

Senator BYRD. To the high school?

Mr. WICK. Yes.

Senator BYRD. What is your overall school population there now?

Mr. WICK. The overall population is 482 students.

BOARDING AND TRANSPORTATION SAVINGS

Senator BYRD. Is this the first year in which this request has come in, Senator Young?

Senator YOUNG. Yes.

I think one point that is most important to the committee is the fact that the cost of rooming and boarding these Indian children is only $1.25 a day. Is that right?

Mr. WICK. This is what the Johnson-O'Malley funds pay us, $1.25 a day.

Senator BYRD. And the nearest Indian school is Flandreau, S. Dak., where some of their children go to this school.

Mr. WICK. We find that our costs would be $893.82, and $1,409.14 for a 190-day school year at Flandreau. A saving of $441.78. You attend 190 days there, and 180 days here.

Senator BYRD. What you are saying, Senator Young, is there would be a saving in board rates?

Senator YOUNG. Yes, and there would be a savings in transportation costs as well. After checking the whole area, I think that Maddock offers the best opportunity of giving high school education, particularly vocational education, to the Indian children on the Fort Totten Reservation.

Senator BYRD. What portion, if any, of the transportation and board rates are Federal costs?

Senator YOUNG. I think all of these costs are Federal, are they not?

Mr. WICK. Yes, they are are paid through the Johnson-O'Malley funds.

Senator BYRD. That would amount to how much annually per student?

Mr. WICK. Board and room is $225 and transportation is $111.71.

Senator BYRD. That would save money to build this school, would it not, Senator Young?

Senator YOUNG. Yes, sir.

FEDERAL FINANCING OF INDIAN PRESENT SCHOOLING

Senator BYRD. Senator Burdick, did you have something?

Senator BURDICK. Yes, I would like to develop this further.

Of the 79 high school students at Fort Totten, 31 are now going to Maddock and 30 are going to schools. Indian schools, 19 go to Flandreau, and 7 go to Steven, and 4 go to Marty. They are all Indian schools, are they not?

Mr. WICK. The other two are mission schools.

Senator BYRD. Does the Government finance those schools?

Mr. WICK. I don't know.

Senator BYRD. At least on the Flandreau School, 19 are financed by the Federal Government?

Mr. WICK. That is right.

Senator BYRD. And there is a saving of how much per pupil?

Mr. WICK. $441.

Senator BYRD. As against going to Maddock.

Mr. WICK. Going to Maddock would be $441 cheaper, based on 180 days. Based on 190, it would be $515.

Senator BYRD. In other words, if you could accommodate them in Maddock, there would be a saving of $431 per student instead of going to Flandreau?

Mr. WICK. Yes, sir.

ADEQUACY OF CONSTRUCTION SPECIFICATIONS

Senator BYRD. Are these specifications broad enough to handle the Indian school population at Fort Totten?

Mr. WICK. I am sure they would be handled.

Senator BYRD. Handle 79?

Mr. WICK. Yes.

Senator BYRD. In other words, the scattering ones, two to Devil's Lake, four to Oberon, 4 and 3 year, could all be gathered together at Maddock?

Mr. WICK. Yes.

BUSINESS EDUCATION EXPANSION

We have business education which we would like to expand. We have vocational shop, incidentally the best welder we have is an Indian boy. We have vocational agriculture, vocational homemaking, and we would like to add industrial arts, and also arts and crafts.

I think with this added curriculum we will attract more of the Indian youth to our school.

The surrounding schools of Warwick, Oberon, Minnewaukan, most of them do not even have homemaking, none of them have vocational agriculture and vocational shop. So our curriculum would benefit these students.

ADEQUATE CARE OF INDIAN CHILDREN

Senator YOUNG. If the Congress appropriated money to help you build the school, would your school be able to assure the Bureau of Indian Affairs that you could take care of up to a hundred children?

Mr. WICK. I am sure we could because in our report we have included them in our planning because they have chosen to come to our schools, we do not have any hold over them. They come each year, we even turn them back because of limited facilities. I am sure that they would come.

ABSENCE OF DISCIPLINARY PROBLEMS

Senator BYRD. Do you have any disciplinary prbolem with the Indian students?

Mr. WICK. No, I feel we do not have any more with them than we have with our own local children.

Senator YOUNG. Mr. Chairman, in all the 21 years I have been here. I have never received a complaint yet from the Indian children or the white children or their parents. This is a remarkable record.

DISPLAY OF COMPATIBLE INTEGRATION

Senator BYRD. You will not find any switchblade knives in their pockets?

Senator BURDICK. If you will look at the exhiibts at the back of his testimony, you will see pictures that show integration at its best.

Mr. WICK. We have the picture of the school which was taken in 1951 on the second page in the upper left-hand corner we have an Indian boy, a junior boy who was among the homecoming king candidates. These others are all in the classes. I asked the photographer taking our annual pictures, to go through the building and take pictures according to his feelings on it. We have others here featuring the homecoming ceremonies, a school party, noonday activities, Indian boy playing chess with a white boy, and a Christmas program, mixed chorus, we find we have one Indian girl. Our vocational shop, it is crowded, we have one of the best instructors, I believe, in the State.

ABSENCE OF DISCIPLINARY PROBLEMS

Senator BYRD. Do you have corporal punishment in your schools out there?

Mr. WICK. No, I do not think so.

Senator BYRD. Do you ever feel you ought to resort to it?

Mr. WICK. I have never had occasion to.

Senator BYRD. You do not have disciplinary problems such as we have in other areas in the country? The teachers are never threatened?

Mr. WICK. No.

Senator BYRD. You certainly have fine looking young people there.

In West Virginia, of course, we have not had much exposure to Indians, but we certainly could appreciate your desire to get the appropriations and I know that Senator Young and Senator Burdick are certainly going to be working hard to secure it for you.

Do you have anything you would like to add, Mr. Smith?

Mr. SMITH. No, I do not think so.

Senator BYRD. You traveled a good distance, did you not, to get here?

Mr. SMITH. Yes, sir.

Senator BYRD. When did you come down to Washington?

Mr. SMITH. Last evening.

Senator BYRD. When do you go back?

Mr. SMITH. Tomorrow.

Senator BYRD. You traveled all the way down here just to see Senator Burdick and Senator Young and make this presentation today?

Senator BURDICK. And Senator Byrd.

BUILDING PROGRAM PRIORITY

Senator BYRD. Now, if you have a statement you would like to make, you go ahead.

Mr. Kenner?

Mr. KENNER. No, as a member of the school board, I know our first problem there is the building program. Our grade school has an enrollment of 284 students and the building is entirely too small. They are packed in there and we have to make plans to expand. As the report shows, we do not have the funds to build the 12-year systems and include the Indian students at the moment.

Senator BYRD. Well, I can just say this, that if I had a problem I wanted to present to this committee, I do not know of two Senators who could do more with it than your two distinguished Senators here. If anybody can make a silk purse out of sow's ear, these gentlemen can do it. You have made an excellent statement. Do you have anything you would like to add?

Mr. WICK. I have one letter that was not in the brochure I would like to submit to you.

Senator BYRD. We will include that for the committee's consideration.

Senator Young, do you have anything further?

Senator YOUNG. That is all.

(The letter follows:)

DEPARTMENT OF PUBLIC INSTRUCTION,
Bismarck, N. Dak., March 8, 1966.

BENSON COUNTY AGRICULTURAL HIGH SCHOOL,
Maddock, N. Dak.

To Whom It May Concern:

This is to advise you that it is my opinion that the education received by the Indian students at the Benson County Agricultural High School is to be preferred since it makes possible an integrated situation for the Indian boys and girls.

A survey of the attendance of the high school age pupils from the Fort Totten Indian Agency indicates that they much prefer to attend at this school. This may reflect their appreciation of the cultural and social advantages as well as the good education which they receive.

A study of education costs will reveal the fact that these students are receiving a high school education at approximately two-thirds of the amount of what it costs at a Federal Government Indian boarding school.

There has been an enrollment of 30 to 50 Indian pupils each year since the closing of the Indian Bureau High School in 1959. Their percentage of attendance has been extremely good.

In consideration of the above facts, it is my opinion that the expenditure of Federal funds for construction purposes at the Benson County Agricultural High School would be advisable as well as beneficial for those concerned.

Thank you for your immediate action and concern in regards to this problem.

Sincerely yours,

DAN C. LEROY,
Director, Indian Education.

ADVANTAGE TO INDIAN PUPILS OF VOCATIONAL TRAINING

Senator BYRD. Senator Burdick?

Senator BURDICK. I would like to add one statement before we close. I think this is an ideal arrangement because it is one of the few schools in North Dakota that offers this vocational training, and so many Indian boys and girls are not necessarily interested in a classical, academic education, it gives them right off a trade or something they can earn a living by, and I think the vocational aspect of this school is one of the highlights of the school.

Senator BYRD. And the amount finally is $467,300?

Mr. WICK. Yes.

Senator BYRD. Thank you, gentlemen.

STATEMENT OF KENNETH B. POMEROY, CHIEF FORESTER, AMERICAN FORESTRY ASSOCIATION

ASSOCIATION ENDORSEMENT OF BUDGET REQUESTS

Senator BYRD. The next witness is Mr. Kenneth B. Pomeroy, chief forester, American Forestry Association.

Mr. POMEROY. Mr. Chairman, by unanimous action, the directors of the American Forestry Association have endorsed the President's budget proposals for the Forestry Service, the National Park Service, the Bureau of Outdoor Recreation, and the Bureau of Land Management.

Senator BYRD. They would like to get a little more money.

Mr. POMEROY. The Forest Service, we feel, should continue its attention to research in order to provide a sound basis for our future economy; the National Park Service should emphasize the protection of the resources that have been entrusted to its care; the Bureau of Outdoor Recreation should provide technical assistance to local

units of government so that the recreation load may be shared equally by all; and the Bureau of Land Management should continue its program of rehabilitation of wornout rangeland.

This last point is covered in more detail in the current issue of American Forests. I would like to provide you with a copy and also call your attention to page 27 where an article about the public lands begins. It reviews the role of Congress in the public lands right there.

Here are some extra copies for the rest of your committee, if you like.

Senator BYRD. Thank you.

Mr. POMEROY. Thank you, sir.

(The prepared statement of Mr. Pomeroy follows:)

I am Kenneth B. Pomeroy, representing the American Forestry Association of Washington, D.C.

In view of current military requirements and the continuing need for a vigorous program of space exploration, our association believes that some rescheduling of domestic activity is justified. Such an adjustment can be made without severe impact on other programs by deferring some of the planned expenditures for capital improvements in the national park system.

In making budgetary adjustments, it should be kept clearly in mind that the primary obligation of the National Park Service is to protect the resources entrusted to its care. A secondary responsibility is to interpret the unique features of the national parks and monuments to the public.

With park visitations increasing more than 10 percent annually, it is obvious that any extensive curtailment of protective and interpretive functions may result in irreparable damage.

Therefore we recommend that the National Park Service place more emphasis on its resource study program. What is the best way to protect the roots of giant sequoia trees from trampling by hordes of human feet. How can wildlife populations be kept in balance with natural surroundings? What is the best way to maintain or restore the environmental conditions?

These and other urgent questions must be answered if park administrators are to conduct their programs efficiently.

STATEMENT OF JAMES THOMPSON, ON BEHALF OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION

ASSOCIATION INDUSTRY REPRESENTATION

Senator BYRD. Frank J. Hanrahan, executive vice president of the American Institute of Timber Construction.

Mr. THOMPSON. Mr. Chairman, my name is Jim Thompson. I am here in lieu of Mr. Hanrahan. He submitted a letter to you.

I represent the American Institute of Timber Construction with our headquarters here in Washington.

Our institute is a nonprofit, technical, industrial association of manufacturers and fabricators who may design, plant laminate, fabricate, assemble and erect load-carrying sawn and glued laminated timber framing and decking for roofs and other structural parts and structures.

FOREST PRODUCTS LABORATORY, MADISON, WIS.

The request this year for $190,000 by the U.S. Forest Products Laboratory for the planning and redesigning of the space at the Madison Laboratory will become available as soon as the Division of Wood Fiber Products and Wood Chemistry moves into their new facilities which will be available in 1967.

This money being requested is for planning purposes and represents the timing that is needed to make this space available. Our industry has been very pleased that Congress in the last several years has made appropriations which bring this facility into reality. Space being vacated by the activities will be housed in the new facility can be logically and efficiently used for structural laboratories, for expansion of the Laboratory's library and for other research programs.

RESEARCH REQUIREMENT

We are particularly interested in the structural laboratory in that it will provide study and testing of full-sized glued laminated construction.

There is a very real need for this information that can be obtained from research such as full-scale evaluation which could be carried on in a laboratory as envisioned by the Forest Products Laboratory.

The funds and facility needed for such research are beyond the capacity of our individual member companies and our industry as a whole. Our industry has in the past spent considerable sums of money both on product development and research at our own plants and in cooperation with the Forest Products Laboratory.

INDUSTRY-LABORATORY COOPERATIVE PROJECTS

An increasing amount of these funds may be used for cooperative research projects with the Forest Products Laboratory provided such facilities are made available to the industry and to the Forest Products Laboratory.

Funds appropriated for research and research facilities have been repaid many times in the form of added tax returns from industry, industrial expansion, and so forth; their research has opened new avenues of employment through expansion of our industry.

We respectfully request that this statement be printed in the record, and we appreciate the opportunity to appear here before the committee and present our views on this.

I think we supplied copies of our statement to the committee, and we appreciate being present.

Senator BYRD. Thank you. Your statement will be included in the record. We appreciate your appearing today on behalf of Mr. Hanrahan.

(The statement follows:)

I am Frank J. Hanrahan, executive vice president of the American Institute of Timber Construction, which is the national trade association of the engineered timber construction industry with its main office in Washington, D.C.

Our institute is a nonprofit, technical, industrial association of manufacturers and fabricators who may design, plant laminate, fabricate, assemble and erect load-carrying sawn and glued laminated timber framing and decking for roofs and other structural part of schools, churches, commercial, industrial and other buildings and for other structures such as bridges, towers, and marine installations.

The 23 active members of the American Institute of Timber Construction represent about 95 percent of this country's production of load-carrying glued laminated structural timber framing used throughout the Nation. Member plants are located in 17 States in all regions of the country and member operations extended to all 50 States. The institute also has 32 associate members, made up of lumber and other material suppliers, chemical companies, regional lumber manufacturers' associations, and the United Brotherhood of Carpenters

and Joiners of America. These organizations also operate on a nationwide basis.

We appreciate the opportunity to appear before your committee in support of an appropriation request for the U.S. Forest Products Laboratory, which is particularly vital to our industry. Specifically, I refer to the $190,000 needed to plan conversion of the space now occupied by the Division of Wood Fiber Products and Wood Chemistry (which will be vacatel in early 1967 when that Division will move into its new facilities) to a long overdue structural engineering laboratory. This planning money is required at this time to avoid leaving vacant for a year the space in which urgently needed structural research work could be conducted.

The concept of gluing small pieces of wood together to create large, strong, straight and curved members and application of such members in structures, on which our industry is based, depends on much basic research—both for conservation of our timber resources and for economical, efficient, safe, engineering design of wood structures.

Our industry, which has been a rapidly expanding one, is now at a point of growth where research is needed on full-size structural elements to further its development. Research on structural elements of sizes in common use today is not currently possible at the Forest Products Laboratory because of lack of testing facilities. The appropriation sought provides for the planning of such facilities.

Lack of such research information inhibits the growth of the industry. Because of the highly technical data needed, our industry, through cooperative efforts, must of necessity depend to a very great measure upon research by the U.S. Forest Products Laboratory for basic technical data. The aforementioned structural testing facilities are urgently needed. No time should be wasted for lack of an appropriation to plan conversion of the aforementioned space to such a laboratory. The technical capabilities of the world renowed staff of the U.S. Forest Products Laboratory should be fully utilized and brought to bear to best advantage on the economic advancement of our country.

The appropriations sought for the U.S. Forest Products Laboratory are a very small investment in terms of the large returns which our citizens will enjoy. We urge that you approve them.

We respectfully request that this statement be printed in the record.

Mr. Chariman, thank you and members of your committee for the courtesies extended me.

STATEMENT OF RALPH D. HODGES, ON BEHALF OF NATIONAL FOREST PRODUCTS ASSOCIATION AND WESTERN FORESTRY & CONSERVATION ASSOCIATION

FOREST PRODUCTS LABORATORY, MADISON, WIS.

Senator BYRD. The next witness is Mr. Ralph D. Hodges, Jr., representing the National Forest Products Association. Mr. Hodges will appear in lieu of Mr. Mortimer B. Doyle. I believe you are also going to speak for Mr. Hardin R. Glascock, Jr.

Mr. HODGES. Yes, sir, Mr. Chairman, both groups are appearing on behalf of general projects.

Mr. Doyle had a commitment prior to the time of the arrangement for this hearing, and Mr. Glascock is the executive secretary of the Society of American Foresters, and their council just happens to be meeting right at this moment.

Mr. Doyle's statement is in behalf of the National Forest Products Association. Mr. Glascock's is in behalf of the Western Forestry and Conservation Association and the Northwest Forest Pest Action Council.

We are requesting that the committee support funds for urgently needed expansion funds for the Forest Product Laboratory at Madison, Wis. The statement preceding this was on the same subject, and it is to be supported.

SILVICULTURE AND ANIMAL RESEARCH LABORATORY, BEND, OREG.

We also ask for $450,000 of construction funds for the Silviculture and Animal Research Laboratory, at Olympia, Wash., ask for additional $200,000 in operating funds for the Pine Silviculture Laboratory at Bend, Oreg.

EUROPEAN PINE SHOOT MOTH ERADICATION

We also request $2.6 million for the eradication of the European pine shoot moth. With your permission I would like to submit a copy of a report entitled, "Economic Evaluation of Potential European Pine Shoot Moth in the Ponderosa Pine Region," simply for the committee files, and we ask that both of these statements be put in the record.

Senator BYRD. The record will have printed therein two statements and the report you may submit for the committee files.

(The statements follow:)

STATEMENT OF MORTIMER B. DOYLE, EXECUTIVE VICE PRESIDENT, NATIONAL FOREST PRODUCTS ASSOCIATION

My name is Mortimer B. Doyle. I am executive vice president of the National Forest Products Association, which has its headquarters here in the Nation's Capital. Our association is a federation of 16 regional, lumber, and wood products organizations operating throughout the United States and Canada. Our industry takes pride in the fact that we rank as the fourth largest employer of manufacturing labor in the United States.

In appearing before this committee today, I urge your approval and support for—

Urgently needed funds for the Forest Products Laboratory at Madison, Wis.;

Construction funds required for the Silviculture and Animal Research Laboratory at Olympia, Wash.;

Operating funds needed to keep the Pine Silviculture Research Laboratory at Bend, Oreg., running at top efficiency;

And funds for a program for the eradication of the European pine shoot moth.

FOREST PRODUCTS LABORATORY

Historically, the United States has been able to improve its standard of living and maintain its competitive position in the world by intensive use of research and development in response to the demands and pressures of a free economy.

It is fortunate that our Government from the earliest days has seen, as one of its functions, the stimulation of research and development. There is a long history of interaction between the Government and private enterprise in this area.

Our industry has grown to look upon the Madison Laboratory staff as the doers who help translate vision into reality and plans into products. In fact, the entire Nation has grown to depend on the Madison Laboratory for the basic type of wood research that is needed by State, regional, and industry laboratories which do product development work. The work assigned to the Madison Laboratory generally entails very extensive basic wood research which is not, need not, and cannot be duplicated anyplace else.

Many of today's accomplishments are the result in large measure of research and development. This is clearly true for the housing industry, where there has been imaginative investment of time, money, and talent in such activity on the part of both industry and Government. The result has been important progress contributing more and better products.

The Federal Government already is heavily involved in this field, and much of the research involving our industry is centered in the Forest Products Laboratory at Madison, Wis.

President Johnson has pointed out that by the end of this century we will have to build homes equal to all those built since this country was first settled.

Never in the history of our country have the fruits of technological achievement been more apparent than they are today. Research is probably more vital today than ever. Never has the demand for such talents been greater.

Thus, 1966 is a critical year of decision for the Madison Laboratory. Our industry realizes this, and is seeking adequate funding for it.

We believe that activities performed by the Madison Laboratory are described best by the President's own words when he noted that the country looks to scientific knowledge for "the technology and industry which will supply us with new products and new jobs to meet our needs."

In recent months, increasing emphasis on the need for more definitive materials testing methods and construction regulations has been voiced by numerous Federal agencies.

The Advisory Commission on Intergovernmental Relations has proposed the development of a Federal building code;

The Department of Commerce's Bureau of Standards has under construction expanded facilities for the study of methods for testing materials and construction;

And, under the National Academy of Sciences, the Building Research Advisory Board has established a high-level committee to investigate the performance concept in developing building standards.

Among industry groups, model building code organizations have joined forces in development of a uniform housing code.

The U.S. Chamber of Commerce has established a construction industry advisory committee to assist and advise in overcoming various construction and regulatory hurdles which stand in the way of building progress.

The American Standards Association, with the support of the American Society for Testing Materials, is requesting a Federal charter for the purpose of bringing additional qualified talent into its standards development program.

The lumber and wood products industry joins with other components of the construction and building materials industries in support of more definitive methods of testing and development of materials and construction requirements based upon performance needs. It particularly recognizes the wealth of experience and knowledge available through the independent model code writing agencies, the American Standards Association, the American Society for Testing Materials, and the various Government standards bodies as the most practical and productive approach to uniform building codes and construction regulations.

In keeping with the interest displayed by Government and private industry organizations concerned with construction materials and regulations, it is essential that adequate facilities for conducting the basic evaluation of the various building materials be maintained and expanded where appropriate. Historically, such testing for lumber and wood products has been conducted at the Forest Products Laboratory at Madison, Wis. While the Laboratory is excellently staffed with experienced personnel wholly capable of conducting new investigations needed to keep lumber and wood products abreast of construction industry needs, in recent years the testing facilities of the Forest Products Laboratory have become more and more inadequate.

The utilization of research and development in most cases is not only good business but probably the only way to do business in the long run. The use of research and development for specific industrial purposes is a major factor in the remarkable record that has been achieved and is being achieved by American industry.

At the present time, the Federal Government owns approximately 107 million acres of commercial timberland. Substantial Federal funds are invested each year by our Government in the management of its forests. The effective management of most of this valuable national resource has been made the responsibility of the Forest Service, which is one of the few agencies of our Federal Government that annually returns a substantial income to the Federal Treasury. This income is made possible by the wise management and the wise investment which the Congress expends on our Nation's resources.

Not only does the Federal Government own more than 100 million acres of commercial forest land, which is more than 20 percent of our total, it also owns more than 50 percent of the standing sawtimber. The Federal Government, therefore, has a substantial interest in maintaining and improving the value and utility of our timber resources.

Practically all of the income from federally owned timberlands is derived from the sale of Government timber to the forest products industry. The price received by our Government for this timber is related to the market price of the end products manufactured from timber. Protection and expansion of the market for these products is of major concern not only to the industry, but to the Federal Government, which in its own self-interest should protect its huge investments in growing trees.

Tangible results from an expanded and accelerated research program at Madison, Wis., would help protect the Federal Government's present investment in trees. Such protection is largely dependent on the availability of funds with which to complete construction of facilities currently planned at the Madison Laboratory.

Several years ago, the Forest Products Laboratory began an extensive planning and facilities expansion program. However, just as planning and construction of the "structural" laboratory facilities were to begin, needed appropriations for this work were not included in the Forest Service budget.

The estimated cost for preparing complete plans and specifications for the structural laboratory described as phase 2 of the Forest Products Laboratory construction program is $190,000. The total construction costs for the Laboratory has been estimated at $3,190,000.

A major part of the enlargement and modernization program is the planning for conversion of part of the older existing buildings into a structural laboratory. It is very important that this be done, and we strongly urge that this work not be delayed any longer. This program calls for only $190,000 in planning money. We were very disappointed that it was not recommended in the 1967 budget. It is very important that this work be completed at this time so that the Madison Laboratory can go forward with its buildiing program.

It is expected that it will take some months to complete construction plans for the proposed structural laboratory. When planning is completed, its construction should not be delayed further by having to wait another year for funds to get construction underway. Original plans estimate the cost for such modernization and improvement to be approximately $2 million. We urge that this sum be appropriated in fiscal year 1967, to remain available until expended.

The plans for a wood chemistry laboratory are already completed and ready for contracting. It is desirable that this construction be gotten underway immediately so that space which is presently accupied by this project in an older building can be made available for modernization. It is urged that $1,200,000 be appropriated for this purpose in fiscal year 1967.

We appreciate the President's concern that the opening budget for the Government be as nearly as possible in balance. We firmly believe that the completion of these facilities will significantly advance both defense and domestic programs. We further believe that the Laboratory's program will result in better products and prices for the American consumer, and we would respectfully urge that some provision be made by this committee and the Congress that would permit this vital work to go forward unhampered.

The sum needed is not a very large figure when compared to other items in the fiscal 1967 budget. If it is denied, however, it will be enough to seriously delay many important research programs.

Turning now to another significant appropriations item—the timber-growing end—where we are primarily concerned with pest control. There is still far too much of our Nation's wood supply destroyed by forest pests. We urge the committee to maintain all of the items in the budget that relate to forest insect disease and control. There are some additional pest control research areas which we would like to bring to the committee's attention.

RESEARCH NEEDS AT OLYMPIA (WASH.) LABORATORY

Our industry appreciates congressional approval last year of planning funds for the important Silviculture and Animal Damage Research Laboratory at Olympia, Wash. The detailed plans are well underway and are expected to be completed soon. In order to avoid further delay in this important program, we recommend that $450,000 needed to construct the Laboratory be appropriated.

RESEARCH NEEDS AT BEND (OREG.) LABORATORY

Several years ago, Congress provided for a most urgently needed Pine Silviculture Research Laboratory at Bend, Oreg. The pine industry depends on this

installation as a primary source for timber-growing know-how. To operate at full efficiency, the planned program will require an additional $200,000 which we urge you to approve.

EUROPEAN PINE SHOOT MOTH

Western pine producers who operate in 12 Western States—embracing about one-half of our country—are deeply concerned about the European pine shoot moth.

Since this foreign insect pest got into ornamental pine plantings in the State of Washington several years ago, it has increasingly threatened to spread to commercial pine forests. If this were to happen it would cause great economic loss, as brought out in a 1965 report prepared by Dr. Donald F. Flora entitled, "Economic Evaluation of Potential European Pine Shoot Moth Damage in the Ponderosa Pine Region." Working with the top experts in forest insects and timber management, Dr. Flora and his task force calculated the minimum expected and the possible maximum impact of the shoot moth on the Western pine economy.

With the chairman's permission, we would like to submit a copy of Dr. Flora's report for the committee's files.

This important pest seriously threatens to reduce timber growth, and, the possible allowable timber cut of this vital industry by about 651 million to 4,375 million board feet of lumber per year. Such a catastrophe would mean the loss of an estimated 12,000 to 74,000 full-time jobs. The corresponding loss to the value of our gross national production of goods and services would amount to an estimated $121 to $697 million each year.

The prospect of such a catastrophe is, of course, of serious concern to both industry and Government.

Acting on the recommendations of the Northwest Forest Pest Action Council, the western pine industry, the U.S. Forest Service, the States of Oregon and Washington, and other cooperators in the 12 Western States are making a concerted effort to determine the feasibility of eradicating the shoot moth. This is a difficult undertaking and a tight race with time. The actual job of eradication would be costly and time consuming, but the stakes are high. By eradicating the shoot moth, the effects of its damage can be minimized and the recurrent costs of control would be avoided.

Good progress is being made on the research with the limited funds and facilities currently available, but it will require several years of accelerated effort before an eradication measure can be developed and tested for practical use.

The most serious impediments to progress is the lack of safe and adequate quarantine and other facilities at the U.S. Forest Service Forestry Sciences Laboratory in Corvallis, Oreg. The quarantine and laboratory facilities are urgently needed in fighting the shoot moth. They are also vital to the development of dependable control methods for a varity of other foreign and domestic insect and disease pests.

Our industry is vitally concerned in all phases of the research being done at the Forestry Sciences Laboratory to develop better and safer methods of keeping destructive insects and diseases in check. We urge that this research be expected to reduce losses in old-growth forests and to protect the young forests that our Nation increasingly depends upon for raw material supply. We also need to develop ways to manage scenic and recreational forests so as to protect them from insects and diseases in order to prevent these noncommercial forests from being sources of contamination for commercially valuable timber.

Research at the Forestry Sciences Laboratory on the European pine shoot moth has too long been hampered by lack of proper space and facilities. The cost of completing the Forestry Sciences Laboratory at Corvallis for shoot moth research is estimated at $2,680,000. This is a small investment considering the benefits that would accrue to the Nation and the people of the rapidly growing West.

Therefore, we strongly urge that this essential research construction be provided for in this year's Forest Service budget. It is essential that the shoot moth research be fully financed so that it can proceed efficiently and expeditiously.

Thank you.

STATEMENT OF H.R. GLASCOCK, JR., ON BEHALF OF THE WESTERN FORESTRY AND CONSERVATION ASSOCIATION

I am H.R. Glascock, Jr., of Portland, Oreg., a member of the Western Forestry and Conservation Association and the Northwest Forest Pest Action Council. I have a joint statement from these groups to present to you concerning research urgently needed to control insects and diseases and to increase forest productivity.

The Western Forestry and Conservation Association for nearly 60 years has been a leader in forest protection throughout the West. Great strides have been made in protecting forests against fire, but the association is concerned over the lag in protection against insects and diseases. These destructive agents kill 7.3 billion board feet of softwood timber annually in the Western States, an area in which the total harvest from both public and private forests is 26.5 billion board feet. This toll by pests is intolerable in view of the increasing need for forest products and the decreasing land available for growing commercial timber.

The association recognizes that chemicals frequently are the only available, effective means for combating forest pest outbreaks. It commends Congress for its substantial financing of research to improve the safety of pesticides and to develop alternative methods of control. The association is urging research and control organizations in the West to develop, test, and apply biological and silvicultural controls to the extent possible.

The Northwest Forest Pest Action Council was organized to get adequate protection against insects and diseases. For nearly 20 years, this unique coordinating group of private and public timberland owners and managers has been a leader in the continuing battle against tree-killing pests. The council provides a public forum for reaching decisions on actions needed to solve major pest problems.

Both of the organizations I am representing today are very much concerned about the potential destructiveness of the European pine shoot moth, a foreign invader that threatens extensive damage to the pine forests of the West. I would like to submit to the committee an analysis by a highly qualified forester. In brief, the report shows that the potential impact of this insect could result in a loss of from 11,000 to 74,000 jobs per year. The necessity for averting this catastrophe is evident.

Fortunately, it appears that this problem can be solved permanently by getting rid of the insect. However, we have only a short time to act before the insect spreads to the commercial pine region of the West. We have been able to limit it so far to ornamental trees in western Washington, but this is just a holding action with present techniques. The actual process of elimination still must be perfected through research. Once the technique has been perfected, hundreds of millions of the moth must be bred up, sterilized, and released in the infested area. The research and mass rearing must be done under strict quarantine in special facilities not now available.

The shoot moth is an extremely urgent pest problem because of its great potential for damage to the pine resources of the West, which are mostly federally owned. However, native insects and diseases still are causing most of the current losses. A many-phased attack, through research, is being made upon forest pest problems, native and foreign. The Forestry Sciences Laboratory of the Forest Service at Corvallis, Oreg., is a key element in this program. An outstanding staff of scientists of diverse skills has been assembled there. In cooperation with others at various western universities, they are making notable progress, but badly overcrowded conditions are seriously slowing their efforts.

At the Corvallis Laboratory, strong emphasis is placed on the development of biological and other alternative means of control. For example, a group of pathologists is studying the possibility of using disease organisms to destroy harmful forest insects. This unit is the only one of its kind in the Western United States. Currently, research is concentrated upon techniques for using a virus to prevent outbreaks of the Douglas-fir tussock moth, thereby minimizing the need to use chemicals against this serious pest. Facilities for processing the virus and other disease organisms in quantity and for determining their safety to man are urgently needed if this type of biological control is to be successful. Studies also are being made of insect parasites and predators. Facilities for producing them in large numbers also are needed if they are to attain practical use as control agents.

Diseases that kill and damage forest trees are even more difficult to control than insects. Some of the most destructive diseases work on the roots, out of sight and reach. Fortunately, there are other organisms that secrete antimicrobial substances that are antagonistic to the disease-causing organisms, just as penicillin, a product of bread mold, combats diseases in humans. Scientists at the Corvallis Laboratory are studying the possibility of using antimicrobial substances in the soil to control tree diseases biologically.

The ultimate solution to many forest protection problems is to develop genetic resistance in the trees. This is a long-term, basic approach to the pest control problem. Its great potential is that it promises to reduce, and in some cases eliminate, the need for other means of control. A good start has been made, but comprehensive facilities are needed in which the mechanisms of resistance can be studied and the findings applied under experimentally controlled conditions.

An important new research project at the Corvallis Laboratory, authorized and begun in late 1964, has the responsibility to move swiftly toward remedying our current lack of factual information on the problem of pesticide residues in soil and water of the forest environment. This project, which will help toward reaching the President's water pollution abatement goals, has already been recommended for expansion by the National Forestry Research Advisory Committee because of urgency of the subject with which it deals. Perhaps the best measure of the importance of providing adequate research facilities for this project as soon as possible is its position as the only research group in the United States working with pesticide residue problems in the forest environment—an environment which constitutes one-third of this country's land surface.

Trees that grow vigorously generally are less susceptible to insect and disease pests. Studies on better ways to establish and grow forest trees in a vigorous, healthy condition are another of the major research activities at Corvallis.

I have stressed the scope of the research program and the strength of the scientific staff at the Forestry Sciences Laboratory in Corvallis. A comprehensive, coordinated program of this kind is essential to develop lasting solutions to forest pest problems and thereby provide means for increasing forest production by reducing tree mortality. The results will be of value in all of the forest regions throughout the United States. This opportunity to add substantially to the economic wealth of the country is not being fully realized for lack of adequate facilities.

At this point, I would like to submit to you two resolutions, both relating to facilities at Corvallies. These resolutions, passed at the October 20, 1965, meeting of the Northwest Forest Pest Action Council, are as follows:

Resolution 1.—The council reaffirms its recommendation that expedited, emergency research be conducted to develop a practical method for eradicating the European pine shoot moth from western North America; that strong quarantine measures be taken to contain the moth within its present limits; and that a prompt and adequate eradication program be carried out, when a feasible method is developed. The council is encouraged by the progress of research, but recommends that the State and Federal organizations involved develop facilities and biological safeguards in Corvallis, Oreg., that will permit studying the moth and thereby greatly increase the effective efforts that can be exerted for solving this urgent eradication problem.

Resolution 5.—The council recognizes both the urgency and the difficulty of developing and testing biological means of controlling insect and disease pests of the forest. It is encouraged by the progress being made at the Forestry Science Laboratory of the Forest Service in Corvallis toward practical use of biological agents, such as the virus of the Douglas-fir tussock moth. The council is concerned, however, that crowded conditions at the laboratory will slow this vital research, and urges that the Forest Service proceed promptly to complete the planned construction of laboratory facilities at Corvallis.

On behalf of the two organizations I represent, I urge that you appropriate the funds needed to complete the Corvallis Laboratory in accordance with the coordinated 10-year research program of the Forest Service submitted to the Congress in 1964. Our understanding is that the amount needed is $2,500,000 for construction alone, and an additional amount for planning.

I thank you for your attention and for the privilege of testifying before your committee.

STATEMENT OF ROBERT L. BREMHORST, VICE PRESIDENT, NATIONAL PARTICLEBOARD ASSOCIATION

FOREST PRODUCTS LABORATORY, MADISON, WIS.

Senator BYRD. Mr. Robert L. Bremhorst, vice president of the National Particleboard Association.

Mr. BREMHORST. I am Novoply product manager of the United States Plywood Corp., New York City. I also am vice president of the National Particleboard Association, and it is in that capacity that I appear before you today in support of appropriations for the U.S. Forest Products Laboratory at Madison, Wis.

ASSOCIATION INDUSTRY REPRESENTATION

Also I have a Department of Commerce list of particleboard companies and I am submitting this for your file.

The National Particleboard Association represents 17 manufacturers of mat-formed wood particleboard wtih 23 plants throughout the United States. Our members account for some 80 percent of the particleboard production. Particleboard plants are located in Arkansas, California, Idaho, Illinois, Indiana, Kentucky, Minnesota, Michigan, Mississippi, North Carolina, New York, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, Wisconsin, and Washington.

Ours is a young industry as the forest products industries go, but it is growing rapidly. The U.S. Commerce Department estimates that production during 1965 was three times what it was 5 years ago.

The reason for this growth is threefold. First, the increasing population is making greater and greater demands for all forest products, (2) particleboard is a product which helps wood products companies make greater utilization of trees, and last, research has helped us develop better products and manufacturing processes.

INDUSTRY-LABORATORY COOPERATION

While individual companies spend a great deal of their own money on research, the work which has been done at the Forest Products Laboratory has made a major contribution to the development of our industry. We in the particleboard industry feel that the teamwork between the Laboratory and our member manufacturers, is a prime example of how Government and industry can cooperate to develop better products and conserve our forest resources.

Representatives of our association serve on the fiber to particle panel advisory committee to the Forest Products Laboratory. We meet periodically to outline research programs of current interest to the public. We currently are talking among other things in terms of studies which will lead to progress in the areas of fire retardant products and better sound control, two primary areas of interest to the building industries.

We periodically call upon the Laboratory for information and assistance to supplement the work being done by our own scientists and technologists. The importance of this assistance to a young industry such as ours cannot be overemphasized. As this committee knows,

money and effort spent by the Forest Products Laboratory pays dividends for many, many years.

We certainly appreciate all the support this committee has given the Laboratory in the past. This committee has been farsighted enough to realize that full utilization of our forest products resources in the future is dependent upon the research we do today. One important step in the direction of providing for the future needs was your approval of initial funds for the wood chemistry building at the Laboratory. This building, when completed, will become a focal point for much of the expanded research on a number of forest products.

WOOD CHEMISTRY BUILDING CONSTRUCTION AND PLANNING FUNDS

We hope this committee will agree with us that this is no time to cut back on the necessary funds to complete the wood chemistry building. It is our understanding that $1,190,000 is needed to complete phase I of the construction program for the chemistry building and $190,000 for planning for phase II.

We, therefore, respectfully request that the necessary funds be appropriated to keep this expanded construction program—and the vital work will be done at the Laboratory—on schedule.

Mr. Chairman, on behalf of the particleboard industry, I want to thank you and the members of this subcommittee for this opportunity to talk to you about the important contribution that this committee and the Forest Products Laboratory are making to the development of the Nation's forest products industries.

Thank you.

Senator BYRD. Thank you, Mr. Bremhorst.

Mr. BREMHORST. Are there any questions, Mr. Chairman?

Senator BYRD. No, thank you.

STATEMENT OF ROBERT R. PATON, EXECUTIVE DIRECTOR, OHIO FORESTRY ASSOCIATION, INC.

NORTH DAKOTA EDUCATION OF INDIAN CHILDREN

Senator BYRD. Mr. Robert R. Paton, executive director, Ohio Forestry Association, Inc.

Mr. PATON. Senator Byrd, it is a pleasure to be here. I thank your committee for giving us the opportunity. I also was very happy and proud of the North Dakota presentation. As a North Dakota boy, myself, I thought they did an excellent job. I don't know whether that needs to go into the record, but I was proud of what they did, and I think that your committee can certainly give them some help.

FOREST INSECT AND DISEASE LABORATORY, DELAWARE, OHIO

I am the executive director of the Ohio Forestry Association, and I am here in behalf of our board who unanimously asked me to come and speak in behalf of this much-needed laboratory expansion program near the town of Delaware, Ohio.

You have a copy of my statement, and it was brief, and I am going to make my summation even briefer.

We feel urgently that this research in insect and pest control is needed today and it is going to be needed even more as very much needed beautification program gets underway. Your committee, I know, appreciates the need for advance information on pest control and on choice of species and new developments in this field, if such a beautification program is going to succeed, and we would like very much to urge that your committee consider seriously the $72,000 item; it is a small item, to develop the plans so that we can go ahead from that point and develop this program which is already badly staffed, badly crowded, partly because of congressional plans which have been given to them, unforeseen, because of diseases and insects which have sprung up, unforeseen, and also because of the very fine work which they are doing.

You know the impact of Rachel Carson's book, "Silent Spring," and the need for better means of controlling pests.

I would like to just point out that the staff there at Delaware has done a monumental job in developing already means of controlling insects other than by pesticides, and I think that the need is there and as a representative of the Ohio Forestry Association, which is a lay nonprofit educational group, I would like to speak to your committee in behalf of this.

Thank you for the opportunity.

Senator BYRD. Thank you, Mr. Paton. Your prepared statement will be included in the record.

(The statement follows:)

I am Robert R. Paton, executive director, Ohio Forestry Association, Inc., Columbus, Ohio.

For your information, I am appearing today at the direction of the Board of Trustees, Ohio Forestry Association, to speak for them in behalf of the proposed enlargement of the Forest Insect and Disease Laboratory, at Delaware, Ohio. This laboratory is a function of the Forest Service, U.S. Department of Agriculture, serving Ohio, Indiana, Illinois, Missouri, West Virginia, Pennsylvania, and other parts of the Northeastern United States. It is well located geographically to serve this important area and is admirably located on a publicly owned tract of 137 acres.

My purpose in asking for the privilege of addressing your committee today is to recommend that an item of $72,000 be added to the current appropriation measure to make possible the development of architectural plans and engineering specifications for enlarging this overcrowded facility.

The laboratory, which was completed and occupied in 1960, was designed to serve a staff of 35, but there has been an immediately growing need for more research, created partly by projects approved by Congress which had not been foreseen, and partly by the reorganization of parts of the Forest Service program to improve efficiencies. This research growth has forced an expansion of the staff and today there are 58 persons stationed there. Combine this increase of nearly 60 percent of the personnel with the attendant equipment and supplies necessary to this enlarged staff and we find the laboratory is today severely overcrowded.

For example: Concentrated studies have been underway on insect transmission of the Dutch elm disease. These studies were increased by Congress in 1965 calling for additional manpower and a considerable amount of scientific equipment.

The disease research is dealing with the spread of oak wilt which has caused heavy losses over much of the central hardwood region. It also is concerned with the problem of heart rot which degrades large volumes of hardwood timber. But much of this needed research cannot be undertaken under today's crowded facilities.

Thus an addition to the laboratory is urgent, we believe.

We have mentioned briefly the fact that the forest resources of Northeastern United States are important. In support of this statement allow me to quote

briefly from the Economic Review, June 1965 issue, published by the Federal Reserve Bank, of Cleveland.

This report states that the forest-based industries in this Fourth Federal Reserve District "make up a significant part of the regional economy. Taken together, the three major subgroups of the wood-using industries; namely (*a*) lumber and wood products, (*b*) furniture and fixtures, and (*c*) paper and allied products, account for 5 percent of both total manufacturing employment, and value added by manufacture. Moreover, employment and value added by these industries in the four-State area represents a significant percent of the national totals or about 11 percent in both cases."

This forest resource is important to the United States, but the losses due to insects and diseases equal nearly 42 percent of the total amount removed from the forest. In 1962, Timber Resources Trends in the United States stated that the timber losses from combined insects and diseases total 2.4 billion cubic feet of wood. This is a loss which certainly can be reduced by greater knowledge of these destructive agencies.

Another important field which needs more research today is with shade tree pests. The increasing movement of populations into urban areas is creating a new demand for shade trees and ornamentals. This is a most desirable demand, but it brings with it a need for better knowledge of controls of the pests which endanger the trees, controls which will not endanger mankind at the same time.

We need only to recall the impact of Rachel Carson's "Silent Spring" to realize the importance of a stepped up research program to learn other means of controlling pests than by indiscriminant use of toxic chemicals.

The Forest Insect and Disease Laboratory personnel have made significant contributions in this direction, but we believe more is needed.

The proposed expansion of this facility is designed to meet these needs. A more intensified attack on the problems of oak wilt, Dutch elm disease and heart rot to name a few, is needed.

The proposed expansion would also provide facilities for all the research staff of the Forest Service now in the Columbus area. This will reduce administrative costs as well as eliminate problems of coordination, transportation, and communication.

We have watched the program of the U.S. Forest Service in Ohio grow in stature over the years and can sincerely say we are proud of this fine organization. The Ohio Forestry Association, now in its 63d year has worked with the Forest Service and we believe in this program and we are impressed with the caliber of the staff.

Ohio Forestry Association also is convinced of the importance of the forest industries to Ohio and to its economy, and because of this we urge the enlargement of this research program.

Thank you for the privilege of appearing before your committee and testifying in behalf of this proposal.

STATEMENT OF ROBERT R. METZ, COMMISSIONER OF FORESTRY, TOLEDO, OHIO

FOREST INSECT AND DISEASE LABORATORY, DELAWARE, OHIO

Senator BYRD. Mr. Robert R. Metz, commissioner of forestry, Toledo, Ohio.

Mr. METZ. Thank you, Mr. Chairman.

I am Robert Metz, commissioner of forestry of Toledo, as well as vice president of the Society of Municipal Arborists. When I take care of the large areas, the term is called city forester or city arborist, when I take care of the smaller trees in the tree lawn, I am an arborist, and following the statements that Mr. Paton made I will limit mine as they apply to the city of Toledo primarily and other cities across our land.

TOLEDO LAWN TREES

I picked up a magazine on the newsstand just an hour before lunch, and I thought it was very symbolic since you have already had Ameri-

can Forestry presented to you that I would show you an American city forest, this is something that struck me noticeably because these trees planted in the tree lawn are what many of our cities are depending on for the greenry and pleasant places to live.

In the city of Toledo if we were to take what we call our tree lawn areas, between the sidewalk and curb, and lay them end to end, I would estimate they would reach between Washington and at least Denver, Colo., and along the way, every 30, 40, or 50 feet there would be a tree that either needed pruning or trimming or spraying or injected with an insecticide, or removing or planting.

Now the city conditions, of course, each one of these trees then has a family interested in it, particularly in the city of Toledo where we know that most people are vitally interested in that tree in front of their home, so limiting my remarks to just this particular application, we have many taxpayers that are calling us about the care of these trees on the city rights-of-way as well as in our parkways and parks.

We often hear people, when we are called, say trim their tree that we trimmed it well or if we did not do too well, they tell us we took the wrong branch off of their tree, but as soon as the tree has Dutch elm disease and it needs to be removed, then they call us up and say, would you please come and get your dead tree.

Insect and Disease Pests

So, in applying the maintenance costs of the taxpayers' money to the city trees, we find that about 50 percent has to deal with the maintenance of trees as related to insects and disease pests.

So, we are dependent upon a laboratory such as would be expanded in Delaware for information that we would be using in our daily work, our day-to-day activities of maintaining these trees that, of course, follow the idea of the need to protect and restore the natural beauty of our land which was fully recognized by the President in his state of the Union message and again in his congressional message on natural beauty.

Laboratory Expansion Requirement

The city of Toledo now is planting over 5,000 trees like this each year and cities like Detroit and Minneapolis have between 300,000 and 500,000 elms that are all standing, subject to Dutch elm disease control, need for a control. So, in looking to a laboratory such as this for expansion and information, I would like to quote what Dr. Russell Whitten, who is one of the project leaders at Delaware, has said about the situation today.

We take for granted that we know all the answers to these insect and disease problems, but he says:

> There could be no question as to the needs for an expanded and accelerated research program for more effective and efficient ways to protect this huge shade tree investment against the destruction of insects. Present knowledge on how to meet this need for protection is either completely lacking, out of date, or far too expensive and ineffective. The city of Toledo, for example, is spending over 500,000 a year in just maintaining this one segment of our tree population.

In closing, Mr. Chairman, I do appreciate the opportunity to come from Toledo and present the need for this expansion in Delaware. Thank you very much.

Senator BYRD. Thank you, Mr. Metz.

I believe one of my staff members is from Toledo. She is a good one, too.

Mr. METZ. Thank you.

(The prepared statement of Mr. Metz follows:)

I am Robert R. Metz, commissioner of forestry for the city of Toledo, and vice president of the Society of Municipal Arborists.

First, I want to express my appreciation to you for giving me this opportunity to appear before the committee on behalf of an urgently needed expansion of Forest Service laboratory facilities at Delaware, Ohio. I also wish to commend the committee for its foresight and prompt action in approving funds for the first phase of this major forest insect and disease research laboratory which were provided for in 1958 by the 85th Congress. This regional laboratory is ideally located to serve Ohio and many other Midwestern and Eastern States with their numerous shade and forest tree pest problems.

My main purpose in appearing before the committee today is to urgently recommend the consideration of a $72,000 request for the planning of an addition to the present laboratory facility at Delaware, Ohio. These funds are to be used to prepare architectural design and engineering specifications for this addition. The Forest Service estimates the cost at $950,000.

This planned expansion of laboratory facilities at Delaware was previously included in the national forestry research program presented to the Congress by the Secretary of Agriculture in 1964.

As I understand it, the present facility constructed in 1959 was the first major U.S. Forest Service laboratory designed exclusively to study and recommend control measures for forest and shade tree insect and disease problems. Since its occupancy in May 1960, the programs annually authorized by the Congress have resulted in serious overcrowding of personnel. Such overcrowding, as you can imagine, does not permit efficient use of the present scientific manpower; neither is there opportunity to recruit additional specialists necessary to implement a vigorous research program. I have observed some scientists currently doing research in facilities such as trailers, greenhouses, and temporary storage buildings. It is self-evident these research conditions are less than adequate.

It is well known that with the rapidly expanding advances in technology, new types of laboratory methods have been developed and are now available for solving the more difficult fundamental problems in biology. These specialized research techniques require special laboratory construction with particular provisions for the safe handling of chemicals and radioisotopes. Such research cannot be performed with the present laboratory facilities at Delaware, Ohio. Thus, if we hope to make rapid progress toward the solution of our serious insect and disease problems, immediate consideration should be given to the construction of facilities which can take advantage of these recent advances. Since it is my understanding that Congress considers all requests for planning money a full year before considering new construction, it is urgent that steps be taken now to improve and enlarge the research facilities at Delaware.

As a commissioner of forestry and a municipal arborist, my day-to-day work has to do with the planting, care, and preservation of our Toledo shade and ornamental trees. We in Toledo know, and you know, that trees properly selected, planted, and maintained are one of the best ways to make our cities a pleasant place to live. The need to protect and restore the natural beauty of our land was fully recognized by the President in his state of the Union message and again in his congressional message on natural beauty.

Toledo already leans heavily on the research going on at Delaware. For example, the current study and evaluation of a recently introduced and highly popularized systemic insecticide was determined by them to be ineffective in the control of Dutch elm disease. This one piece of important information already has saved our Toledo taxpayers thousands of dollars since we had considered its wide-scale use this year.

Last year for the third year in a row the city of Toledo planted over 5,000 new street trees. Some 7,631 trees and evergreens were placed on public rights-of-way, parks, and playgrounds. In order to avoid obvious mistakes of the past by planting only a few varieties of trees, we are now using over 75 different kinds. The responsibility for their proper maintenance rests with us; however, we know very little about the problems of protecting these trees from insects and diseases. This is especially so with the large number of new varieties of

trees available for planting. We therefore must rely on the scientist to show us the best ways. In turn, the scientist can provide this information only when he has adequate research facilities to conduct experiments under control conditions.

The protection of shade trees from insect and disease damage constitutes the largest single problem in tree maintenance. More than 50 percent of private and public shade tree maintenance cost is for this protection. Reliable figures show that annually more than $37 million is spent. A conservative estimate of the number of shade trees in the United States is over 120 million. It is further estimated these have a value in excess of $30 billion. About 70 percent of this valuable natural resource is located in the Northeastern United States. In recent years the number and value of shade trees has increased an average of 7½ percent per year. The growing interest in beautification will undoubtedly induce an increase in this percentage in the years ahead.

With this investment in one of our greatest natural resources, there can be no question as to the need for improving and expanding the relatively modest research facilities at Delaware, Ohio. This is the only Federal laboratory in the Nation which has primary responsibility for the control of shade tree pests, including such problems as the Dutch elm disease and other serious wilts and tree declines.

In closing I want to thank you again for the opportunity to appear before this committee.

STATEMENT OF EDWARD H. SCANLON, SECRETARY-TREASURER OF THE SOCIETY OF MUNICIPAL ARBORISTS

Dutch Elm Disease and Tree Specie Undesirability

Senator Byrd. The next witness is Mr. Edward H. Scanlon, secretary-treasurer of the Society of Municipal Arborists, editor of Trees magazine, former commissioner of shade trees for the city of Cleveland, Ohio.

Mr. Scanlon.

Mr. Scanlon. Another aspect I would like to add to this, Senator, is the fact that due to the Dutch elm disease and the fact that over the past 20 or 30 years we have found that many of the old fast-growing, easy-growing species of trees were inadequate and a serious mistake.

In the past, oh, say 15 years, many new species about which very, very little is known have come into the picture, especially for the homeowner and the municipal arborists.

Forest Insect and Disease Laboratory, Delaware, Ohio

Now, these are things that we know practically nothing about, as a matter of fact, I could say nothing and be closer to right, and this laboratory has the prospect of doing a tremendous job for both the homeowner and for we pepole in the professional end of the thing and the only facility that I am familiar with that ever did this job on any kind of a national basis—not a national basis, but I mean a public basis, was the Shade Tree Laboratory at Stanford University, which was closed as an economy measure in 1934. Prior to the opening of this establishment in 1959 or 1960 there was no work done on the ornamental trees, with the result that people just go floundering around, something happens to one of these trees, and the nurseryman from whom they purchased the tree and to a great extent the professional arbortist know nothing. We have to have some answers on this thing.

And it is not a lot of money they are asking for. You know, that is just minor, the important thing is to get this establishment. So, with that, I will just conclude and thank you very kindly.

Senator BYRD. Thank you, Mr. Scanlon.

We will include your complete statement in the record at this point.

Senator BYRD. Thank you, gentlemen, for traveling a long way to be with us.

(The statement follows:)

I am pleased to have the opportunity that has been extended to me to speak in behalf of the proposed and badly needed expansion of laboratory facilities at the Forest Service Shade Tree and Forest Insect and Disease Laboratory at Delaware, Ohio.

The inception of that installation in 1959 was looked upon by all municipal and commercial arborists, park superintendents, and other people having to do with the problems of street and ornamental trees, as the most valuable assistance they had received in many years. In the past 6 years this institution has more than fulfilled the hopes and aspirations held for it by the professional people in the field. They have done a grand job but, because of the tremendous need for such facilities they have rapidly outgrown the installation of 1959.

Municipal arborists have learned two hard cold facts. The first is that very few trees of gigantic proportions have a place on most municipal streets. The second is that it was a very foolish and costly mistake to indulge in the overuse of a single species of tree such as the American elm. Beautiful though this tree may be, its prime use should have been confined to large areas such as the parks and other spacious grounds. These two facts lead us to an inescapable conclusion. That is, that we must indulge in the wider use of other species which have heretofore been little used and little known in this country.

This experimentation, and that is all anyone can possibly call it, began about 20 years ago. There was no other direction in which to go. We had found out the hard way that the old trees that had been used so promiscuously and injudiciously on American streets could no longer be afforded. The cost of maintaining and removing these forest giants, which for many years before their removal had caused countless people countless thousands of dollars in sidewalk, sewer, and other repairs, had to go.

With the advent of the "new" trees which really are not new, except from a use standpoint in this country, there has arisen a need for a knowledge of some of the diseases and insects that may affect these trees as their numbers continue to increase on our city streets. Because of this we need, and need badly, an institution, such as the Shade Tree Laboratory at Delaware. The proof of this is, of course, the fact that in a comparatively few years it has outgrown the facilities that were erected in 1959.

The homeowner is an innocent bystander in this drama of trees for the simple reason that he no longer can rely on the old "tried and true" favorites. He, just as the professional, must go with the "new" trees. The homeowner has learned the hard way that the forest giants represent a bygone era.

As professionals we would like to be able to advise people intelligently, but what individual has the knowledge, time, and funds to do this so badly needed work.

The homeowner and every community in the land has a big stake in the research that is badly needed.

The need for an expansion for this facility at Delaware was dramatically proved in the experimental work that was done by the staff in the past 2 or 3 years in its exhaustive research on a product called Bidrin, which was delineated more fully in Mr. Metz' statement. Without a doubt, the results which Delaware found will save the American homeowner many millions of dollars. Had this product been allowed to go on the market with no research by the USDA, it would have been a costly and a very sad experience for both the homeowner and the professional arborist.

Personally, I have waited for many years to see this establishment come to life. I recall distinctly in 1934 when the Shade Tree Laboratory at Stanford University was discontinued as an economy measure. To the best of my knowledge this is the first effort since that time to render a service in the field of ornamental arboriculture. In my various capacities in this field over the past 40 years, I look upon this as a long step forward in the American approach to better

looking cities through the more intelligent use of a wide range of species and cultivars. The intelligent use of trees can only be applied if we know what troubles affect these trees and how to combat them. I earnestly solicit your serious consideration, and then passage of this appropriation.

I am very grateful for the opportunity to speak in behalf of this so badly needed facility and wish to thank the committee for this privilege.

STATEMENT OF LAURENCE C. WALKER, DEAN, SCHOOL OF FORESTRY, STEPHEN F. AUSTIN STATE COLLEGE, NACOGDOCHES, TEX.

FOREST SERVICE WILDLIFE HABITAT AND SILVICULTURE LABORATORY, NACOGDOCHES, TEX.

Senator BYRD. Dr. Laurence C. Walker, dean, School of Forestry, Stephen F. Austin State College, Nacogdoches, Tex.

Mr. WALKER. Senator Byrd, the occasion for me to appear here is unique and on behalf of Dr. Ralph Stone, our president, and Texas foresters and conservationists, I appreciate it.

I would like to recommend the committee's consideration of additional funds for the U.S. Forest Service installation at Nacogdoches, for a new building. The laboratory is the regional headquarters for all wildlife habitat research at the Forest Service's Southern Forest Experiment Station, and as such it involves research on an area of about 108 million acres of commercial forests throughout the Midsouth.

LABORATORY BUILDING REQUIREMENT

Urgently needed there, and we hope for the next fiscal year, is a new Federal laboratory building. Our college now for some 20 years has been providing the building, custodial services, and utilities for the Forest Service installation. This we have been real happy to do. Presently, however, the Forest Service, like half of our own people, are housed in a World War II barracks on a site which has been designated for a new school of forestry classroom building, and we hope to have this new classroom building in 1968 according to our present plans.

The building which we would hope to have for the Forest Service on a site which has been leased to the Federal Government by our State legislature on our SFA forestry center tract, which is a square block area, $365,000. This would enable them to have a staff of 10 professional and 10 subprofessional people doing this work.

COLLEGE ENROLLMENT INCREASE

Our college had an increase in enrollment of about 1,900 in 1959 to a proposed minimum of 7,500 for next fall. Two years ago our school of forestry had about 100 students, today it has 240, and we are gearing for well over 300 next year, and thus it is becoming very important that we get our new school of forestry classroom building in operation.

That, sir, is in a nutshell what we have in mind.

COLLEGE AND UNIVERSITY—LABORATORY COOPERATION

I should point out, I believe, that the Forest Service program at Nacogdoches is cooperative not only with our college but with our sister school, Texas A. & M. University, with the Texas Parks and Wildlife Department, Game and Fish Commission, the U.S. Fish and Wildlife Service is also housed in college facilities, and thus an increase in appropriations will expedite Federal research there in a way that will enable a strong team to be further strengthened.

The work is important locally, too, as well as involving the Midsouth because we use Federal foresters for instructors both at the undergraduate and graduate level in our own programs.

All of us in Texas are proud of the Forest Service unit there. Their productivity over the years has tested this and we are proud to be a part of their program as they are part of ours.

Now, I appreciate the opportunity to appear before you and if there are any questions, sir, I would be happy to try to answer them.

Senator BYRD. I have no questions, Dr. Walker. I appreciate your appearance today.

Glad to have your statement.

(The prepared statement of Dr. Walker follows:)

I am Laurence C. Walker, dean of the School of Forestry, Stephen F. Austin State College, Nacogdoches, Tex.

I would like to recommend the committee's consideration of additional appropriations for the U.S. Forest Service's Wildlife Habitat and Silviculture Laboratory which is located on the Stephen F. Austin State College campus at Nacogdoches, Tex.

The Laboratory is the regional headquarters for all wildlife habitat research at the U.S. Forest Service's Southern Forest Experiment Station, an area that includes 108 million acres of commercial forests in the Midsouth. Whether deer, squirrel, turkey, quail, and other game will be scarce or abundant depends on how these forests are managed. Research at Nacogdoches is designed to furnish sound scientific knowledge of ecological relations between game, habitat, and timber, and to develop guidelines for practical management that is consistent with other uses.

Urgently needed at Nacogdoches—for fiscal year 1967—is a new Federal laboratory building. The college has, for over 20 years, provided gratis to the Federal Government all facilities, utilities, and custodial services—a considerable obligation upon funds also needed for instruction. The State-owned World War II barracks now occupied by the researchers is scheduled to be torn down in the near future to make room for construction of additional and much-needed forestry classrooms at the State's most rapidly expanding college. The cost of the proposed laboratory is approximately $335,000, with an additional $30,000 needed for architectural plans. The State of Texas has already leased 1½ acres for 99 years in the SFA Forestry Center to the U.S. Forest Service on which to locate the building.

Equally as important as the new laboratory is the need for an additional $100,000 to expand current research in game habitat-silvicultural relations and in forage quality evaluation within the pine-hardwood uplands and hardwood-producing bottomlands of the South.

These commercial forests yield raw materials for a multimillion-dollar timber industry. Whether game can likewise be included in the "millionaire" class depends, essentially, on ascertaining facts and then informing timberland owners of scientifically tested techniques for managing the natural resources of the Nation's woodlands. Both timber and game can be grown on the same acreage, but one may thrive at the expense of the other unless sound conservation practices are understood and applied. At present, broad generalizations may be made of the interrelations of timber and game, but they are inadequate for these dynamic times of strong competition for forest land use.

Forage quality and wildlife nutrition is a phase of research that has long been neglected throughout the South. Information about energy and digestibility values of wildlife foods is basic for understanding why wildlife thrive

or do poorly in various habitats. Research would tell which plants, or combinations of plants, are inherently capable of furnishing essential nutrient constituents for animal diets. Techniques for diagnosing deficiency conditions of wildlife and its environment, and how to improve animal vigor and productiveness, would be sought.

I would like to mention, too, that U.S. Forest Service research at Nacogdoches is cooperative with Stephen F. Austin State College; Texas Parks and Wildlife Department; Texas A. & M. University; Arkansas Game and Fish Commission; Louisiana Wildlife and Fisheries Commission; Louisiana State University; the U.S. Fish and Wildlife Service; and private industry. Thus, an increase in appropriations will expedite U.S. Forest Service research, and it will also strengthen a team of scientists and organizations vitally interested in the economic and recreation potential of the South's wildlife and forests.

The work is also important locally: Federal scientists regularly teach courses in the State's school of forestry and direct graduate and undergraduate student research projects. Thus the U.S. Forest Service is an integral part of the college program.

The productivity of this group over the years, attested to by industry and other Government agencies, commends the use of Federal funds for this cause.

I appreciate the opportunity to appear before this committee and ask that this statement be included in the records of your hearings.

STATEMENT OF RUPERT CUTLER, ASSISTANT EXECUTIVE DIRECTOR, THE WILDERNESS SOCIETY

Senator BYRD. Mr. Rupert Cutler, assistant executive director of the Wilderness Society. Is Mr. Cutler present?

Mr. Cutler's statement will be included in the record.

(The statement follows:)

I am M. Rupert Cutler, assistant executive director of the Wilderness Society. The Wilderness Society is a national conservation organization of some 35,000 conservation-minded members, with headquarters at 729 15th Street NW., Washington, D.C. It is devoted primarily to wilderness preservation and increasing the knowledge and appreciation of the wilderness resources of our Nation.

I am here today to urge strengthened programs of wilderness and wildlife research, forest recreation, endangered wildlife species protection through habitat acquisition, the purchase of wilderness and recreation lands, and the expansion of programs begun by the conservation agencies under authorizations of the 1964 Land and Water Conservation Act.

President Johnson, in his recent message to the Congress on preserving our natural heritage, quoted Albert Schweitzer, who said, "Man has lost the capacity to foresee and forestall. He will end by destroying the earth."

With every annual appropriation by the Congress to protect and preserve important units of what is left of our natural heritage, we find that there is an escalation of costs that could have been averted by earlier foresighted action to do what we could when we could. Now, each year, we find not only that the costs are higher, but that the areas we wish to save are eroding away through development and other causes.

In view of these circumstances, we believe its reasonable to support the agencies responsible for protecting our natural heritage in their reasonable requests for adequate budgetary allowances to pursue their activities, with regard to present and future needs, and with special regard to the desperate need of the whole country not to lose our unique natural possessions.

While we do not judge ourselves competent to be specific about the money needs for each of the agencies who do much fine yeoman work in the areas in which we are concerned, the objectives these money needs are designed to achieve are real and pressing.

THE NATIONAL PARK SERVICE

We support the National Park Service's budget request for fiscal year 1967 to accelerate its national park system plan and new area studies programs. These programs have as their objective the identification of natural, historical, and recreation areas which are nationally significant for inclusion in the national park system, as well as detailed studies of individual areas proposed for possible addition to the national park system.

Also, under the national park system plan, material must be developed and furnished to the Bureau of Outdoor Recreation for completion of the nationwide outdoor recreation plan, which BOR must complete under Public Law 88-29 by May 1968.

Suggestions received from many sources must be pursued for the study of areas now in jeopardy. Broad planning efforts, as well as specific area planning, will provide an efficient approach for designing the national park system in a systematic way. Planning for newly authorized areas must proceed as expeditiously as possible.

Vital in specific area planning will be the study of national park and monument areas which are required for implementation of the Wilderness Act. A mandatory schedule has been set by the Congress for the number of areas to be studied under the Wilderness Act in given periods.

The 1967 budget request is for $888,600, including an increase of $102,200 for this program to help meet a June 1967 deadline for completion of national park system planning material. Our understanding is that the requested increase will not raise the appropriation level above that for 1966, because it will be in lieu of funds provided in 1966 for certain nonrecurring costs.

The National Registry of Landmarks program, as well as the Historic American Buildings Survey, must be supported to the fullest extent possible. While some progress has been made in recent years to indicate a national recognition of the importance which our historic links have with regard to our culture and our environment, there is almost daily proof of irreversible losses because be have not been quick enough to interpose before the demolition squad. We hope that your committee will authorize the modest sums asked by the Park Service to carry out their programs. This includes $61,700 to finance the National Registry of Landmarks, and $157,100 to continue the Historic American Buildings Survey.

THE FOREST SERVICE

In the Wilderness Act Congress has provided strong basic policy, within the established administrative framework of the Department of Agriculture and the Department of the Interior, for the preservation of our Nation's remaining wilderness within the national forests and the national park and wildlife systems. Altogether, the wilderness which conservationists hope to see preserved in the National Wilderness Preservation System represents less than 2½ percent of the Federal public estate. Within these areas—some 150 to 175 separate units—we find great need for more knowledge with which to direct programs for the protection and maintenance of the wilderness resource. We do not know all that we must know in order to bring about their desired use while at the same time protecting from damage the unique recreational, scientific, and educational opportunities that they can, with proper care, continue to provide for an increasingly large number of the American people. To this end the society wishes to urge strengthened Forest Service programs of forest and wildland recreation research, both biological and sociological. Specifically, we wish to support (1) the establishment of a research program in the ecology and use of western wilderness areas, and (2) to request that the research program in the Boundary Waters Canoe Area be raised to a level adequate to help meet the area's rapidly increasing use pressures and their consequences.

Much has been and should be written about America's magnificent wilderness areas, but biologically they are poorly understood. One of the most critical problems in the entire area of resource protection and use is the need for a sound understanding of wilderness ecology—not only the forces of nature and their phenomena, but also the impacts of man in and near the wilderness.

Wilderness areas are living, ever changing, plant and animal communities. With inadequate understanding, the very reason or purpose a wilderness area has been set aside can be destroyed. Because of improved forest fire protection, for the past several decades, large forest fires and their tremendous ecological force occur much less often today. What does this mean in terms of the plant and animal community? White pine blister rust, an introduced disease from Europe, probably has entirely different impacts upon the ecosystem. What are they, and what can be done about them? And, of course, man himself and his frequent use of pack animals have still other impacts. A basic question is—How can wilderness be enjoyed but not destroyed?

The Forest Service has an experienced research organization that can get to the heart of these and related problems effectively and efficiently. For western wilderness, their research is needed (1) on the basic ecology of the principal

wilderness plant and animals species and associations, (2) to understand and develop methods to minimize the impacts of human use, (3) to fund ways to maintain wilderness plant cover compatible with the wilderness concept, and (4) to develop techniques for maintaining desired population levels of elk, deer, and other big game species within their environments. A $300,000 Forest Service research program should be included in the 1966–67 appropriation to develop the knowledge that will guide the maintenance of America's magnificent wilderness areas for the benefit of everyone. This item is not in the budget as proposed by the administration, but we firmly recommend its addition to permit a beginning of this vital work.

Regarding the Boundary Waters Canoe Area, first, I want to thank this committee for the start you provided last year toward a strong research program. One of the most capable biologists in the country and an equally capable social scientist are now devoting their full energies to research in the BWCA. Our request is to now provide these men the support needed to do the job effectively and as rapidly as possible.

The BWCA is unique. Ecological research will be emphasized too, but under much different circumstances—in a land of forests and lakes, relatively level, with a different climate, different soils, different vegetation, and under conditions of much heavier use than western areas of wilderness.

Here, in addition to answering some of the questions to which we have already referred, research must also find out how to restore some of these north woods which have been burned and logged in the past. The objective must be to put them back, as much as possible, into the biological condition found when they were first explored by the voyagers 200 years ago.

Research must also help cope with the present. Last year the BWCA was host to more than one-fourth of a million visitors—and the land felt their impact. Many lakeshore campgrounds along the canoe routes are heavily used and worn and must be restored. In fact, the ceiling on use must be determined. Within 5 years more than one-half million visitors can be expected. Even with better dispersion of use, research can answer, "Is this too many?" An important task is to measure present use—not merely count people—but measure, describe, and explain the impacts of use upon the resource. Adjustments in use should be tested and evaluated.

The need to study the effects of users upon the water resource is becoming more critical, and the research effort here must be coordinated with the research effort upon the land resource.

The Wilderness Society urges an increase of $175,000 in the U.S. Forest Service's BWAC research program to further wilderness study in the canoe area. The society, with other citizen groups, are asking this increase in fiscal 1966–67 above the $120,000 appropriation which was provided by the Congress for the current year (1965–66) and that has again been requested for "forest recreation research" of the North Central Forest Experiment Station (formerly Lake States Forest Experiment Station). We are confident that this modest amount, as well as the funds for western wilderness research, will be returned many fold in protected land values in a beautiful America.

NATIONAL FOREST ACQUISITIONS

The Land and Water Conservation Fund Act budget, as presented to the Congress, includes proposed acquisitions by the Forest Service of about 141,000 acres of an estimated cost of about $13 million. This program includes a large variety of lands to serve the varied needs of the American public for general outdoor recreation use such as camping, hiking, fishing, skiing, swimming, horseback riding, and for the enjoyment and protection of wilderness environments. It provides for protection of the living places of such threatened wildlife species as the bald eagle and for acquiring lands for addition to the scenic Eleven Point River in Missouri, and to the George Rogers Clark Recreation Way in Illinois, the Mount Rogers-Whitetop in Virginia, the Seneca Rocks-Spruce Knob National Recreation Area in West Virginia, Kinzua Reservoir in Pennsylvania, the Big Sea Water Recreation Way in Michigan, Monarch Lake in Colorado, and California's Feather River. These are but a few of the key project areas.

The Wilderness Society, of course, has a primary concern with the advancement of wilderness concepts and programs. It is vitally interested in seeing that the wilderness system, as established by the Wilderness Act, be protected as rapidly as practical. A major concern of conservationists is that there be acquisition as quickly as possible of inholdings within national forest wilderness

areas and primitive areas. It is very important that whenever properties within these units become available the Forest Service finds itself in a position to acquire them without delay. The alternative will be further increased prices, the threat of subdivision for summer homes, and other possible uses adverse to the wilderness environment and in conflict with the policy set by Congress in the Wilderness Act.

Notable progress has been made in several of the wilderness areas under the current year's budget. The largest resort in the Selway Bitterroot Wilderness Area has been optioned by the Forest Service. Negotiations are substantially complete for some of the other private ownerships. This progress needs to be continued. It can be continued through the 1966–67 appropriations requested for the Forest Service, but at less than the desired rate.

The budget under consideration includes funds necessary to acquire only 4,140 acres within or immediately adjacent to national forest wilderness or primitive areas, in Arizona, California, Colorado, Idaho, Nevada, and Washington. The society recognizes the need for accelerating this effort through inholding acquisitions in nearly 10 additional wilderness areas and primitive areas. These purchases would require an increase of $1 million in appropriations to permit the purchase of about 2,000 acres of national forest wilderness lands. We would strongly support such increases.

As a companion to the needs for land purchases there is an urgent need for an acceleration of the land exchange program of the Forest Service. Many of the larger industrial owners of lands within wilderness and primitive areas are not willing to sell but are willing to exchange. In the past such exchanges have been delayed due to inadequate appropriations for land appraisal and negotiation work. The Wilderness Society supports the $1.8 million increase in the budget request for land exchanges as a significant contribution to the acquisition of inholdings in both primitive areas and wilderness areas.

BUREAU OF SPORT FISHERIES AND WILDLIFE

Three items in the Bureau of Sport Fisheries and Wildlife budget request of concern to the Wilderness Society are (1) the proposed $1.5 million reduction in the migratory bird conservation account for the purchase of migratory waterfowl habitat; (2) the low $17.17 million receipt limitaion item for Federal aid in wildlife restoration; and (3) the low level of Federal support for the cooperative wildlife research unit program.

We would urge that the emergency wetlands acquisition program to protect prairie duck habitat threatened with destruction be supported at least at the $7.5 million level of last year. The $6 million budget request will hamper the Bureau in its attempt to meet the wetlands conservation goals outlined in Public Law 87–383, the Wetlands Loan Act. There are few more urgent conservation needs than that of acquiring and preserving the northern prairie wetlands. This program should be stepped up to at least $10 million for the next fiscal year.

The excise tax collections which fund the Federal aid in wildlife restoration program exceeded $20 million last year, and the proposed arbitrary limitation of $17 million is inadequate for funding of this vital "matching grant" program in 1966–67. The Bureau's wildlife research budget should include enough money to bring the Federal Government's contributions to each of the 18 cooperative wildlife research units at land-grant colleges and universities across the country from the present $15,000 per year up to $40,000 to match the Federal support of the parallel cooperative fishery research units at many of the same institutions and to match present State support of these units.

The Wilderness Society strongly supports the budget request of $330,000 from the land and water conservation fund to the Bureau of Sport Fisheries and Wildlife to establish a Florida sandhill crane refuge. We would hope that, in the future, moneys from this fund might also be used by this Bureau to acquire inholdings in, or to enlarge, national wildlife refuges, or portions of refuges, suitable for inclusion in the national wilderness preservation system.

We also favor increased financial support for the Bureau's staff research efforts, both at its wildlife research stations and at its game fish research laboratories. The new Northern Prairie Wildlife Research Center in North Dakota must be staffed up to solve problems related to the preservation of prairire waterfowl before these species are further depleted. Game fish laboratories of the Bureau are in need of considerably more funds than they have received in the past if they are to cope with the serious threat to valuable North American game fish that is posed by unrestricted netting by foreign commercial fishermen. The

Tiburon, Calif., Laboratory deserves support up to the $500,000 level in its effort to keep tabs on the effects of intensive commercial fishing on the game fish stocks of the Pacific coast. Also needed is the $1,100,000 requested for the construction of a much needed headquarters building for the Migratory Bird Populations Station at the Patuxent Wildlife Research Center in Maryland.

The Wilderness Society strongly supports the enlightened new direction in which this Bureau's wildlife services program is headed—away from massive, unselective predator and rodent control programs and toward limited, selective, animal control combined with sound training and educational efforts. One of the best of the Bureau's good new programs is its "wildlife enhancement" effort. Under this $100,000 pilot program its wildlife services people would, in addition to their animal control work, serve as catalysts to improve conditions, on all classes of land, for nongame as well as game species, through coordinating and encouraging wildlife conservation work on both private and public lands. We feel that this program is a real breakthrough in terms of its recognition of the desirability to preserve and manage for nonconsumptive use—bird watching, photograph, etc.—the many interesting nongame wildlife species, in addition to the traditionally managed game species.

BUREAU OF OUTDOOR RECREATION

The Wilderness Society supports the distribution from the land and water conservation fund of $64,440,000 to the States on a matching basis and $43 million to three Federal recreation land-administering agencies—the National Park Service, the Forest Service, and the Bureau of Sport Fisheries and Wildlife. We hope the funds allocated to the Park Service for use in starting land acquisition for a Redwoods National Park will be spent in the Redwood Creek area of California, and that the Park Service will also be encouraged to move ahead quickly to round out its holdings at Point Reyes and Assateague National Seashores. Of particular interest to the society is the $546,000 requested by the Park Service to complete the 1961 budget authorization of $937,000 for acquisition of lands across the Potomac River from Mount Vernon to protect the view from this national shrine.

We heartily approve of the Forest Service's plans to use much of its fund allocation to acquire wild lands in the Smokehole region of West Virginia to round out the newly created Spruce Knob-Seneca Rocks National Recreation Area.

We would like to note that the Land and Water Conservation Fund Act authorizes an advance appropriation of $480 million, beginning July 1, 1967, and express our hope that this advance will be appropriated promptly to meet appropriation authorizations for seashores, recreation areas, parks, and other projects that have been approved by Congress. Delay may have very serious effects upon some of these projects, particularly in holding up the acquisition of valuable recreation and park lands near urban areas and in other locations where land prices are escalating.

We support the Bureau of Outdoor Recreation's administrative budget requests, believing that it must have additional funds and positions if it is to do adequately the many important jobs assigned it by Congress.

BUREAU OF LAND MANAGEMENT

The 465 million acres of public land administered by BLM have many values and should be administered to serve the needs and interests of the American public. Key to wise management of the public domain is this agency's land classification program authorized under the 1964 Classification and Multiple Use Act. Additional money and manpower are needed to get this basic program moving ahead.

Needing emphasis through increased funding are this agency's wildlife habitat and natural area preservation programs, as well as its traditional range and watershed protection activities.

There are also extensive areas of high-quality wilderness on the public domain which should be classified as "wilderness" at the earliest possible time to avoid their being degraded by unplanned haphazard developments and intrusions.

I very much appreciate the opportunity to present this testimony here today, and thank the chairman and the committee for this privilege.

STATEMENT OF PHILIP A. DOUGLAS, EXECUTIVE SECRETARY, SPORT FISHING INSTITUTE

PREPARED STATEMENT

Senator BYRD. Mr. Douglas, Philip A. Douglas, executive secretary, Sport Fishing Institute, Washington, D.C.

Mr. Douglas?

Mr. DOUGLAS. Thank you, Mr. Chairman, I am going to very briefly summarize with some emphasis on a couple of items in my statement which you people already have and I would appreciate it being filed for the record.

Senator BYRD. Very well.

(The statement follows:)

I am Philip A. Douglas, executive secretary of Sport Fishing Institute, Washington, D.C., the only national, nonprofit, nongovernment, professionally staffed fish conservation organization. The institute is supported financially by a broad array of manufacturers of equipment and supplies used directly and indirectly by some 60 million anglers out fishing, as well as by a large and growing number of consumer groups and interested individuals. The institute's program, as you and your colleagues may recall, Mr. Chairman, has three phases: (1) research in fishery biology; (2) education in concepts, principles, and problems of fish conservation; and (3) professional service to official agencies and key citizen groups.

Dr. Robert Hutton, executive secretary for the American Fisheries Society, the Nation's most venerable scientific society, has asked that his society of fishery scientists be associated with the testimony I am about to present on behalf of the institute.

1. *National reservoir research.*—Since its inception in 1961, budgetary requests and appropriations for funds to operate the much needed reservoir research program have been pitifully inadequate. During fiscal year 1966, the total funds appropriated for the national reservoir research program, including both the White River studies in Arkansas and the Missouri River studies, amounted to only $386,000. The $390,000 being requested by the Bureau of Sport Fisheries and Wildlife for use in fiscal year 1967 provides for mere continuation of "shoestring" operations in what should by now have become a reasonably substantial program. The budget has remained essentially static since fiscal year 1965 when $375,000 was appropriated—the negligible increases in 1966 and 1967 (proposed) resulting only from revision of Government pay schedules.

You and your associates on this committee, Mr. Chairman, are among the Nation's most knowledgeable businessmen. Therefore, you are well aware of the necessity for basing large programs upon solid facts. This applies with equal force to development of expanded sport fishery programs—strongly recommended to the late President Kennedy by the Outdoor Recreation Reseources Review Commission. A special study report of the Commission, on sport fishing, indicated that a threefold increase in angling demand will develop through the rest of this century and that one-third of it must be met by reservoir fishing. It also stressed that our ability to sustain such an increase on reservoirs would necessitate intensified and new research to learn more about fishes, how they behave in and respond to the artificial conditions presented by reservoirs, and to develop new means of managing reservoirs to assure increased productivity of such waters in the future. The fact is that we are failing, with inadequate and static budgeting in this important area, to meet the need. If this situation continues to prevail, we will be unable, in this great country of ours, to meet the future demand for recreational fishing. Therefore, Mr. Chairman, we urge your committee to double the amount requested for the 1967 fiscal year, thus appropriating $750,000.

2. *Marine game fish research.*—Formerly, it was thought that the oceans were boundless in their supply of marine animals. Currently, this is becoming increasingly recognized as fallacy. In this respect, salt water sport fish have been especially neglected. Their life histories and ecology, behavior, significance of estuaries, effects of pollution, influence of various rates of harvest, and myriad other factors require concentrated study by research scientists. We are already too late with too little in many areas in marine biology and oceanography.

For example, there has been much justifiable public concern lately about the substantial and accelerating take by commercial long-liners of billfishes (marlins, sailfish), for use (with various tunas, whale meat, etc.) in manufacture of fish sausages. The use of billfishes as an ingredient in fish sausage is minor compared to other species, growing, but scarcely essential. By contrast, in America and many other countries, the billfishes are of tremendous economic significance as objects of sport fishing. Very large capital investments are generated by the prospect of catching such large game fishes on rod and reel, and substantial service industries are built up rapidly wherever supplies of these fish occur.

The effect of intensive long-lining for marlin off Baja, Calif., during 1964 may be reflected in the decreased average size of striped marlin taken by anglers (principally Americans) during 1965. The average weight of marlin taken there this past year was about 70 pounds. By contrast, the corresponding average weight the previous year was about 110 pounds. It is also reflected in the decline in long-line catches themselves. In 1964, each boat harvested hundreds of billfish per day. In 1965, however, the catches averaged only three or four fish per boat. The Sport Fishing Institute has summarized essential details of the overall problem in the lead articles of two recent issues of the SFI Bulletin (No. 164, "Marlin Harvests," and No. 168, "International Fishery Problems"), copies attached for your further information.

Time magazine (Jan. 28, 1966; p. 44) took note of this serious problem recently, as did many sports publications (Yachting magazine, pp. 44 and 116, February 1966; Sports Afield, pp. 96–97, February 1966; Sportfishing, pp. 19 and 46, 59–60, February 1966; Salt Water Sportsman, editorial, January 1966; Sports Illustrated, pp. 4 and 20–24, Jan. 31, 1966; and Motor Boating, "Fish 'n Ships" column, February 1966). Without adequate basic data on the migratory behavior of billfishes and other big game fish we lack the necessary facts to go to the conference table with other nations and discuss ways and means of how best to manage this resource and thus control this problem on a rational basis.

We have been dismayed by the apathetic implementation of the provisions of the Marine Game Fish Research Act (Public Law 86–359), particularly the lack of nourishment provided to the important Marine Game Fish Research Laboratory established several years ago at Tiburon, Calif. Under a 5-year plan initially projected for this station, formulated in 1961, the Tiburon facility would have operated on a budget of at least $1 million in fiscal year 1966. Had this occurred as projected, we would now be in possession of many of the facts that are so badly needed for rational solution of the vexatious long-lining problem. In appalling contrast, Tiburon actually received only $83,000 for fiscal year 1966 operations—and only $88,000 is requested for fiscal year 1967. A very fine but tiny beginning has been made by the two fishery scientists now stationed at Tiburon, in obtaining minimal billfish migratory data from a very limited tagging program. However, this is by no means enough in the present light of demonstrated need for much more comprehensive knowledge.

In response to a very recent verbal request by Fish and Wildlife Commissioner Clarence F. Pautzke for background information on this entire problem, and the institute's views as to needs, our Executive Vice President Richard H. Stroud supplied same in a letter. With your permission, Mr. Chairman, I should like to include a copy of that letter herewith as a part of my testimony. In short, Mr. Stroud urged a substantial increase in billfish research, as well as several supplementary measures designed to strengthen U.S. capabilities in dealing with important fishery matters.

We find it incomprehensible, moreover, that the west coast marine game fish research effort at Tiburon has not been expanded at a rate similar to that applied to the marine game fish research effort at the Sandy Hook, N.J., laboratory on the east coast. The latter received $459,000 in fiscal year 1966—more than 5½ times the amount of funds appropriated for use at the vitally important Tiburon facility.

The west coast game fish research effort has been neglected to the clear detriment of the public interest. Therefore, we strongly urge that your committee now add at least $500,000 for use at the Tiburon Game Fish Research Laboratory during fiscal year 1967. If this sum should be added, as we urge, the total to be appropriated for marine game fish research would remain well under the $2.7 million authorized annually by the Marine Game Fish Research Act of 1957 (Public Law 86–359).

3. *Upstream migrant Chinook and coho salmon.*—These species must pass through the obstructions of the Willamette Falls, Oreg., area in order to reach ancestral spawning grounds. An ancient fishway located approximately 20 miles above the mouth of the Willamette River where it joins the Columbia River has been ineffective in the past. A "pocket" caused by heavy flow of water passing through the Crown-Zellerbach and Portland General Electric Co. plants produced a dead-ended cove where these migratory fish became trapped. A new fishway will soon be constructed as phase A of a program to allow free passage upstream from the cul-de-sac at nearly all water stages. It is anticipated that this $700,000 project, for which a contract was recently let, will be ready to accommodate spring Chinook salmon in 1966 and fall Chinooks and increased numbers of cohos.

We need every available spawning and nursery ground we can possibly provide in the great Columbia River Basin. The multiple dam construction over the past decade on the Columbia and its tributaries has seriously damaged the entire salmon population for this North Pacific area.

Also needed is phase B, to construct a two-entrance section that will lead from the main portion of the Willamette Falls to join a common exit to the forebay with the cul-de-sac replacing the present inefficient ladder. As in the case of phase A, some 16.3 percent of the cost of construction will be provided by private funds with the remaining 83.7 percent coming from Federal allocations. The second project, phase B, will cost in the neighborhood of $1¼ million. We urge that this committee recommend the appropriation of approximately $1 million as the Government's share in this construction cost.

4. *National forest recreation demands.*—As reservoir construction proceeds throughout the Nation, additional aspects require financial attention. The national forests, for example, provide strong attraction to the outdoor-recreation-seeking public. Consequent increased demands arise for adequate facilities such as access roads, parking, campgrounds, water supply, boat-launching ramps, and sanitary facilities. Each year these add considerable strain to an already diminutive budget provided for recreation within national forest boundaries. It appears now that some 28 new large impoundments will require development of access and boat launching facilities in the near future. It is estimated that $1,646,000 will be needed as an addition to the budget item for "Water resource development and related activities" for the U.S. Forest Service if these recreational facilities needs are to be implemented. Therefore the Sport Fishing Institute requests the committee to carefully consider this need within the context of the recreation development responsibilities of the U.S. Forest Service.

5. *Forest Service appropriations.*—Sport Fishing Institute supports contentions of a strong need for continued and expanded watershed research. Thirty-eight thousand dollars for planning a laboratory is needed to help push new knowledge over the goal line at the U.S. Forest Service Coweeta Hydrologic Station, Dillard, Ga., in the most important watershed study program ever to be inaugurated in these United States. With some 30 years of hydrologic data now recorded, using various forms of manipulation on its test plots of 45 small subwatersheds, Coweeta can provide many answers to puzzling queries on the precipitation runoff relationships in certain forest areas. Vegetation, soils, and water involve complex relations between transpiration, interception, and evaporation and/or runoff and/or yield, that are of the utmost importance in watershed management.

6. *The National Fisheries Center and Aquarium.*—Additional needs are estimated at $146,100. These funds are primarily for salaries to enable hiring technical advisers and consultants to put this center on "home base" in its preconstruction planning efforts.

Thank you for the opportunity to appear before your committee, Mr. Chairman, and to present Sport Fishing Institute's views on these matters of active or potential direct concern to nearly one-third of America's citizenry.

[From the SFI Bulletin, Washington, D.C., July 1965]

MARLIN HARVESTS

There appears to be a heavy drain on the world stocks of striped marlin, blue marlin, black marlin, even sailfish, as well as various tunas, by Japanese long-liners and perhaps also the Russians. The Japanese, in particular, require tremendous quantities of fish to feed their closely crowded people. Part of an intensive effort to meet this need has taken the form of the manufacture of sau-

sages out of big fishes like the marlins, with black marlin especially favored as a principal ingredient.

Dr. James E. Morrow (University of Alaska) summarized the status of marlins, sailfish and spearfish of the Indian Ocean in a paper in part I of the "Symposium on Scombroid Fishes," published by the Marine Biological Association of India, Mandapam Camp (his studies partly aided by Sport Fishing Institute research grants). The huge black marlin (up to 1,560 pounds or more), he says, is "one of the finest of food fishes, being delicious raw or cooked * * * In addition, the black marlin is much sought after by sport fishermen because of its great size and fine sporting qualities."

Dr. Morrow reported that over 1 million pounds per year of black marlin, alone, are processed into fish sausages by the Japanese. He also stated that Chinese and Japanese "commercial landings [of striped marlin] run into millions of pounds annually," and that sport fishermen also hold striped marlin in high regard. Similarly, the black marlin and sailfish are heavily utilized by both sport and commercial fishing interests.

Some dispatches, reported by Outdoor Editor Kenneth Foree in the Dallas Morning News (Texas) some weeks ago, suggest that the Japanese harvests may be making noticeable dents in the world populations of these great fish. If this should become verified, it is considerable cause for alarm, not only by U.S. sport fishermen and the Japanese, themselves, but by the United Nations Food and Agricultural Organization as well. To illustrate the magnitude of apparent local depletion, Editor Foree cited a report resulting from an encounter off Baja California between a flotilla of Mexican charter boats and a Japanese fishing vessel which terminated in the "running" by the chartermen of a 10-mile long-line the Japanese had set earlier.

The charter boatmen claimed to have found more than 300 sailfish and marlin on the 2,000 hooks on that single Japanese long-line. In all, the Japanese had been working five simultaneously. It was postulated, assuming that same rate of catch daily, that 1,500 sailfish may have been harvested daily for a known fishing period of 14 days—an estimated 21,000 in 2 weeks by one vessel. Much poorer sport fishing is said to have prevailed and continued long after, attributed to that sort of commercial harvest, presumably by a number of similar vessels.

Other reports tend to support these observations and general conclusions. Editor Foree cited an article that appeared early this year in the New Zealand Herald (Auckland), crediting Japanese long-liners with nearly eliminating deep-sea fishing off Mayor Island. Reportedly, no big fish had been caught in 1964 compared to 900 in 1949—with a steady and progressive decline occurring thereafter since the appearance in the area of the first Japanese fishing boats in the early 1950's. On the other hand, great quantities of black marlin, striped marlin, and broadbill swordfish have been taken from New Zealand waters by the Japanese.

There is great need, it seems to us, to expand research programs on the life histories, migrations, and population dynamics of these great fishes. They are world resources, of significance to all countries. If the stocks are being depressed as severely as these reports suggested, there is need for quick action at the international level to devise and apply adequate conservation programs. This matter should be given immediate attention at the highest policy levels of government.

The big-game fish tagging program, initiated at Woods Hole Oceanographic Institution (partly supported by Sport Fishing Institute research grants)—greatly extended with respect to marlins on the Pacific Coast by the U.S. Marine Game Fish Research Laboratory, Tiburon, Calif.—should be intensified and expanded. An Assistant Secretary of State for Fisheries should be established to help expedite international negotiations with respect to this and many other serious problems. Commercial and sport fishing interests have a need here to pull together for the common good. * * *

[From the SFI Bulletin, Washington, D.C., November 1965]

INTERNATIONAL FISHERY PROBLEMS

Marlin harvest by Japanese longliners fishing off the Pacific Coast of Central America have been poor this year. Reliable reports indicate that catches of striped marlin by the 60 vessels fishing in the area in June 1965, were only three or four fish per boat. This compares with catches of hundreds per boat during the previous year. Moreover, the average weight of marlin taken this year

was only about 70 pounds. Last year, the corresponding average weight of marlin was 110 pounds.

Large catches made in 1964 are undoubtedly among the factors contributing to poor harvests this year. Cooler water temperatures may also have been a factor, possibly causing marlin populations to shift to other waters. However, in the absence of firm biological evidence, one way or another, the causes for the decline can only be speculative. Fortunately, the U.S. Marine Game Fish Laboratory, Tiburon, Calif., has initiated an extensive tagging program. This should help develop much needed information on the migratory behavior of marlin and other big game fish. Such information is vitally important for both sportsmen and commercial fishermen alike. However, it is clear that far greater research efforts, largely dependent on increased appropriations by the Congess to this valuable program, are badly needed.

Big game fish problems are by no means restricted to the Pacific Ocean. Blufin tuna stocks in the Atlantic Ocean also may soon be in trouble. Results from the cooperative game fish tagging program, being conducted by biologists of the Woods Hole (Massachusetts) Oceanographic Institution (partly financed by grants from the Sport Fishing Institute), have already demonstrated that fact. Over 30 percent of young bluefine tuna that have been tagged and released thus far have subsequently been recaptured—a substantial rate of exploitation. Potentially helpful international recognition of the urgency of the Atlantic tuna problem has been given by UNFAO Deputy Director-General O. V. Wells. He urged, at a recent international tuna conference, in Rome, that early action be taken to prevent a catastrophic decline in tuna stocks. Representatives from Brazil, France, Japan, Nigeria, Portugal, Senegal, United States, Cuba, West Germany, Italy, and Mexico were in attendance.

Wells proposed that an International Tuna Commission be established in association with the FAO. Its mission would be to encourage coordinated research by signatory nations as well as to undertake its own research program in order to assure conservation of Atlantic tuna stocks. There is a dire need for international action to conserve fish populations that are shared by fishermen of many nations. Such action, however, must be based on the findings of coordinated fishery research on a far larger scale than has been accomplished in the past.

Greatly accelerated oceanic catches of Atlantic salmon by Greenland commercial fishermen, in recent years, have also generated international alarm. The salmon catches in the ocean off Greenland jumped from only 55 metric tons in 1960 to 1,540 metric tons in 1964. The recovery in the Greenland fishery of significant numbers of salmon tagged as smolts in salmon rivers of many countries (the United States, Canada, Ireland, Scotland, England, and Sweden; Norwegian fish are probably also present but unidentified) demonstrates the international nature of the stocks being exploited.

Commendably—we hope not too late—the International Commission for the Northwest Atlantic Fisheries considered the matter at its recent meeting in Nova Scotia. As a result, the scientific advisers to the ICNAF adopted this plan of action to meet the problem: (1) obtain catch-and-effort statistics for the Atlantic salmon fisheries off Greenland, and of each North American and European nation; (2) determine length, weight, and age composition of catch samples from the West Greenland area and from home rivers; (3) tag salmon in the West Greenland fishery, as well as in North American and European rivers; and (4) attempt to correlate growth characteristics, scale types, parasites, and serological and biochemical characters of West Greenland fish with samples of demonstrated origin.

Presumably, the results of this program would then provide a factual basis for development of a workable plan for reasonable allocation of catches among nations whose rivers are contributing to the oceanic stocks. The only thing that bothers us is whether all this may come much too late to save the salmon. It seems to us that oceanic catches should be sharply limited now, so that the world can be sure to have ample Atlantic salmon to divvy up later, when we learn how. * * *

SPORT FISHING INSTITUTE,
Washington, D.C., March 2, 1966.

Hon. CLARENCE F. PAUTZKE,
Commissioner, Fish and Wildlife Service,
Department of the Interior, Washington, D.C.

DEAR CLARENCE: I am writing in response to your verbal request last evening for further information on the marlin long-lining problem, pursuant to my letter of a few days ago. As I mentioned to you at the time, everything of significance that we have been able to uncover has been summarized and presented publicly in the pages of various past issues of the SFI bulletin. The sources and nature of the material have been cited and discussed. We have also made a few recommendations toward eventual resolution of the problem.

First and foremost, we have urged a substantial increase in research funds for the marine game fish research program of the Bureau of Sport Fisheries and Wildlife for use in expanding the important marlin tagging program being carried on by the Tiburon Game Fish Research Center. We have long been interested and have urged this. Indeed, it was partly with the help of SFI research grants, commencing in 1960, that the practical use of dart tags for tagging billfish and tunas was successfully developed at Woods Hole by Frank Mather and his associates. And we have long urged that increased funds be sought by your agency for such use, following extension of this method to the west coast. A recent trip to Baja California underscored again the urgency of this need.

Second, we have long urged the establishment within the State Department of an Assistant Secretary for Fishery Resources to strengthen and support the efforts of your office at the international level. Representatives of several national conservation organizations, for example, were present and supporting when I proposed this again last fall to Senator Magnuson as an alternative to his bill, S. 1778. At the time, he thought this had considerable merit and that it might be achieved without need of legislation. Thus far, at least, I have seen nothing to justify that confidence.

Third, we have supported moves by others, who are also keenly interested, to place this matter on the agenda of appropriate UNFAO fisheries committees and of ICNAF. Our thought is that emergency international agreement might be sought to stabilize the world fishery at some recently attained level of intensity, pending outcome of intensified research seeking data on key biological factors significant to rational solution of the problem.

Fourth, we think it might be timely to support the concept of a 12-mile territorial limit with respect to fishery resources. This should afford opportunities to exercise better control over fishing activities in many coastal areas of billfish concentration and possible spawning and/or nursery significances.

In order to provide you with the information that we have sought out, summarized, and discussed, and you requested, I am enclosing copies, marked to specific items of pertinence, of the SFI bulletin Nos. 118, 120, 138, 148, 150, 164, 168, 169, and 171. You will note that our awareness and concern with respect to long-lining for billfish was evident at least 5 years ago.

Sincerely yours,

RICHARD H. STROUD,
Executive Vice President.

ADDITIONAL REPRESENTATION

Mr. DOUGLAS. In addition to our own statement, we have been asked by the American Fisheries Society, the Izaak Walton League of America, and the Wilderness Society to associate our statement with their thoughts, and that is what our main interest is in coming before your committee for additional appropriations, sir.

NATIONAL RESERVOIR RESEARCH

As a portion of our program, research in fishery biology stands pretty high. We wish to commend your fine committee for helping get the national reservoir research program started in 1961 on the

White River in Arkansas and the Missouri River basin. Incidentally, our former research director is in charge of that research program, and they are just beginning to turn in some fine results.

However, we find that in the last 3 years the budget has stayed practically stationary with only salary considerations adding to it and in order to follow up the outdoor recreation resources review commission recommendations to the President, through the late President Kennedy, we find that we are going to have to really step up our artificial reservoir fishery research program in order to meet a threefold increase in demand which is estimated to develop through the rest of this century, and we find that approximately one-third of this pressure must be met by reservoir fishing. We need to learn a lot more about fishes and we need to develop new means of managing artificial conditions whereby they will produce the most in our sport game fish.

Marine Game-Fish Research

My chief point of emphasis this afternoon is toward additional funds for the marine game-fish research program.

We found that considerable inroads are being made into the big game sport fisheries on all coasts surrounding our American continent and we are beginning to become quite worried at these tremendous inroads.

When you consider that the Japanese commercial longliners are fishing baited hooks in the order of 10 to 60 miles in length and tag many, many of these large game fish out in the open oceans, we have, well, cause for considerable concern.

They are using them to make into fish sausage and this is a food on their native island of Japan along with eating these fish in a raw condition in a product called sashami.

We have some statistics that came out of considerable study down in the Baja California coastline whereby the average size of striped marlin taken by anglers during 1965 decreased from the 110-pound fish taken in 1964 to about 70 pounds. A size decrease of this nature is usually indicative of overharvesting.

Also, commercial boats checked in 1964 had only 2, 3, 4 of these large billfish per ship as compared in 1963 to many hundreds of these fish.

From the eastern tropical Pacific Ocean studied we found that in 1956 catches by commercial Japanese longliners averaged approximately 600 fish as compared to 200,000 of these large fish in 1963.

Magazine Articles

Our national concern has been emphasized by articles in prime magazines, very recently in January and February of this year. To name a few—Time magazine, Yachting, Sports Afield, Salt Water Sportsman, Sports Illustrated, and a new magazine called Sport Fishing. These were largely based on information from our monthly publication, the SFI bulletin, which started calling attention to this in July of this past summer and again in November.

I would like to call to your attention the Congressional Record article of February 15, 1966, referring to the article in Sports Illustrated

that was inserted at the request of Congressman Daddario of Connecticut. The last paragraph says:

Mr. Speaker, I would support efforts which can legally be taken by appropriate authorities of our National Government to provide relief from this depredation.

Referring to these heavy longline catches by the Japanese commercial fishermen.

Such efforts should extend to negotiation of new international agreements, if necessary.

We have been requested by the Commissioner for the Fish and Wildlife Service to provide him with our thoughts on recommendations of what to do about this tragic happening in the past few years to our large open ocean game fishes.

TIBURON GAME FISHERY RESEARCH CENTER, BAJA, CALIFORNIA

We suggest that increased appropriations be provided the Tiburon Game Fishery Research Center in California on the west coast which has already initiated a small tagging program, down into Baja California, of these billfishes, largely the sailfish and marlins.

ASSISTANT SECRETARY OF STATE FOR FISHERY RESOURCES

Secondly, we urge that there be established within the State Department an Assistant Secretary for Fishery Resources to strengthen and support the efforts of the U.S. Fish and Wildlife Service at the international level.

INTERNATIONAL AGREEMENT

Third, we feel that international agreement should be sought to stabilize the world fishery at some level of intensity which would depend largely on the outcome of intensified research which would seek data on key biological factors significant to rational solution of this problem.

TERRITORIAL FISHING LIMITATION

Fourth, we think it timely that a 12-mile territorial limit be considered with respect to our fishery resources, and this would coincide pretty much with the current 12-mile territorial limit where we would have some control over the fishing activities in many of our coastal areas that would be of significance to the billfish concentrations and possibly spawning and nursery grounds.

FUNDS REQUEST

Our request, Mr. Chairman, had been in the neighborhood of $500,000 for use by the U.S. Bureau of Sport Fisheries and Wildlife preferably for intensifying the research marine game fishery research programs at the Tiburon, Calif., laboratory as well as the two new laboratories now being explored in the gulf region.

This points up the fact that the authorization by the Congress is already available in the form of some $217 million which was authorized annually in the Marine Game Fishery Research Act of 1957.

With this, I believe I will end my statement and invite your attention to other items that are included in the printed record.

Thank you very much, sir.

Senator BYRD. Thank you, Mr. Douglas.

STATEMENT OF RICHARD C. WOLFF, VICE PRESIDENT OF THE GARCIA CORP., TEANECK, N.J.

MARINE ANGLING PROGRAM

Senator BYRD. Mr. Richard C. Wolff, vice president of the Garcia Corp., Teaneck, N.J. Mr. Wolff.

Mr. WOLFF. Mr. Chairman, besides being vice president of the Garcia Corp., I am the head of the Association of Marine Angling Clubs and a past director of the Outdoor Writers Association of America.

I am hear speaking on behalf of the marine angling program, and I would like to summarize my statement in the high spots, and look at this chart because I have carried it around Washington for the last 8 hours. I think it has some valuable information.

MARINE GAME FISH RESEARCH

The budget as it stands right now is $644,000, and this basic budget is programed to take care of the facilities at Sandy Hook, N.J., Narragansett, R.I., as well as Tiburon, Calif.

In the coastal area of the United States there are about 8½ million salt water anglers, which is a goodly group of fishermen.

FUNDS REQUEST

We think that the Federal marine game fish program justifies an expenditure of $1,814,000 next year. Divided with $250,000 for Narragansett, $250,000 for Tiburon, and $1,314,000 for the Sandy Hook Laboratory facilities.

The Sandy Hook Laboratory in New Jersey is right now scheduled to receive approximately the same amount as last year, plus possibly a small amount for increased salaries. We urge the increase to go to $1,314,000 with an allocation for, No. 1, pollution, $250,000; this is a study of the pollution as it is related to support fish in their different habitats and in their different age groups.

For instance, the tiny eggs and fry would, of course, be subject, or at least we think subject, to pollution more than the adult fish.

INADEQUATE RESEARCH FACILITY

Then another interesting thing, aspect, is that they have a dock out here at the Laboratory and they have a very valuable research vessel. As a matter of fact, the cost of building a new and strong dock is about one-fourth the value of the vessel and yet every time there is any kind of a storm or something, we have to pack up the vessel and try to hide it and hope that the wind blows from the right direction so we do not lose the boat. So it seems logical that since the dock only costs one-fourth, I hope we can get enough money to build the dock.

ARTIFICIAL REEF CONSTRUCTION

I think most important and most dramatic is the use of old automobile cars, old junk cars, for building reefs and obstructions in the water. I should not say "obstructions," actually building artificial reefs are these old automobile bodies. I have an allocation of $400,000 for this purpose.

A significant fact with this is that in the west coast experiment 549 junk automobiles were placed in a 1-acre area and the poundage of game fish increased from 36 to 1,542 in the first seven months. This is an indication that the use of these old automobiles could possibly increase the marine population as much as 50 percent. Now, we have a tremendous need for increased recreational facilities; we have a growth of 500,000 fishermen a year, and we are trying to supply some fish for these fishermen.

The location of these reefs would be clearly marked, clearly defined, and we know that they will act as a nursery ground for such fish, both bottom fish such as porgies, bluefish possibly, we also know they will act as feeding stations as the various migratory fish move up and down the coast.

STRATEGICALLY LOCATED FEEDING STATIONS

An interesting thing, if you refer to the chart here, the Sandy Hook Laboratory discovered that fluke will spawn up off the coast of New England, as miniature fish they migrate down into the vast Carolinas and work their way back up north.

Along the way, spotted in these strategic locations could be these feeding stations. The mature bluefish are located down in the southern waters and in the fall in the New England area they run right up the coast and we have good bluefishing all the way up, so that every indication is that this will be successful. That these artificial reefs will serve a twofold purpose.

They will give us a chance to get rid of the 2 million ruined automobiles lying around and on America's scenery and we don't know what to do with them. It will give us an opportunity to take those 6 million automobiles at the rate of possibly 1 million a year, dump them in the areas designated throughout the entire United States in the eventual program, and produce good fishing, produce recreation by serving a twofold purpose.

So, our goal is to get sufficient money, and that is $400,000 to start this pilot program in these areas indicated on the map.

I have indicated them appropriately by a ruined automobile. That would be the pilot study program that we would like to have accomplished.

LABORATORY ACCOMPLISHMENTS

Along with my statement I also have a document from a Dr. Lionel Walford who is the director of the Sandy Hook Marine Laboratory. I asked him, well, "What have you accomplished so far?"

Along with my statement there is a list of his accomplishments which were quite significant.

As a matter of fact it was the efforts of the laboratory that first revealed the migration habits of the fluke.

When I was in school I was thrilled by the knowledge of the salmon going up the stream to spawn and so forth, coming back down, or on the west coast they die. This is a revelation. There are again many significant difficulties discovered so far by this facility and the facilities at Naragansett and on the west coast in California.

FISHING TACKLE TAX AND INDUSTRY AND LOCAL COOPERATION

So I think we have a really good program here, along with the wrecked cars, pollution, of course, the dock, and we want to continue the existing work which is now in progress, which is producing excellent results, and in view—in viewing this I would like the committee to consider that a substantial sum is raised by the fishing tackle industry in view of an excise tax that still exists on fishing tackle. We call it a voluntary tax since there was no effort to have it repealed, the particulars on rods, reels, hooks, and creels. It amounts to almost $7.5 million a year, contributed by industry to conservation, matched by funds from the States it is given over to improving the facilities.

Unfortunately, well right now about 15 percent goes into the salt water area, 85 percent goes into the fresh water area. So I think we have an important program here. I certainly appreciate the time you have given me to present our side of the case and I want to thank you very much.

Senator BYRD. Thank you.

(The prepared statement of Mr. Wolff follows:)

I am Richard C. Wolff, vice president of the Garcia Corp., the largest manufacturer of fishing tackle in the United States, with headquarters in Teaneck, N.J.

I am here today in my capacity as head of the National Association of Marine Angling Clubs, a nonprofit orgainzation incorporated in New York State to promote marine conservation throughout the Nation, and on behalf of many colleagues in the 1,200 member Outdoor Writers Association of America of which I am a past director.

Once again this year, the administration's inadequate budget request for the vital Federal marine game fish research program is causing great concern among the nearly 8½ million salt water sport fishermen in the United States. It also poses serious economic consequences for many coastal communities in 21 States where the mysterious disappearance of popular game fish off their shore has discouraged or threatens to discourage salt water angling.

The $644,000 budget request before you now is meant to accommodate the entire Federal program including research facilities at Sandy Hook, N.J., Narrangansett, R.I., and Tiburon, Calif.

That sum is less than one-fourth the amount Congress envisioned might be needed on an annual basis when it established the program in 1959.

It is one-third the minimum amount needed for fiscal year 1967 if the Federal program is to make any real progress in increasing dwindling game fish supplies.

We believe the budget for the Federal marine game fish program justifies an expenditure of at least $1,814,000 next year: $250,000 for Narragansett, another $250,000 for Tiburon, and $1,314,000 for the Sandy Hook Laboratory, headquarters for the entire Atlantic coast research program.

This may sound like a large sum if you still see in your mind's eye a solitary angler casting off an ocean beach. But like some of our most popular game fish, those days are gone forever. Sport fishing in our country is a multi-billion-dollar sport, three times more important to our economy than hunting, according to Federal surveys. And the $1.8 million appropriation we support should be evaluated in terms of the nearly $1 billion that will be spent on salt water fishing by American sports men and women this year.

As a result of the dismal 1965 season, the distress signals are flying high once more. Atlantic coast anglers fished in deeply troubled waters with little to reward their efforts. Fluke, red drum, bluefish, spot, and croaker—among the most highly prized game fish by anglers on shore and aboard party boats—

were in dangerously short supply. Marine biologists fear for them the same fate that overtook the Atlantic salmon—virtual extinction. Unless Congress champions the one research program capable of protecting our game fish resources, many of these popular species will join the whooping crane and the bald eagle as memorial chapters in America's natural history books.

Reportedly, the Sandy Hook lab under the Department of Interior's present budget is to receive some $464,000 for fiscal year 1967, virtually the same amount it got last year only after Congress examined the program needs and substantially exceeded the Department's original request. It urgently needs $1,314,000.

Additional funds are needed in these amounts:

(1) $250,000 to accelerate research into the effects of pollution on coastal fishes and the development of criteria for minimum standards of water quality compatible with healthy salt water fish resources;

(2) $200,000 for construction of a new dock for the *Dolphin* and the *Challenger*, the laboratory's converted research vessels; and

(3) $400,000 to experiment with the construction of artificial reefs made from solid wastes including junk cars—a project clearly envisioned by Congress in the 1959 legislation which authorized marine researchers to study and recommend the development and location of new fishing grounds, the restoration of now barren areas, and the preservation of natural protective marshland.

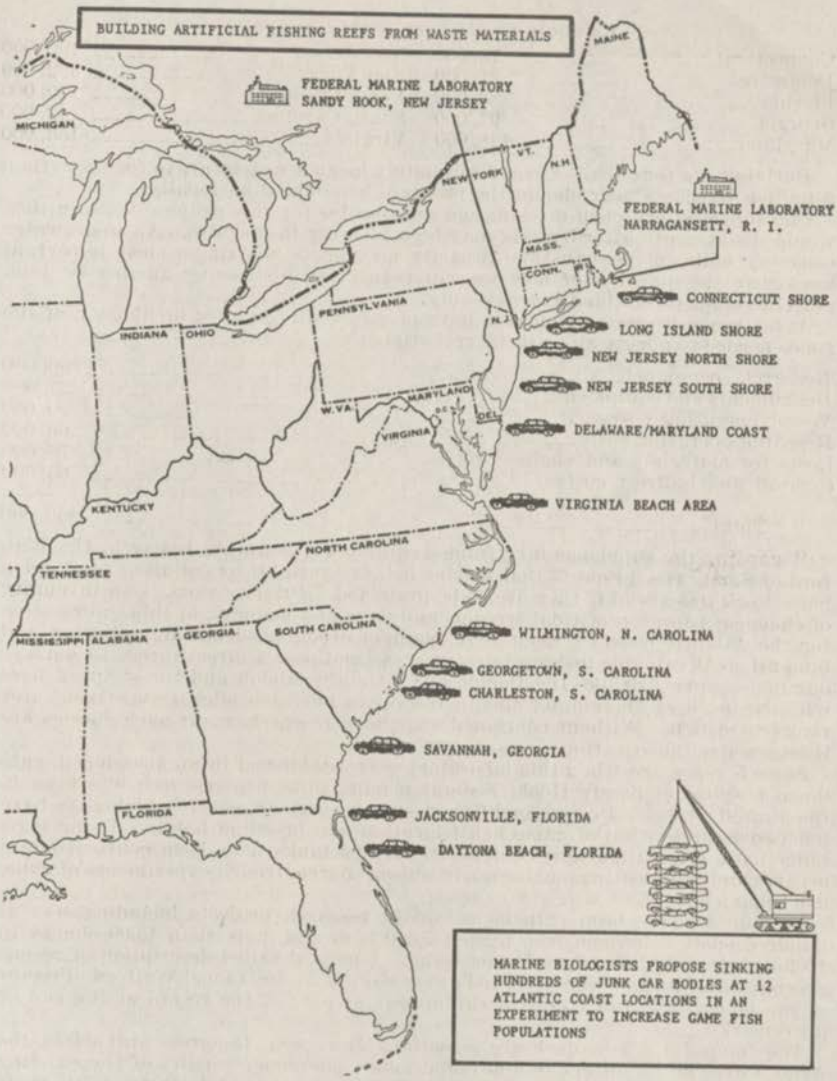
To deal with the largest need first—$400,000 for the experimental building of artificial reefs—this is a project of enormous potential aid to fishing and our national beautification program for even in the pilot study phase, several thousand junk car bodies would be required.

Very limited Pacific coast experiments have produced most promising results, but vastly different coastal conditions in the Atlantic require individual experiments at several locations off 10 States, according to Sandy Hook scientists.

This experiment is by no means frivolous nor impractical. In fact it looms today as our best hope of increasing the marine game fish population on this coast by 50 percent—the minimum increase the experts believe necessary to sustain the growth of marine angling at its present rate of approximately 500,000 fishermen a year.

One west coast experiment using 549 junk cars over a 1-acre area increased the game fish poundage from 36 to 1,542 within the first 7 months. Marine biologists explain that similar reefs here should serve a dual function: First as invaluable nursery grounds for blackfish, porgy, sea bass, fluke, amberjack, and bluefish which require from 2 to 4 years to mature; and second as easily located excellent sport fishing grounds when these fish grow large enough to roam the area and rise closer to the surface and the angler's hook.

What the marine biologists propose to do if funds are available is to conduct model basin studies and undersea surveys of the locations considered most promising. Then they will launch construction of modular design reefs covering 5 acres of ocean bottom at each pilot study location. (See map attached.) A sample module might contain 5,000 yards of rubble, a large ship hull, and a minimum of 500 junk auto bodies cabled together in clusters, and scattered over the area.



Paralleling this experiment would be an economic feasibility study to determine how the materials can be obtained and placed most economically. For example, Job Corps volunteers might be enlisted to prepare junk cars for submersion by removing nonmetallic parts, drawing oil and gasoline, etc., and help prepare them for loading on barges.

According to information provided by the Institute of Scrap Iron & Steel here in Washington, scrappage of old cars in this country has passed the 6 million mark for the first time in history. In New York City alone last year, an estimated 25,000 cars were abandoned on the streets. The estimated number of cars junked annually in those Atlantic Seaboard States off of which the experimental reefs would be constructed totals approximately 1,408,000.

Estimate of old cars junked annually

Connecticut	72,000	New Jersey	190,000
Delaware	21,000	New York	392,000
Florida	183,000	North Carolina	110,000
Georgia	97,000	South Carolina	42,000
Maryland	148,000	Virginia	153,000

Burial at sea for old autos could ultimately mean a watery grave for more than a million wrecks a year should the program be adopted nationally.

One supposed criticism of using old auto bodies for this prupose because they would disintegrate after 3 years may be a blessing in disguise. An underwater cemetery with an inexhaustible capacity may prove the single most important answer to the question of how we can reduce the distressing number of junk piles intruding on our landscape's beauty.

At my request, marine biologists have prepared this detailed breakdown of the funds needed to pursue an artificial reef study:

Research personnel	$90,000
Instruments and equipment	25,000
Vessel operating costs	90,000
Research operating costs	60,000
Costs for materials and engineering	70,000
General and indirect costs	65,000
Total	400,000

Regarding the supplementary funds required for pollution research, Dr. Walford of Sandy Hood reports that marine fish are hard hit by pollution "and much more work lies ahead if they are to be protected. Priority work is an inventory of chemical pollution of tidal streams and bays and mapping of this information for the Atlantic coast." Each year, channel dredging, drainage, pollution and land fill steal valuable inshore nursery areas and pose a direct threat to some of our finest game fish like the Pacific and Atlantic salmon and the stripped bass who live most of their adult life in the ocean but then migrate up freshwater rivers to spawn. Without continued, expanded research, many such species are threatened with extinction.

Some 5 years ago when this laboratory was established in an abandoned, rundown hospital at Sandy Hook, Federal marine game fish research was born in the United States. In a reconditioned surplus tugboat, marine biologists have pioneered exploration of game fish migration and breeding habits. Using ingenuity more often than new equipment, surplus tanks have been converted into oceanariums duplicating marine environments for controlled experiments of game fish behavior.

Volunteers have been enlisted to aid in research projects including several hundred sport fishermen who tagged 7,500 bass and more than 1,000 sharks in 1965 to help establish migration patterns. A more detailed description of recent accomplishments has been prepared at my request by Dr. Lionel Walford, director of the laboratory, and I hope it can appear as part of the record at the end of my remarks.

The funds for a new dock are essential. Last year, Congress authorized the Army Corps of Engineers to study and make emergency repairs of the existing facility deemed unsafe. At the present time, the research crafts with their valuable equipment have to be transferred to a safer harbor whenever bad weather blows in. The boats are valued at approximately four times the cost of the new dock.

In considering the request for a more adequate appropriation for our nationwide marine game fish research program, I hope Congress will keep in mind the substantial sums raised annually through the Federal excise tax on fishing equipment. Last year, more than $7 million in revenue was raised under the Dingell-Johnson Act which provides funds for sport fishing research in cooperation with the States. Our industry did not agitate for repeal at a time when it was quite popular to do so. My company believes that this Federal-State program is most worthwhile. However, a great majority of these funds are directed at fresh water fishing improvements.

Finally, the importance of salt water sport fishing to coastal State economies cannot be minimized. The most recent national survey of fishing and hunting in 1960 by the Interior Department indicated the average marine angler spends more than $100 a year in pursuit of this sport including 14 percent on transportation,

10 percent on food and lodging, 37 percent on auxiliary equipment such as boat hires and boat motors, and 11 percent on actual fishing equipment. These sport fishermen are rapidly approaching the $1 billion mark in annual expenditures, a figure which would certainly seem to justify the Federal Government spending $1,814,000 on a research program to insure that they will enjoy good fishing in the years to come.

RESEARCH ACCOMPLISHMENTS—FISCAL YEAR 1966 TO DATE

Fluke mystery clarified.—With augmented funds, the *Dolphin* went back into operation this fiscal year and November marked the start of full-scale, continuous field operations. The *Dolphin's* priority assignment is to locate breeding areas for coastal migratory fishes and to discover patterns of movement of their young into shallow water sanctuaries.

An important discovery made in our initial work concerns the mystery of breeding of the fluke or summer flounder, prime sport and commercial species. From our *Dolphin* expeditions we have learned that this fish breeds in deep water off the New York and New Jersey coast each autumn but the young are swept far away to the south by strong ocean currents. To survive, the young when one-third to one-half inch long must swim out of the currents and into the shallow bays to find sanctuary by the time they have reached North Carolina. A year later, when they are 6 to 8 inches long, they begin the long northward movement back to New Jersey, New York and New England. North Carolina bays are the nursery grounds for fish that populate northern waters in later years.

As more such discoveries are made by the *Dolphin*, a basis will be provided for effective joint conservation programs by the coastal States.

Results with the new sea tank.—For our new sea tank facility, we flew a school of eight bluefish alive from Palm Beach to Sandy Hook last spring. Working with these fish our first goal is to learn how the sun controls their daily activity patterns and their feeding habits.

Continuous 24-hour observation of bluefish showed their activity to be directly related to light. As light intensity increases from sunrise to noon, activity of the fish increases also. As light decreases toward sunset, swimming speed decreases to, finally assuming a slow-moving or "sleep" phase during night hours. During observations over many months, the fish have never completely stopped moving, although their speed sometimes slows to only 2 or 3 feet per minute.

Under constant, low intensity light corresponding to a continuous twilight the rhythm persists. If the artificial day is shifted to start either 7 hours earlier or later, the swimming speed rhythm changes to correspond to the new day period. The sea tank staff is now using movies in slow motion to analyze the method of detection, selection, approach and capture of bait by the bluefish.

These results will enable us to understand in detail how bluefish are able to navigate on spring and fall migrations of hundreds of miles along the coast, and what causes them to bit at certain times during the day and not at others.

Progress on pollution.—In a stepped-up program of studies on pesticides, we have found: the levels of dangerous insecticides which kill or permanently injure fishes and other marine organisms; the levels which produce temporary damage to internal systems; and the effects of the external environment such as temperatures salinity, and dissolved oxygen on the toxicity of these compounds. Our experiments demonstrated considerable variability among chemical pollutants. For example, less than 50 parts per trillion of endrin, an organochloride insecticide in common use, seriously disrupted the production of liver cholesterol in game fishes but snails and clams were apparently unaffected by concentration 100,000 times higher

Marine fishes are hard hit by pollution and much more work lies ahead if they are to be protected. Priority work is an "inventory of chemical pollution" of tidal streams and bays and mapping of this information for the Atlantic coast.

Bluefish migration patterns.—Tagging of 3,000 bluefish this summer, aboard our motor launch *Bluefish*, revealed a massive migration of the species from New Jersey to North Carolina starting in late summer. From taggings of thousands more bluefish, along the coast, we have found them migrating from Florida to both Maryland and New Jersey and from North Carolina to both Virginia and Florida. Further taggings will round out knowledge of their extensive migratory patterns and provide a basis for action by the States to conserve bluefish—a most important Atlantic coast species and one whose life patterns until now have been a mystery.

Striped bass spawning and migrations.—Clear patterns of striped bass migration resulted from a cooperative program in which volunteer sport fishermen tagged 7,500 bass. Our analysis this year showed New York and New Jersey striped bass to migrate south in the autumn and to winter in southern New Jersey bays, in Delaware Bay, and in Chesapeake Bay. They begin their return north in the spring. Some of them pause to spawn in Delaware Bay, others in southern New Jersey, but most of them in the Hudson River. Again for the striper, it is clear that we are dealing with very migratory fish and their conservation is an interstate problem.

Shark research continued.—Experimental fishing aboard the *Challenger* from Long Island to Delaware Bay has documented the presence each summer of populations of large sharks. Many of the sharks common in the area are not only a hazard to bathers but prey on other fishes. With the help of hundreds of volunteer anglers, this summer, we reached a total of over 1,000 sharks tagged and found that the migrate south along the coast in late fall and return northward in spring and summer. Migration routes appear to be different for each species.

We have also fostered expansion of sport fishing to help lower the abundance of sharks. Through these efforts, big game fishing for sharks has grown in popularity, as indicated by the increased number of shark fishing tournaments along the Atlantic coast this year and of the number of sportsmen who ask to participate in our shark tagging program.

Sea temperature and currents.—Studies of controlling environmental factors—water temperature and coastal currents—were expanded to cover the coastal area from Massachusetts to North Carolina as a supplement to our expanded vessel program. Temperature measurements are made remotely with infrared detectors by laboratory personnel in monthly flights in Coast Guard aircraft. Patterns of current flow are shown by drift indicators, dropped from the plane every 10 miles (5,600 dropped since July). Our monthly sea temperature maps are in use not only by fishermen, but also the Navy, the Weather Bureau, oceanographers, and other marine scientists.

Temperature patterns and currents prove to affect the migration of many fishes; e.g., mackerel, bluefish, striped bass, tuna, fluke. For example, (1) virtual disappearance of striped bass from New Jersey and New York waters this autumn is associated with exceptionally cold ocean water, 8° below average in November; (2) this cold water favored mackerel and large catches were made from New Jersey south; (3) fluke were concentrated against the beach by very cold offshore water this summer and large catches were taken; (4) massive upwelling of this cold water occurred along 40 miles offshore from Manasquan to Little Egg Harbor and, fortunately, kept bathers out of the water, for large numbers of sharks were attracted by the upwelled water.

STATEMENT OF WILLIAM A. PARR, FOR THE NATIONAL ASSOCIATION OF STATE PARK DIRECTORS

Bureau of Outdoor Recreation Budget Request

Senator Byrd. Mr. William A. Parr, superintendent of State parks, department of forests and parks, Annapolis, Md.

Mr. Parr. Senator Byrd, it is a pleasure to be here. I am not here representing the department of forests and parks but rather the National Association of State Park Directors at the request of Mr. Ben H. Bolen who was president of the association and commissioner of State parks in Virginia. I have already submitted a statement and I think I can summarize it primarily through the last paragraph of the statement.

Personnel Adequacy

In the first place we support the budget request for the Bureau of Outdoor Recreation. We are concerned about the provision of sufficient new personnel to insure improvement and adequate servicing of State project requests. When I say State project requests they are

so classified but they include requests which must be cleared through a State agency, requests submitted by the minor subdivisions of the State—the townships, the cities, and other areas.

Land and Water Conservation Funds

Finally, we are gravely concerned with the thought of some nearly $20 million in the land and water conservation funds. We have realized that this is due to the lack of income to the fund but we also hope that this fund income will increase this year and that the wording in the budget bill can be made in such a way as to make this money available if it does increase.

Administrative Limitation on Open-Space Funds

We are particularly concerned in something we have learned of just recently. That is the apparent loss of open-space funds under the Housing Act of 1961 to many of our areas, areas that are part of the standard metropolitan areas and covered by the Housing Act whereby administrative orders the funds are being limited to the so-called built-up areas of these metropolitan areas.

This in my own State of Maryland is to the department of forests and parks and represents a potential loss of some $2.5 million in matching funds, Federal matching funds, and we are gravely concerned over this because it is in the area of the State around Washington and around Baltimore where land prices are rising so rapidly that we are having a hard time keeping up with it at all.

Letter of Hon. Grant Sawyer, Governor of the State of Nevada

I also have a letter from Gov. Grant Sawyer, of the State of Nevada, enclosing a telegram which he sent to Congressman George Mahon, chairman of the House Appropriations Committee, in which he authorizes us to introduce to this committee.

Senator Byrd. It will be included in the record.

(The material follows:)

The State of Nevada,
Executive Chamber,
Carson City, Nev., February 24, 1966.

Mr. Ben Bolen,
President, Association of State Park Directors,
Department of Conservation and Economic Development,
Division of Parks, Richmond, Va.

Dear Mr. Bolen: I am enclosing a copy of my telegram to Congress Mahon regarding the Bureau of Outdoor Recreation's budget.

You may consider this letter as an authorization to enter the wire into the transcript of the proceedings of the Subcommittee on Interior and Related Matters during your hearing should you so desire.

You may also use the wire in any manner you see fit, if it will assist the Bureau of Outdoor Recreation in obtaining their budget request.

Cordially yours,

Grant Sawyer, *Governor.*

[Telegram]

Congressman GEORGE MAHON,
Chairman, House Appropriations Committee,
House Office Building,
Washington, D.C.:

The Bureau of Outdoor Recreation's budget is scheduled for consideration before the House Appropriations Committee on February 8. The Bureau of Outdoor Recreation has done an outstanding job in our State and the fruit of their efforts will be enjoyed not only by Nevadans but by the entire Nation for many generations to come.

I strongly endorse and support the Bureau of Outdoor Recreation requests and urge you to do all you can to support them.

GRANT SAWYER,
Governor of Nevada.

PREPARED STATEMENT

Mr. PARR. Thank you for the opportunity of appearing. If you have any questions I will be glad to try and answer them.

Senator BYRD. Thank you, Mr. Parr, for your appearance and for your testimony.

(The prepared statement of Mr. Parr follows:)

My name is William A. Parr and I am superintendent of State parks, Department of Forests and Parks, Annapolis, Md.

I represent the National Association of State Park Directors, at the request of Ben H. Bolen, commissioner, Division of Parks, Department of Conservation and Economic Development, Richmond, Va., and president of the association.

The National Association of State Park Directors is composed of the directors of the State park agencies in the 50 States.

We in the States have a vital stake in the budget of the Bureau of Outdoor Recreation. The establishment of this Bureau and the passage of the Land and Water Conservation Fund Act has proven to be a "shot in the arm" to outdoor recreation for the States and for the political subdivisions of the States. For the first time, many of the subdivisions are beginning to assume their part of the responsibility for supplying outdoor recreation facilities for our citizens.

With this awakened interest comes additional responsibilities on the upper levels of government. The preparation of a State plan has been carried out in 48 States. But the checking and approval of projects on a State level, and the submission and coordination of these projects with the Bureau of Outdoor Recreation has necessitated the enlargement of our State staffs.

Because the Bureau of Outdoor Recreation is a new agency, it has not yet received adequate staffing to meet its responsibilities. An adequate staff at all levels of operation is essential to prevent delays and backlogs in the servicing, review, and approval of projects submitted by the States. These are State approved projects, not only of State agencies but of county and local governments. We respectfully urge your committee to approve the restoration of sufficient requested positions in the Bureau of Outdoor Recreation's budget to insure proper and prompt handling of these projects.

Our association is deeply concerned with the reduction in Land and Water Conservation Act funds. We realize this reduction is related to income from the sale of the entrance stickers. We would like to see this fund restored to $125 million. With the rapidly rising costs of land in most areas and ever-increasing costs of labor and materials, we can ill afford any slackening in our efforts to supply outdoor recreation lands and facilities.

All of us are feeling the pressures for outdoor recreation close to our population centers, and we need to make a maximum effort to meet these needs. If the continued Vietnam emergency should result in restrictions of any type, these areas close to population centers will become increasingly important.

In summary, we support the budget request for the Bureau of Outdoor Recreation; we urge the provision of sufficient new personnel to insure prompt and adequate servicing of project requests and other assistance to the States; and finally, we urge you to give thoughtful consideration to the restoration of land and water conservation funds to the $125 million level.

STATEMENT OF RICHARD C. LONGMIRE, ON BEHALF OF THE NATIONAL ASSOCIATION OF SOIL & WATER CONSERVATION DISTRICTS

Public and Private Land Conservation

Senator Byrd. Mr. Richard C. Longmire, of Pauls Valley, Okla., chairman of the legislative committee for the National Association of Soil & Water Conservationists.

Mr. Longmire. Thank you, Mr. Chairman. As you indicated I am chairman of the legislative committee of the National Association of Soil & Water Conservation Districts; I am a supervisor in my own home district in Oklahoma.

We are very much concerned with the conversation of our natural resources on Federal lands as well as on private lands—privately owned lands and the amount and quality of the work that is done on Federal land very often affects what we can do on our private lands, so we would like to take this opportunity to bring to you two or three items which we think should be considered.

Increasing Visitors to National Forests

We believe that the problem of visitors to the national forests is a very acute problem. We think the number of visitors have been increasing sharply and the Forest Service needs additional money to handle them, to provide the necessary maintenance for this heavy visitors load, so we are asking the committee to go along with the budget recommendation of some $28 million.

Forest Fire Control

We recommend that the Federal contribution to cooperative forest fire control be increased by $2,189,000 up to $15 million.

Forest Tree Planting Programs

The demand for wood products, especially pulp and plywood has brought a corresponding increase and interest of the farmers in forestry and tree production, so we hope the committee will see fit to increase the appropriation for forest tree planting from $100,000 to $1 million. There is an awareness that production of quality timber can, over a period of time, contribute in a substantial way to improved income and better employment situations in many rural areas.

Therefore we recommend an appropriation of $1 million for cooperation in tree planting—and for assistance to States for tree planting an appropriation of $1.5 million.

Management and Marketing Technical Assistance

We also have a problem with technical assistance in management and marketing, so we estimated for an appropriation of $4.5 million, that is an increase of $962 million over the budget proposal.

Senator Byrd. $962,000?

Mr. Longmire. $962,000.

BUREAU OF LAND MANAGEMENT LANDS

On our Bureau of Land Management lands we have been informed that it is going to take over 50 years to get them in a position where the erosion and mismanagement will catch up and level out.

So we are going—we are asking that instead of an increase of $284,000 in this field proposed in the budget we recommend an increase of $300,000, to a total of $15 million 315,000 for the soil and watershed conservation item.

BUREAU OF OUTDOOR RECREATION

We also support the work of the Bureau of Outdoor Recreation and recommend that funds for the budget proposals for this bureau—our recommendation is at the budget level.

BUREAU OF INDIAN AFFAIRS SOIL AND MOISTURE LAND PROGRAM

We also ask the funds for soil and moisture level for the Bureau of Indian Affairs be sustained at the 1966 level.

This briefly is our position in the field of conservation.

Thank you very much for the opportunity of appearing here.

Senator BYRD. Thank you, Mr. Longmire. You have a lot of friends on this committee.

(The prepared statement of Mr. Longmire follows:)

I am Richard C. Longmire, of Pauls Valley, Okla., chairman of the legislative committee for the National Association of Soil and Water Conservation Districts (NACD). The association represents more than 3,000 local soil and water conservation districts in all 50 States and Puerto Rico. Nearly 18,000 men and women serve without pay as the governing officials of these districts. Approximately 2 million private landowners are cooperators in the districts' programs.

Our purposes are the conservation, orderly development, and wise use of the Nation's land, water, timber, and related natural resources through the effective exercise of local initiative and decision.

District officials and district cooperators have an active and continuing concern about the protection and improvement of public lands being administered by the Federal Government.

We appreciate this opportunity to present our views on appropriation items for fiscal year 1967 for the Forest Service, Bureau of Land Management, Bureau of Sport Fisheries and Wildlife, Bureau of Outdoor Recreation, and the Bureau of Indian Affairs.

As a general statement we are concerned about the level of Government investment in work for the protection and development of natural resources. More and more people are steadily putting more and more pressure on these resources. We depend on them not only for food, but for recreation, water, timber, and other purposes. As we use them more intensively, the management job becomes more complex and expensive.

In our judgment, there will be a need for a steady increase in the Federal investment in resource management and development over the years ahead because resources are the raw materials of our economy, as well as life itself, and we must have them in good supply and in good condition.

We recognize, however, the need to be selective in moving ahead. We cannot do everything at once. But urgent matters should be dealt with in time because postponement only adds to the cost in the future.

FOREST SERVICE

One of the critical developments in connection with the management of national forests has been the accelerated use of the forests for recreation. The number of recreational visits has been climbing at the rate of 10 to 11 million a year. There were 133 million recreational visits to the national forests in calendar year 1964, an estimated 144 million visits last year, and the prospect of 155 million this year.

This build up has created a need for the construction of new facilities, as well as improvement in existing ones, in order to provide reasonably good accommodations for the visitors. It has also created problems of cleanup and maintenance in forest areas handling visitors. Accordingly, we support the budget figure of $29,876,000 for the recreation-public use item under Forest Land Management.

In view of the steadily increasing demands for water supplies of good quality, and the contributions which forest lands make to these supplies, we also support the budget proposal of $6,261,000 for soil and water management work under forest land management.

We are disturbed to find that the budget, once again, has not proposed funds for Forest Service participation in water supply and flood control projects involving both national forest and private lands—under the Watershed Protection and Flood Prevention Act. Appropriations to the Department of Agriculture for projects approved under provisions of this act cannot be used, apparently, for work on public lands. As a matter of practical operation, this has meant that potential projects with intermingled public and private land, but involving land treatment or structural work on national forest lands, have been bypassed. It is our hope that future budgets will provide for Forest Service participation in projects under the Watershed Protection and Flood Prevention Act.

The State and private forestry cooperation items are of particular interest to conservation districts. These cover programs which directly assist district cooperators with fire protection, woodland insect and disease protection, and technical forestry assistance in the management and marketing of timber.

There are more than 4 million private woodland owners in the Nation. Virtually all of them are in conservation districts. Virtually all of them need the fire protection, low-cost tree seedlings, and technical forestry services offered through these cooperative programs in order to develop the multiple-use capabilities of their forests.

Better management and marketing from farm forests can mean better living and jobs for farm families as well as other rural people.

The cooperative local-State-Federal forestry programs are carried out largely by, and through, the State foresters. The State foresters and their men on the ground work closely with conservation districts and district cooperators in most parts of the country. Latest records show that 1,199 soil and water conservation districts have written agreements with the State foresters, and that an additional 1,371 conservation districts regularly cooperate with them without written agreements.

The number of written agreements is increasing. We are pleased to see this trend because the written agreements provide for a more complete understanding of who will do what, in connection with the farm forestry work, and the result is a more efficient job.

We wish to associate ourselves with the National Association of State Foresters in requesting moderate increases in the cooperative forestry programs. The enlarged use of forests, especially by sportsmen and recreationists, has increased the need for forest fire control measures and we recommend that this item be increased to $15 million—a rise of $2,189,000 over the budget proposal.

With the growing demand for wood products, particularly pulp and plywood, that has been a corresponding increase in interest on the part of farmers in their forests—and the potentials for improved production. There is a growing awareness, too, that production of quality timber can, over a period of time, contribute in a substantial way to improved income and a better employment situation in many rural areas. We recommend an appropriation of $1 million for the cooperation in forest tree planting item—and an appropriation of $1,500,000 in the assistance to States for tree planting item.

Along with the growing farmer interest in timber production is an increasing demand for technical assistance from the staff of the State foresters, particularly in the fields of management and marketing. This assistance, provided directly on the farm and by knowledge of the timber markets, is invaluable. We urge that the budget proposal of $3,538,000 for cooperation in forest management and processing be increased to $4,500,000 for fiscal year 1967.

Our concern about the preceding items is not intended to reflect any lack of interest in other elements of the Forest Service program. On the contrary, we wish to commend the Forest Service on their excellent stewardship and their multiple objectives on more than 186 million acres of national forests and grasslands. We are especially interested in the valuable research in forestry being conducted by the Forest Service. Improved techniques resulting from this research are useful to all forest owners in conservation districts. We wish to support the budget proposals for the forest research items.

BUREAU OF LAND MANAGEMENT

Conservation districts have a very active interest in the condition of the public lands administered by the Bureau of Land Management. We are constantly aware that millions of acres of these lands are so intimately associated with the operations of privately owned lands—either through lease or permit arrangements, or by the simple fact that they exist side by side—that the success of private operations depends on the quality of the public lands. This means good vegetative cover and the application of essential soil and water conservation practices where needed.

The best evidence is that better vegetative cover and much more intensive use of conservation measures are needed on most of the 177 million acres administered by BLM within the contiguous Western States. Current estimates by the Bureau indicate that 50 million of the 177 million acres are deteriorating at a serious rate and require immediate conservation treatment to prevent further loss of the soil mantle. Of this acreage, 44 million are considered to be in poor or worse condition.

Continuing soil losses, largely the result of depleted plant cover, inflict a double damage. They not only diminish the usefulness of an extremely valuable upland resource, but pour costly deposits of sediment into downstream valleys and reservoirs. The damage to downstream values includes agriculture, recreation, municipal water supplies, fish and game, flood control structures, and power developments.

We believe it is a responsibility of leadership in Congress and in the executive branch of Government to set a good example of resource stewardship. We believe this committee has recognized this responsibility and moved to do something about it. During the past 10 years, appropriations for soil and moisture conservation work on BLM lands have been increased in every year but one. They are almost five times larger in the current fiscal year than they were in fiscal 1957.

Nevertheless, conservation work on the reserved lands had received so little attention for so many decades, that nothing less than a major recovery effort will correct the damage that has been done. BLM's 1964 inventory of conservation needs indicated that a $680 million investment will be necessary to protect the public lands from further deterioration. But at the current rate of progress, the losses will not be halted for another 50 years.

With this situation in mind, we urge the committee to take a more constructive step than that proposed by the budget. Instead of a reduction in funds for this important work, as the budget proposes, we believe the committee should recommend an increase of $300,000 over the 1966 appropriation for soil and watershed conservation.

An appropriation of $15,315,000 would permit the agency to approximate its 1966 pace in 1967, and also take an important forward step in such a critical watershed as the San Simon, near the town of Safford, Ariz. In this watershed, a combination of high-intensity rainfall and longtime misuse of highly erodible land has had devastating effects. San Simon Creek has now cut a channel that runs from 500 to 800 feet wide, and from 10 to 30 feet deep. The active erosion, and the sediment load being poured downstream, can be controlled. Ninety percent of the control effort required to stabilize the watershed, however, must be centered on BLM lands adjacent to San Simon Creek.

BUREAU OF SPORT FISHERIES AND WILDLIFE

Although the conservation of land and water are not the prime functions of the Bureau of Sport Fisheries and Wildlife, the nature of the Bureau's operations puts it in a good position to make a substantial contribution in this direction. There are approximately 300 units in the national wildlife refuge system, containing an aggregate of 28.5 million acres administered by the Bureau.

At the time these refuge lands are acquired, a considerable portion of the acreage has conditions of deteriorated soil, water, and vegetation. These conditions must be corrected for efficient management and maximum production. Attention is given first to the most severely eroded lands or to those areas where a delay in treatment would magnify costs.

The goal, of course, is to manage the refuge soils, water, and other renewable natural resources in line with their best capabilities for the primary benefit of wildlife and its associated habitat. Insofar as compatible, the refuge units

are also managed to allow use by the public. The Bureau reported that more than 14 million persons visited the units in 1964—a 12-percent increase over the previous year. This public recreational use of refuge lands has added to conservation problems and treatment.

The soil and moisture conservation program of the Bureau is in expert hands but progress is being limited by the availability of funds. Only about one-fourth of the needed conservation work has been completed on Bureau lands and the annual rate of accomplishment is slower than it should be. During the current fiscal year, funds are sufficient for meeting only 1.6 percent of the total conservation needs, we are informed.

We urge the committee to provide an addition $288,000—a total of $1 million—for the Bureau's soil and moisture conservation program, so that this essential work can be accelerated—not only for the benefit of the Bureau's primary mission, but for the benefit of the several million Americans who annually avail themselves of the opportunity to visit these unique areas. As a footnote, we want to mention that the Bureau is cooperating, through agreements, with 121 conservation districts in 127 counties. Active cooperation is underway with an additional 30 districts, where formalized agreements have not yet been completed.

BUREAU OF OUTDOOR RECREATION

If the Bureau is to carry out the functions assigned to it in connection with development of recreational plans and the acquisition of areas for outdoor recreational purposes and preservation of endangered wildlife species, it must have the funds necessary to do the job. We support the increases included in the budget for these purposes.

Substantial numbers of conservation districts and private landowners cooperating with districts have demonstrated during the past year a widespread interest in establishing varied types of recreational facilities to meet part of the evident public demand for such facilities. In many instances, operation of these recreational enterprises—or prospective enterprises—is intended to supplement income received from farming or ranching operations. It has become abundantly clear, however, that private landowners have little to guide them when they consider entering the recreational field. There is a need for responsible sources of information, not only as to the physical suitability of property for recreational development, but even mor critically as to the economic requirements and profit potentials (or lack of them) in given localities of the country. Recreational market and economic information is not now available to private landowners, insofar as we have been able to learn, from either the Small Business Administration or the Departments of Agriculture or the Interior.

Since most of the oncoming public demand for recreational facilities must ultimately be met in the private sector, we hope the committee will give consideration to the need for reliable economic and market information by private landowners.

BUREAU OF INDIAN AFFAIRS

Soil and moisture conservation continues to be an important element in the resource management program of the Bureau and we do not understand the reasons for the reduction proposed in this activity by the budget. Somewhat more than 45 million acres of the Indian lands are classified by the Bureau as range lands. On about 40 percent of this land, or somewhat more than 18 million acres, good land use plans have not yet been drawn and put into effect.

The erosion hazard on a very large share of these lands is high, especially in the dry sections of the West, because of the relatively sparse vegetation and the intensity of the rainstorms when they come. Careful management is a key to sustained use without damage to the resource, and there is still much to be done in this direction, not only on the range but on farmlands. Even with the most careful management, there is a serious question about whether the available resources can sustain an adequate living for all who are now using the range. We recommend an increase in the appropriation for the soil and moisture conservation program over the fiscal year 1966 level—or at least a continuation at that level—rather than a decrease.

STATEMENT OF JOHN R. IMMER, PRESIDENT OF THE FEDERATION OF CITIZENS ASSOCIATIONS

PREPARED STATEMENT

Senator BYRD. Mr. Immer. Mr. John R. Immer, president of the Federation of Citizens Associations of the District of Columbia.

Mr. Immer, you have quite a lengthy statement here.

Mr. IMMER. I have no intention of reading it. I would like to submit the statement for the record and then be allowed to comment on a few of the highlights of the statement very briefly.

I would like to submit the statement and its enclosures, three enclosures, a letter from Mr. McCarter, of the National Capital Transportation Agency to the Honorable Carl Hayden, a letter from Dr. Dillon Ripley, Secretary of the Smithsonian Institution, and then finally a drawing showing the structure of the building of the John F. Kennedy Center and its relationship to the site as authorized by Congress.

(The statement and enclosures follow:)

TESTIMONY OF JOHN R. IMMER, PRESIDENT OF THE FEDERATION

I am John R. Immer, a District taxpayer and president of the Federation of Citizens Associations of the District of Columbia.

Chairman Carl Hayden, of the full Senate Appropriations Committee, wrote me as follows under date of November 2, 1965, and I quote:

"DEAR MR. IMMER: Upon receipt of your letter of October 18, 1965, I wrote to the Administrator of the National Capital Transportation Agency to determine what plans there may be for construction of a rapid transit station within or contiguous to the John F. Kennedy Center for the Performing Arts.

Attached is a reply made to me by Mr. McCarter. He indicates that after further study he will communicate with me again and I will be glad to advise you of any further information which he is able to provide.

CARL M. HAYDEN."

Senator Hayden sent along to me a letter from Walter J. McCarter, Administrator of the National Capital Transportation Agency, who testified before this subcommittee on Monday, March 14, saying that he was having a study made in connection with Senator Hayden's request, and adding that:

"Obviously, there will be additional costs involved in any additions to our presently planned system. Either increased capital costs because of an additional station and more complicated engineering problems or because of the addition of a pedestrian tunnel. On the other hand, the substation of a station at the Center in lieu of our 23d and H Street Station could result in the loss of patronage. However, we will analyze these possibilities and will inform you promptly of the results of these analyses."

Let me make clear at this point, Mr. Chairman, that the Federation is wholeheartedly in favor of a subway, and strongly supports the position of Mr. McCarter before this committee on Monday last. Nothing that I say in this statement is critical of the District of Columbia subway, or its officials. Our view simply is that the subway system is essential to the city, and to the financial success of the Kennedy Center, and to make that Center available to all Americans.

Mr. Chairman, the National Capital Transportation Agency furnished Chairman Hayden its study of the matter of a subway station at the Kennedy Center on February 16, 1966, and Senator Hayden kindly sent a copy to me.

This study should be of interest to the ranking minority member of the full Senate Appropriations Committee, Senator Leverett Saltonstall who, along with Senators Joseph S. Clark and J. William Fulbright, all promised the Nation that there would be a subway station at the Kennedy Center. All three of these distinguished Senators are members of the Board of Trustees of the Kennedy Center. And the Kennedy Center, like the National Capital Transportation Agency, comes before the Senate Appropriations Committee, and this particular subcommittee, for funds.

I would like to quote from the Washington Post of October 1, 1965, these words by Senator Joseph S. Clark:

"The inaccessibility of the river site has been greatly overstated by its opponents. Moreover, in my opinion, the way to improve the Center's accessibility is to include a subway station for the Center area in the new rapid transit plan, not to move the Center."

I think the credibility of the Senate Appropriations Committee, and of this subcommittee is at stake in the matter of a subway station at the Kennedy Center, in view of the public promises of Senator Saltonstall, its ranking minority member, that a subway station would be located at the Center.

At this point I would like to include with your permission, Mr. Chairman, the full text of the report which the Administrator of the National Capital Transportation Agency, Mr. Walter J. McCarter, made to Chairman Carl Hayden under date of February 16, and which Senator Hayden furnished me.

This NCTA report makes clear that, in addition to a minimum cost of $12.3 million, major problems and difficulties may be encountered in placing a subway station at the Kennedy Center. Surely, however, these problems will not be as difficult of solution as placing a garage costing $15 million under the Kennedy Center. Furthermore, the Congress has provided a subway station at the District of Columbia Stadium. Are we to assume from this that the Congress thinks, and this committee agrees, that sports are more important than culture and the arts? Are we to assume that the Congress is more interested in providing access to a sports stadium which the Congress built, even though it is run as a private domain by the private sports interests of the District, than to a cultural center which the Congress made a Presidential memorial to a loved and martyred President? And which is being constructed with tax funds.

Or, are we only concerned about those fortunate Americans, who constitute about the upper 5 or 10 percent of our population, who have limousines and chauffeurs? If we are really concerned about the affluent and how they get to the Kennedy Center, and we don't care about the low-income people, and how they get there—and what they do when they get there—then we may go down in history with Marie Antoinette, who is best known and infamous for her remark, "Let them eat cake." She was told the people had no bread, and she assumed that they all had cake like she did.

Here is a similar situation with the garage at the Kennedy Center where the Congress and, specifically this committee, since it has handled the appropriations for the Kennedy Center as well as the National Capital Transportation Agency, may have made the assumption, with regard to the Kennedy Center, that everyone has a car. Yet, by providing a subway system for the District of Columbia, and providing appropriations for it, this subcommittee obviously knows that every District family does not own a car.

The trustees of the Kennedy Center, as well as Roger L. Stevens, Chairman of the Board of Trustees of the Center, have repeatedly declared that a subway station will be provided at the Kennedy Center. It is now up to this committee to appropriate the funds for such a subway station at the Kennedy Center.

There is not a minute to be lost if this subcommittee and the Congress is to really provide a subway station at the Kennedy Center instead of simply talking about providing a subway station there. It is up to this subcommittee, the parent full Appropriations Committee of the Senate, and to the Congress to make good this pledge to the Nation of Roger L. Stevens, which he circulated on behalf of the trustees of the Kennedy Center last October 15, 1965:

"We hope that by the time the NCTA commences design of the line to Rosslyn, the Center will have been constructed and completed. There is every reason to believe that NCTA and its engineers and experts will take into consideration the Center and the adjacent housing facilities and locate the station as near the Center as feasible. With these facts in mind, there is no merit to the statement that there will be 'no station near the Center.'"

It is my belief that the subway station must be just as near the Kennedy Center as the $15 million garage which is to be built under the Center with Treasury-guaranteed bonds.

Let me point out for the benefit of this subcommittee that part of the route from the 23d and H Street station to the Center is isolated, that elderly people like to attend cultural events, and that every effort must be made to protect them. The federation surely expects the same degree of concern for the low- and moderate-income people attending the Center's events to be shown as has been shown by the trustees and the Congress for the well to do who are expected

to attend it. This great Presidential memorial must not and cannot be permitted to be simply a facility for the rich, and the mink coat set.

Dr. S. Dillon Ripley, the Secretary of the Smithsonian Institution, has already spoken out in very strong terms about the failure of the trustees of the Kennedy Center to plan for the poor. He said there was almost complete silence about the legislative mandate to develop programs "designed specifically for participation, education, and recreation."

Dr. Ripley asked, in a letter which I include, with your permission Mr. Chairman, at this point in my remarks, "Do we propose to administer a means test at our ticket windows?" Taken together, the architecture and the guidelines give the impression of a grudging acceptance of the necessity of doing something for some of those who cannot or do not normally frequent our centers of culture. What is totally absent is an emphatic statement of a determination to do something for this, the great majority of our city and our country. And something in this context must mean more than merely reducing prices. Dr. Ripley added that:

"Taken together, the impression of the proposed activities of the Center deviates widely from objectives of the Smithsonian Institution in its concern for all the people. The concept of providing a splendid showcase for the very best performances is certainly not a contemptible one. By all means let some of the 52 weeks of the year be devoted to this objective. But if all we are doing is creating a more lavish setting for what already goes on in Washington, of saving people the trouble of traveling to New York to go to the theater or the opera, surely we are neglecting the great opportunity that has been given us to do something that will really make a difference in the life of the Capital and of the Nation."

It is significant that the Washington Post of December 19, 1965, quoted Dr. Ripley, whose role in the Kennedy Center both as a trustee and as Secretary of the Smithsonian Institution of which the Center is a branch is of the highest importance, as saying:

"I got the feeling that it was being planned for a snappy kind of people coming up in mink coats. With a 12-month situation there are going to be plenty of everyday occasions when something can be done for the rest of the population."

Let me point out that support for the position of Dr. Ripley was almost immediately expressed by two top officials of the District of Columbia who have appeared before the Appropriations Committees of the Congress themselves many times, or have had their representatives do so. I refer to Walter N. Tobriner, President of the Board of Commisisoners of the District of Columbia, and William H. Waters, Chairman of the District of Columbia Recreation Board, both of whom are ex officio members of the Board of Trustees of the Kennedy Center.

It is high time that this subcommittee, which has provided funds for the Kennedy Center, took a look at how the people's money is being spent there, and whether the will of the Congress has been complied with.

Also, I think I should point out to this committee, the Washington Post, as if to advise the citizens of the District of Columbia and of the Nation to make the most of a bad bargain, said as recently as January 25, 1966, that:

"The location of the Center, the limited seating capacity of its halls, and the design of the plant, which does not provide for rehearsal halls or workshop facilities, would make it difficult to develop participation by people of the community other than as audiences."

And, the Washington Post editorial continues,

"Certainly cheaper seats must be available in all the halls, possibly through foundation grants or some form of Government subsidy, and the management and trustees should make every effort to encourage a cross section of the city's population to patronize the Center. But concern that the Kennedy Center not become solely a haven for the well to do can mask an equally important consideration. The Center cannot be allowed to become 'a lifeless marble shell' that is merely 'a passive receptacle for shows from elsewhere,' as S. Dillon Ripley, Secretary of the Smithsonian Institution, put it. If the Center is to live, to breathe, to contribute something to the Nation, the suggestion of Mr. Waters of the District of Columbia Recreation Board that 'Washington does have a special interest in and a special claim upon the Center's facilities' must be accepted."

Let me say that since Dr. Ripley wrote to the Chairman of the Board of Trustees of the Kennedy Center that: "Taken together, the impression of the proposed activities of the Center deviates widely from objectives of the Smithsonian Institution in its concern for all the people," it is high time that this subcommittee, and the members of the full Committee on Appropriations takes

notice, and do something to bring this Cultural Center back to earth and back to the common people, and provide a subway station.

When one goes to the National Gallery of Art, with one's family, and visitors from other parts of this country, the great art of the world is there free for all to see. Masterpieces costing up to $2 million or more are there within the reach of all. Centuries of the best of the world's art is there, brought together from all over the world, and free. This National Gallery is not a Presidential memorial, and it was given to the people of this Nation free by the Secretary of the Treasury, Andrew Mellon. It is open only in the daytime. Let us compare this great National Gallery cultural center with the Kennedy Memorial Cultural Center where one will have to walk a third of a mile late at night to reach, since there will be no subway station unless your committee acts now, and buses will reach it only infrequently at night. If one does go by car, there will be a stiff parking fee. And, once there, there will be an admission fee of up to $10 a person. For a family of five, that could well be a very expensive thing. Your constituents can now go to the Washington Monument and ride to the top for 10 cents, and go to the Jefferson and Lincoln Memorials, and the Grant Memorial for free. Your constituents can go through the Capitol Building of the United States for free, and join a guided tour for 25 cents.

But to go to the Kennedy Center—a Presidential memorial, and a cultural center like the National Gallery of Art—may cost up to $2 for parking, and $10 for an admission ticket. Remember, the National Gallery is free.

The Congress has provided free access to the national collection of fine arts, the National Portrait Gallery, the Freer Gallery, and the Library of Congress and its concerts and art. But the Kennedy Center will be priced for the "snappy kind of people coming up in mink coats," as Dr. Ripley has so expressively stated. No wonder he says, "the Center deviates widely from objectives of the Smithsonian Institution in its concern for all the people."

Is this what the Congress really intended to provide when it made the Cultural Center a Presidential memorial? If this is what Congress intended, then it has erected a greater memorial to Andrew Mellon than to President Kennedy, and the sooner this is recognized as the true situation the better.

If the Kennedy Center is to truly serve as a worthy memorial to our late President, then it must be made available in every aspect to the millions of American citizens—your constituents—who come here as visitors every year, and it has been estimated that 15 million will soon be visiting Washington each year. They will be asking your committee some very embarrassing questions if the present plans are not changed now. They might very well retire some members of this committee from public life by means of the ballot box. The best way to make the Kennedy Center available to all Americans, including your constituents, is to provide a subway station adjacent to the garages of the Kennedy Center.

President Johnson has not once but several times told the American people that our city streets must be made safe for people, yet the ever-present dangers to life and limb persist, and it is for this reason that the Kennedy Center must be served by a subway.

The Senate Appropriations Committee, and this subcommittee in particular, must examine at this hour all facets of the Kennedy Center. It should hold open hearings at which Negro and white citizens can testify. Your committee should call the Right Revenend Paul Moore, Jr., suffragan bishop of the Episcopal diocese of Washington, who wrote on September 14, 1965 that:

"I completely agree as to the urgency of making the John F. Kennedy Center available to all citizens of Washington and, particularly, to those who could not reach the Center by car or who could not pay the kind of prices necessary to make it self-supporting. Many of the people of our diocese are in that position. In view of the Government's increasing concern for the culturally deprived and, particularly, because of President Kennedy's own concern, it seems incredible that a cultural center would be of such a nature as to be unavailable to the culturally deprived."

Almost without exception, in other major cities in this country and abroad, cultural centers, civic theaters, and opera houses, are located on or over a subway system. This is true of Lincoln Center for the Performing Arts in New York City which Roger Stevens, as a leader in the Metropolitan Opera, helped establish, where the subway system of New York City gives easy and inexpensive access to the Lincoln Center. Why doesn't this subcommittee call in experts from New York and other cities and really make a study of this matter before it is too late to change the present District of Columbia subway route which the Congress provided without giving any thought to access to the Kennedy Center?

Also, the Kennedy Center operation under Roger Stevens seems to be ignoring the Negro citizens of our country, and there is about no effort being made by the Kennedy Center or this committee to obtain the views of Negro civic and cultural leaders about the role of the Negro in the Center's operations, or as beneficiaries of its cultural presentation programs. I have been told there are no Negroes on Roger Stevens' staff at the Kennedy Center operations headquarters. If this is true, it is a grave oversight in view of the great contributions to the performing arts in our country of Negro artists. This committee has a duty to act, if this is true.

Here, again, the provision of a subway station at the Kennedy Center would be a major step in making its cultural presentations of the performing arts accessible to the colored families of the District of Columbia and the Nation. This is surely of interest to your subcommittee.

Dr. S. Dillon Ripley has pointed out, in his famous letter of November 22, last year, to Roger L. Stevens and the trustees of the Kennedy Center that "Only the most limited provision has been made for rehearsal rooms, workshops, studios, and the other facilities required for the creation of works of art, rather than simply for their performance." So, the Congress has authorized to be paid, and, indeed, paid nearly $5 million for the architect's plans for the Kennedy Center, and these plans do not permit the kind of activities which Congress provided for in section 4 of the Kennedy Center Act, as Dr. Ripley has noted.

But, even more grave, the architect's plans impose a sort of cultural colonialism on the Nation's Capital which will forever stunt its growth. It does less for the cultural growth of the Nation's Capital than Lincoln Center does for the cultural growth of New York City—and the Lincoln Center didn't cost the taxpayers of the Nation a dime.

The architect's plans will prevent establishment of a resident opera company in the Nation's Capital which would give Negro artists an opportunity to develop, and for a fully integrated opera company to be established which would make major contributions to the Nation's cultural growth through the development of new opera forms, and high standards, a company which would be received abroad with as much acclaim, say, as the great opera companies of leading European cities are when they come to our country for tours, and which would be just as good as those companies. What has the Kennedy Center got against Negro artists anyway? The Kennedy Center has given over $300,000 to the Metropolitan Opera National Company which, when it performed here at the White House last year, didn't have a single Negro artist or star. What kind of a Presidential memorial is this, and isn't this, too, something this committee should be interested in? Why should this committee provide funds for an almost completely segregated operation in the form of a Presidential memorial? This point was made in the Congressional Record last June 17, 1965, on pages 13482–13483, in a letter signed by Commissioner Walter N. Tobriner and dated June 15, 1965. Commissioner Tobriner said:

"There can be no question that the Center must adopt an antidiscrimination policy both for its own employees and for all organizations with whom it has contractual relations, including organizations concerned with the performing arts. If the Center has not already adopted a policy in this respect, it should do so promptly.

"With this in mind I have today addressed a letter to Roger Stevens with a request that such a resolution be introduced at an early date for action by the executive committee and board of trustees."

So far as I have been able to discover, there has been no published account of the board of trustees of the Kennedy Center adopting such a resolution as Commissioner Tobriner proposed on behalf of the District of Columbia. Isn't this, too, a matter which your subcommittee should be concerned with along with the provision of a subway station at the Kennedy Center?

Mr. Chairman, I want to say on behalf of the federation, that all of us are grateful for Chairman Hayden's action in expressing an interest in a subway station at the Kennedy Center. Now that he has removed the roadblocks, it would seem to us that this subcommittee must move forward at this time to appropriate funds for such a subway station.

I submit at this point a site plan which shows the original site authorized by the Congress for the John F. Kennedy Center. Superimposed on this plan is the outline of the building that is to be built, showing how it extends out over the original authorized site by over 2 acres.

This is a vital point in view of the opinion of the Comptroller General of the United States that, and I quote:

"Appropriations to carry out enabling or authorizing laws must be expended in strict accord with the original authorization both as to the amount of funds to be expended and the nature of the work authorized. Of course, one Congress cannot bind a future Congress and the Congress has full power to amend the original authorizing act or to direct that an appropriation shall be used for purposes additional to or entirely foreign to those specified in the original authorization act."

I also call to your attention the following language from the Statutes at Large, 62d Congress, page 444:

"Hereafter there shall not be erected on any reservations, park, or public grounds, of the United States within the District of Columbia, any building or structure without express authority of Congress."

Despite this important legal point, the trustees of the Kennedy Center have, since 1961, publicly stated their plans to erect a structure which would extend beyond the site authorized by the Congress, and are presently embarking on the construction of a building of which 2 acres are on land never authorized by Congress for the construction of such structure.

Nor is there any record that these plans of the trustees of the Kennedy Center were revealed to committees of the Congress.

Senator Everett M. Dirksen introduced legislation in the 86th, 87th, and 88th Congresses to enlarge the site for the Kennedy Center. Hearings were never held on this legislation, yet, today, the site on which the Kennedy Center is actually being built is as large as that provided in the Dirksen bill.

The trustees of the Kennedy Center, therefore, willfully deceived this committee when they asked for funds for a parklike setting, and then proceeded to enlarge the construction site to incorporate 2 acres of the land provided by this committee for a parklike setting into the actual construction site.

The trustees of the Kennedy Center also deceived this committee when they asked for and received $15 million for construction of a building 2 acres of which were on land not authorized by the Congress and which was never intended by the trustees or the architect to fit within the authorized boundaries of the Kennedy Center site which are plainly set out in section 3 of the John F. Kennedy Center Act and which section has never been amended to provide for new boundaries. No less an authority than the American Law Division of the Library of Congress has made this very point clear in a report furnished to the Congress itself, and which I would be glad to furnish to this committee.

The House Public Buildings Subcommittee Chairman Robert E. Jones assured the House of Representatives, both in committee and on the floor of the House on August 5, 1963, when asked this question: "Is any further acquisition of land contemplated for the Cultural Center?"

Chairman Robert E. Jones replied: "No, there is none, or it would be considered along with this legislation. There has been no request for additional land in the last 2 years that I know anything about. There was about 3 years ago a request for additional land. The Public Works Committee took the position that we have already supplied a sufficient amount of land to accommodate the need." This statement appears on page 13288 of the Congressional Record of August 5, 1963.

The issue came up again before the House Public Buildings Subcommittee during the December 1963 hearings on the proposal to name the Cultural Center in honor of President Kennedy. I call your attention to page 69 of the published hearings in which Chairman Jones, for the House Public Works Committee, stated flatly that, "There is no authority in this bill for the trustees to acquire any more property."

I do not believe it was the intention of the Senate Appropriations Committee or any of its subcommittees to provide 2 acres to enlarge the construction site. I believe the public record sustains my views on this, and I believe, further, that this committee must act to protect the public interest in this matter.

It is my deep conviction that the matter can only be cured by an amendment enlarging the boundaries for the Kennedy Center site set out in section 3 of the John F. Kennedy Center Act. In other words, an amendment version of the bill offered in the 86th, 87th, and 88th Congresses by Senator Dirksen must be presented to the Congress, heard by congressional committees, and adopted, and signed into law by the President. I would be glad to work with your committee to bring this before the Congress in order that the Congress can consider it.

So, in sum and substance, I have been authorized by the Federation of Citizens Associations by a duly adopted resolution to retain counsel and to institute

litigation to uphold the John F. Kennedy Center Act and the plain intent of the Congress.

In conclusion I would like to call to your attention the following excerpt from an editorial in the Washington Post today which stated in part that—

"All of the city planning here for the past decade, and notably the highway planning, has assumed that a large and efficient rail transit system would be rapidly built. The effects of good public transportation reach far beyond commuting convenience; they broaden employment and housing opportunities for those who do not have cars, and they put all of the city's cultural resources at the disposal of youngsters who would otherwise rarely leave their own neighborhoods. The subway will be, among other things, an invaluable adjunct to the city's campaign against poverty."

These are the points I have been trying to make in this statement. The editorial makes clear, too, that the Congress deleted several million dollars from the preliminary planning funds for the subway.

I would urge this committee to restore in full the planning funds required in order that the work of the subway can proceed as scheduled.

I thank you for the consideration you have shown me.

NATIONAL CAPITAL TRANSPORTATION AGENCY,
Washington, D.C., February 16, 1966.

Hon. CARL HAYDEN,
U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: This is in response to your inquiry of October 21, 1965, concerning the feasibility of including, in rapid transit plans, a station within or contiguous to the John F. Kennedy Center for the Performing Arts. In our earlier letter of October 25, we stated our intention to examine the many questions involved in this proposal and we are now able to report on the results of our efforts.

The transit system authorized by Congress will provide the Center with service from the station authorized by Congress at 23d and H Streets NW. Service to the Center will be in keeping with the objective standards by which the Agency designed the downtown distribution pattern which appears in the Agency's report of November 1, 1962. Then and now we feel it would be inconsistent to design the system to render specialized service.

Rapid transit serves best when it serves the greatest number of people daily and in the usual course of community affairs. To obtain maximum revenues for the heavy investment for the system—and to render maximum service to the community—a system was designed primarily to serve commuters and shoppers having downtown as their destinations. These will be constantly recurring trips; on an annual basis the time saved by the public will be immense.

Certain anchor points for the system were selected—one of them the Capitol. Another anchor point is Rosslyn, Va., an impressive center of employment and development only 4 minutes from downtown Washington by transit and an ideal base point for transit lines to be extended ultimately throughout northern Virginia. It is the line from downtown to Rosslyn which will serve the Cultural Center and provide service according to the standards adopted for the entire system.

In the 1962 plan, the station locations in the center city were selected on the basis of circumstances expected to obtain in the year 1980, using National Capital Regional Planning Council, Washington metropolitan area transportation study and local planning agency projections concerning the extent and location of employment. Upon reference to the 1962 report it will be seen that 68 percent of downtown jobs in 1980 would be within a 5-minute walk (1,250 feet) of a transit station, and 92 percent of those jobs within an 8-minute walk (2,000 feet). We find a walk of approximately 6 minutes required for a distance of somewhat under 1,500 feet from our 23d and H Street station to the Cultural Center. Thus, although not situated immediately adjacent to a station of the system, the Center will be well within the normal service area of a station already authorized by Congress. The distance of the Center from the nearest station is consistent with the distance of various other attractions in the city from other center city stations.

In their own interests, the Center may wish to enhance the relationship to the station by constructing a pleasant above-ground walkway from the station to the Center along the principal avenue of approach. Such a walk would afford

patrons arriving by transit a stimulating view of the building and its riverside setting. It may be worth mention that a very handsome approach for pedestrians has been planned by the staff of the National Capital Planning Commission.

In contrast, if the station were adjacent to or under the Center, the approach for patrons would be through the basement of the building with no opportunity for them to experience and to respond to the beauty of the Center and to the meaning of the Center as a memorial to President Kennedy.

In the planning activities of the Agency, it has been contemplated—and it remains so—that the Rosslyn line is to be placed in operation in 1972, with construction to begin in 1970. Design of the Rosslyn line and its stations will be initiated about 2 years before construction begins. As with stations on other lines, the exact location of the station proposed at 23d and H Streets has not been finally determined upon and location will be fixed as engineering and other details affecting location are more precisely determined. The determination of these details is, of course, a continuing process and decisions thus far have been based upon matters already ascertained. Present station locations and system alinement have been selected on the basis of objective standards as to service, prudence in investment, and feasibility and efficiency of engineering and operations. Any change in the proposals must take into account the effect upon investment, the effect upon operating costs, and the nature of the service which might be accomplished by the change. To provide specialized transportation service to the Center would be very costly in terms of initial construction and would increase operating and maintenance costs throughout the years.

In our reexamination of the alinement of the Rosslyn line and its stations, we continue to feel that the physical task and the costs which would be involved in rerouting the authorized system to serve a station in the basement of the Cultural Center would be of formidable dimension. It would be necessary to reroute the line to proceed southwesterly from the presently authorized station at 18th and H Streets NW., under approximately 41 parcels of property (including 20 parcels owned by the George Washington University) and to enter the alinement of F Street at 21st Street. A new station would be required in the vicinity of 22d Street and F Street to replace the station lost at 23d and H Streets. The route would then continue underground to the Cultural Center station and thence under the Potomac River to the presently authorized station beneath Rossyln.

This change in the system would increase construction, operating, maintenance, and land acquisition costs. Revenues would not be increased to compensate for those added costs. The quality of service rendered to 30 million riders each year on the presently authorized line would be impaired to serve the modest additional number of Cultural Center patrons who might ride rail transit if a station were in the basement of the Center instead of at nearby 23d and H Streets.

Increased construction costs would result from the longer subway construction (1,360 feet), the additional Cultural Center station, and more difficult engineering problems relating to curves, grades, and geological conditions. The increased cost of this realinement is estimated at $12.3 million, but this added cost will be even greater if—

(1) The George Washington University and others insist upon compensation for easements on a "highest and best use" or other expensive basis;

(2) Buildings in the Columbia Plaza development currently under construction must be underpinned;

(3) Detailed soils investigation of the difficult geological site of a Cultural Center station disclose further problems in addition to those currently assumed.

Increased operating and maintenance costs would result from the added stop and the longer run. Service would be slowed approximately 1¼ minutes between the 18th and H Streets station and northern Virginia due to the increased running time and additional stopping time. Slower service invariably decreases patronage and hence decreases revenues, all other factors being equal.

In our view, no increase in transit patronage can be expected from realinement. The number of new passengers picked up on the realined route would be offset by an approximately equal number of passengers lost from the 23d and H Streets community and those lost due to slower travel times, while the intermittent rail transit volume from Cultural Center patrons would be speculative since attendance at the Center would vary with the "box office" success of the various attractions. And, whatever degree of success the Center might enjoy, with rail transit available at the 23d and H Streets station within reasonable walking

distance of the Center, rail patrons will be assured of service without the expense which realinement would entail.

It is my sincere hope that this discussion provides you with helpful informations. The Agency is at your disposal for any additional information or assistance you may require.

Sincerely yours,

WALTER J. MCCARTER, *Administrator.*

SMITHSONIAN INSTITUTION,
Washington, D.C., November 22, 1965.

Mr. ROGER L. STEVENS,
Chairman of the Board, John F. Kennedy Center for the Performing Arts, Washington, D.C.

DEAR ROGER: I am writing to raise with you once again issues of the most fundamental importance for the John F. Kennedy Center.

Public Law 85-874, which established the National Cultural Center, instructs the Board to—

(1) Present classical and contemporary music, opera, drama, dance, and poetry from this and other countries;

(2) Present lectures and other programs;

(3) Develop programs for children and youth and the elderly (and for other age groups as well) in such arts designed specifically for their participation, education, and recreation; and

(4) Provide facilities for other civic activities at the Cultural Center.

Writing of the Center, President Kennedy said: "It was not conceived as a group of halls and theaters to benefit Washington audiences alone * * *. The Center will, I hope, become in the broadest sense an educational as well as a cultural institution * * *." It was in the spirit of this mandate and of this hope that the Regents of the Smithsonian welcomed the decision to establish the Center as a bureau of the Institution. They stood ready, as they do today, to offer all possible assistance to the Board and officers of the Center in the furtherance of these high objectives. I am writing now in the conviction that, unless positive steps are taken immediately, we will fail to take full advantage of the magnificent opportunities implicit in the Center.

In March 1964 I wrote to you as President of the Board to call attention to some of the educational possibilities of the Center and to record the Smithsonian's special interest in assisting in the realization of these possibilities. In the intervening months I have continued my efforts to focus attention on this aspect of planning for the Center. In April of this year, for example, I wrote to you:

"I would like to reemphasize at this time the interest which we at the Smithsonian have in plans for the John F. Kennedy Center for the Performing Arts.

"The Smithsonian is particularly interested in cooperating with the Kennedy Center in off-hour and off-season programing of an educational nature to supplement the normal programing at the Center."

At that time I forwarded an eight-page memorandum outlining possible educational activities.

Again in May I wrote, "As you know, the Smithsonian Institution is much interested in the possibilities of the Center's educational potential." At that time I suggested the possibility of the appointment of an assistant or associate director responsible "for educational programs, for lectures, and similar public events providing for contact with the visitors." Now that we seem to be nearing the time for the appointment of the Center's artistic director, and now that physical construction of the Center is about to begin, I feel that I must once again raise the general question of the objectives and programs of the Center.

I cannot emphasize too strongly my conviction that what is at stake here is not the question of whether some educational activities will be included here and there is the Center's program, but rather the question of what the Center itself is all about. Unless all of our actions—the formulation of the program, the choice of director, the design of the physical facilities—are informed by an imaginative regard for creativity and a deep sense of social responsibility, I very much fear that all our energies and expenditures will produce nothing but a lifeless marble shell.

An examination of the plans for the building and of the Program Committee's guidelines suggests very strongly that the Center is now coming to be viewed primarily as a showcase for works created somewhere else and brought here

briefly for the pleasure or edification of local audiences. Only the most limited provisions has been made for rehearsal rooms, workshops, studios, and the other facilities required for the creation of works of art, rather than simply for their performance. This impression that the Center is thought of as a passive receptacle for shows from elsewhere, rather than as an active generator of new works and new productions, is confirmed by the guidelines.

"The Center * * * *should seek out and sponsor* the best in American music, theater, opera, dance and film; it should *provide a send-off* for American performing groups sent abroad * * * it should *open its facilities* to foreign governments * * * etc." [Emphasis added.]

None of these is in any way an unworthy or inappropriate activity, but what is striking is that the guidelines leave so little room for anything more positive or creative.

Accepting for the moment the notion that the Center should be devoted to the display rather than the creation of works of performing art, we may ask to whom these works will be displayed. Do the guidelines offer any clues as to the nature of the proposed audience? The seventh guideline states, in rather equivocal language, that the Center: "should make available a fair amount of seats in the performing halls at low prices for students, young people, and those in straitened circumstances."

Does "fair" mean "equitable," and if so, what is an equitable amount of seats? Or, does "fair" means just "passable?" And do we propose to administer a means test at our ticket windows? Taken together, the architecture and the guidelines gives the impression of a grudging acceptance of the necessity of doing something for some of those who cannot or do not normally frequent our centers of culture. What is totally absent is an emphatic statement of a determination to do something for this, the great majority of our city and our country. And "something" in this context must mean more than merely reducing prices.

What, then, of the legislative mandate to develop programs "designed specifically for * * * participation, education, and recreation?" Here again the guidelines are almost completely silent. Apart from passing references to "exhibits relating to the performing arts," and "educational programs in the arts," nothing is said of any of the possible programs that might be used to involve large numbers of people in the Center's activities. On the contrary, the guidelines explicitly state that:

"The Center, while recognizing its responsibility to welcome and encourage Washington-based performing groups, should not give these groups permanent prerogatives or facilities."

Although the precise meaning of these words is unclear, the tone again is one of acceptance of a minimal responsibility. This refusal to make any commitment to local performing groups seems virtually to eliminate all possibility of repertory companies and of wide popular participation in the artistic work of the Center.

Taken together, the impression of the proposed activities of the Center deviates widely from objectives of the Smithsonian Institution in its concern for all the people. The concept of providing a splendid showcase for the very best performances is certainly not a contemptible one. By all means let some of the 52 weeks of the year be devoted to this objective. But if all we are doing is creating a more lavish setting for what already goes on in Washington, or saving people the trouble of traveling to New York to go to the theater or the opera, surely we are neglecting the great opportunity that has been given us to do something that will really make a difference in the life of the Capital and of the Nation.

It is possible here only to suggest a few of the things that might be done to meet the responsibilities implicit in the direction of the John F. Kennedy Center for the Performing Arts.

One thinks, for example, of the imaginative Theater National Populaire of Jean Vilar. Here, in a single weekend, at a cost of about $4 one may attend a concert, have a cold dinner, and see a play on Saturday, and on Sunday take part in a discussion involving actors and audience, attend a matinee, an evening performance, and a dance. Here special school matinees, including discussions of the play to be performed, are regularly held; here the building and snackbar are opened at 6:30 and there is an early curtain so that theatergoers may get home on public transportation, and in time to work the next day; here ordinary performances cost from 20 cents to $1. Here, in short a deliberate and imaginative effort has been made to involve the poor and the rest of the nontheatergoing population. Now a similar Theater Lyrique Populaire, also under Vilar's direction, is being built for opera performances.

While Vilar's scheme is not something to be slavishly imitated, it does show an awareness of public needs and an imaginative determination to meet these needs which would be welcome in the current planning for the Kennedy Center.

Surely some program of this kind could be developed for the people of Washington and, particularly in the summertime, for the hundreds of thousands of tourists who come here to visit—often from parts of the country in which performances of high quality are simply not available. Attractive "packages" of artistic performances, educational events, and recreation could be devised; tickets could be made readily available throughout the country—perhaps at post offices—at modest prices; other cultural, educational, and recreational attractions of the Washington area could be included in these "packages."

As another example, one thinks of the extraordinary success of New York City's Shakespeare in the park and philharmonic in the park programs, which have attracted huge audiences by making free performances available. Should not the magnificent facilities of the Kennedy Center be used, at least occasionally, in the same way?

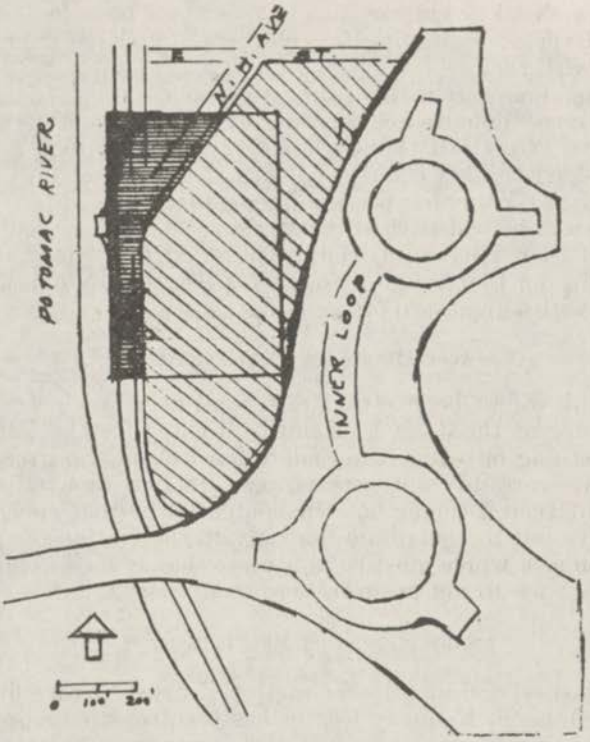
The French-American festival under the direction of Lukas Foss at the Lincoln Center last summer attracted a new kind of audience to Philharmonic Hall. Washington is surely a natural setting for events of this sort.

Again, one thinks of the almost unlimited educational opportunities at all levels that might be offered by the center. Playwrights and composers-in-residence, performances by and for children, exhibits, classes, lectures, apprenticeships—all these should be viewed not as ancillary activities to be reluctantly fitted in among the important events of the year, but rather as the very heart of the center's program.

The direction of a center for the performing arts raises choices strikingly similar to those that are faced by every museum director: choices between passive display and active education, between mere curatorship and creative scholarship, between stylish exclusiveness and broad inclusiveness. It is vitally important, I repeat, that the Kennedy Center, like the Smithsonian itself, should make its choices in a mood of imaginative creativity and with a deep sense of its responsibility to the local community and to the Nation.

Sincerely yours,

S. DILLON RIPLEY, *Secretary.*



Site authorized by Congress in the National Cultural Center Act of 1958 and retained in the John F. Kennedy Center Act of 1965. Trustees seek 92,600 sq. ft., or more than 2 acres, of additional land outside the site authorized by Congress.

Land incorporated within building line of Kennedy Center building outside of site authorized by Congress, as shown on Drawing 2-2, Excavation Plan, Kennedy Center Building.

Plan Showing Part of Kennedy Center Building on Land Not Authorized by Congress. Based on drawing published on page 132, Report of Hearings held on April 22 and 23, 1958, before a Subcommittee of the Committee on Public Works of the United States Senate on S. 3335, A Bill to Provide for a National Capital Center of the Performing Arts.

Prepared by:
The Federation of Citizens Associations of the District of Columbia.

December 6, 1965

JOHN F. KENNEDY FOR THE PERFORMING ARTS

Mr. IMMER. Our fedration is concerned and my purpose in being here is to appear in regard to the John F. Kennedy Center for the Performing Arts which is presently proposed to be built and is actually under construction on the Potomac River.

Senator BYRD. Mr. Immer, do you have any one in your federation with you here?

Mr. IMMER. No, I do not, sir.

Senator BYRD. I was going to say you might have them sit here at the table with you.

Mr. IMMER. I am here with me this afternoon.

Senator BYRD. You are not carrying that Evening Star trophy.

Mr. IMMER. No, I left that at home, my children took a fancy to that and I don't think I could get it out of the house.

Senator BYRD. Your wife was holding on to it.

Mr. IMMER. The bad part of it is I think she felt she had more of a claim to it than I have. I would not actually, as you know yourself, the suffering that we go through is permitted by our wives and they put up with a great deal on it.

ACCESSIBLE SITE DESIRABILITY

But I think we all believe that this is all very much worth while and the matter of the John F. Kennedy Center for the Performing Arts is something on which the Federation has spent a great deal of time. We are certainly not opposed to it, in fact we are very much in support of such a center but our contention is that such a center to be effective but to contribute not only to the Nation's capital but to the Nation as a whole must be in a place that is accessible and this is what brings me to my position here today.

SUBWAY STATION REQUIREMENT

Over the last several months the matter of providing a subway station for the John F. Kennedy Center has been commented on by the ranking minority member of the full Senate Appropriations Committee, Senator Leverett Saltonstall, who, along with Senator Joseph Clark and Senator William Fulbright all promised there would be a subway station at the Kennedy Center.

All three of these distinguished members are members of the board of trustees of the Kennedy Center. On October 1, 1965, in the Washington Post, Senator Clark was quoted as saying:

> The inaccessibility of the river site has been greatly overstated by its opponents. Moreover, in my opinion, the way to improve the Center's accessibility is to include a subway station for the Center area in the new rapid transit plan, not to move the Center.

GARAGE ACCOMMODATION FOR AUTOMOBILE OWNERS

I think the credibility of this Senate Appropriations Committee and of this subcommittee is at stake in the matter of a subway station in the Kennedy Center in view of the promises of Senators Saltonstall and Fulbright, that a subway station would be located at the Center.

I would like to call to your attention that provision is being made for a $15 million parking garage to take care of the limousines that will be used by wealthy patrons when they attend the Center, and that there is no facility for the person who does not have a limousine or who is not one of the favored few who will be able to park his own car, and our point is that if the Senate can provide $15 million for a parking garage for a few, then it certainly should provide subway facilities to make it available to the general public.

DEMONSTRATION OF LAND AND BUILDING INCONGRUITY

In addition to that there are a number of other aspects of the Kennedy Center which I think need to be called to the attention of the committee here and for this purpose I have included in my exhibits here a drawing showing the original site and the only site authorized in the John F. Kennedy Center Act for the construction of the Kennedy Center itself.

And superimposed on that drawing we have put an outline of the building itself which has been taken from the excavation drawings for the Center which I have here with me.

It is the very last exhibit, and that drawing shows plainly that over 2 acres of the building extends out over and beyond the site authorized by Congress.

OPINION OF COMPTROLLER GENERAL AND STATUTORY PROVISION

In connection with this I would like to quote from an opinion of the Comptroller General:

> Appropriations to carry out enabling or authorizing laws must be expended in strict accord with the original authorization both as to the amount of funds to be expended and the nature of the work authorized.

I will also call to your attention the following language from the statutes.

Statutes at Large, 62d Congress, page 444:

> Hereafter there shall not be erected on any reservations, park, or public grounds of the United States within the District of Columbia, any building or structure without express authority of Congress.

MISLEADING ACTION OF CENTER TRUSTEES

Despite this the trustees of the Center came before this committee and asked for and received certain sums.

The trustees of the Kennedy Center therefore willfully deceived this committee when they asked for funds for a parklike setting and then proceeded to enlarge the structure sites to 2 acres of the land provided for by this committee for a parklike setting into the actual construction site.

The trustees also deceived this committee when they asked for and received $15 million for construction of a building, 2 acres of which were on land not authorized by the Congress and which was never intended by the trustees or the architect to fit within the authorized boundaries of the Kennedy Center site which were plainly set out in section 3 of the John F. Kennedy Center, which is in the drawing there in front of you.

On August 5, 1963, Chairman Robert E. Jones, chairman of the House Public Buildings Committee, stated in committee and on the floor when asked this question: "Is any further acquisition of land contemplated for the cultural Center?"

"No, there is none or it would be considered along with this legislation. There has been no request for additional land in the last 2 years that I know anything about."

So in sum and substance the federation is concerned, No. 1, that the Kennedy Center may be built in an isolated location without any provision for extension of a subway as has been promised by eminent Senators of this committee, members of this committee——

Senator BYRD. Only one of those Senators is a member of this committee.

Mr. IMMER. I see; I am corrected on that.

Senator BYRD. One of the three that you named.

Mr. IMMER. I see, right.

PROJECTION OF CENTER INEFFECTIVENESS

And more important we are concerned about the prospects for success of a center and we feel that if it is built in an isolated location without having access to a subway that it will be most unfortunate for the Center itself and that there will be later criticisms of the Center and of the Appropriations Committee in appropriating funds without providing for proper access to the facility.

RESTORATION OF HOUSE REDUCTION AND SUBWAY PLANNING

Now one thing I would like to make very clear as a final point. Our consideration is that the subway go forward without any delay what so ever, and as a final point I would urge this committee to restore in full any of the planning funds that were deleted by the House last fall in order that the work on the subway can proceed as scheduled, but I do ask the committee to consider some of the problems that have been introduced in the construction of the Center here.

CONTEMPLATED SUIT INSTITUTION

I might also add that the federation has considered all of this and considers it so important to the future success of any such Center in the District of Columbia or the Nation's Capital that I have been authorized to retain counsel and institute litigation to uphold the John F. Kennedy Center Act and the intention of Congress.

Senator BYRD. You are speaking for the federation?

Mr. IMMER. Yes.

Senator BYRD. Does that complete your statement?

Mr. IMMER. Yes, sir.

Senator BYRD. Your complete statement has been included in the record. I appreciate your appearance here today, we are glad to have you.

STATEMENTS OF MICAH H. NAFTALIN, COUNSEL, AND JOHN W. CHESLEY, JR., CHAIRMAN, SOUTH POTOMAC CITIZENS CRISIS COMMITTEE

GEORGE WASHINGTON MEMORIAL PARKWAY

Senator PROXMIRE. Our first witness regarding the National Capital Planning Commission request for land acquisition funds for the George Washington Memorial Parkway, is Mr. Naftalin. We are happy to have Mr. Naftalin here.

Your written statement will be placed in the record at this point.

(The statement follows:)

I appear here today representing the South Potomac Citizens' Crisis Committee, an organization which speaks for the roughly 45 home and homesite owners along a portion of the Potomac River shoreline in Prince Georges County.

Md., between Broad Creek and Fort Washington. These property owners are directly affected by the proposed appropriation for the George Washington Memorial Parkway under the Capper-Cramton Act of 1930, and they oppose the appropriation for this parkway as it is presently planned.

The committee's position carries the endorsement of the Riverview Community Association and the Broad Creek Citizens' Association. In fairness, I shall state that the membership of this committee overlaps to some extent with that of these other two citizens groups. You might say that ours is the "action group" created for this special purpose while the others are continuing bodies. Furthermore, we will be arguing for a proposition that enjoys much broader community support and one which bears the imprimatur of the Maryland-National Capital Park and Planning Commission.

BACKGROUND

On May 29, 1930, Congress enacted the Capper-Cramton Act (Public Law 284) which, among other things, authorizes the National Capital Park and Planning Commission to acquire land along both the Maryland and Virginia sides of the Potomac for the purpose of constructing the George Washington Memorial Parkway. "Said parkway shall include a highway from Fort Washington to the Great Falls on the Maryland side of the Potomac * * *." With respect to the acquisition of shoreline property, the act indicates that adjacent lands at prohibitive costs are not to be acquired "As to any lands in Maryland or Virginia along or adjacent to the shores of the Potomac within the proposed limits of the parkway that would involve great expense for their acquisition and are held by said Commission not to be essential to the proper carrying out of the project, the acquisition of said lands should not be required upon a finding of the Commission to that effect."

Over the years, the Virginia parkway was constructed. In more recent times some activity has taken place with respect to the parkway at the Montgomery County, Md., end. To date virtually no acquisition of private land has been accomplished in the so-called south Potomac sector, Prince Georges County, Md.

In 1950, the National Capital Planning Commission maps[1] indicated a proposed route in Prince Georges County which would have taken virtually the entire shoreline from the District of Columbia line south to Fort Washington save only the tip of Hatton Point. Since that time, the taking line of the parkway route has moved inland to accommodate shoreline residential areas, notably in the sections called Treasure Cove and Indian Queen Estates which lie between Fort Foote Park and Indian Queen Point on the Broad Creek and the Swan Creek Club development above Hatton Point immediately north of Fort Washington Park. As will be seen it will be the purpose of this statement to suggest and support the justice and desirability of making a similar accommodation to a short additional stretch of shoreline properties which lie on the south bank of Broad Creek and run south down the Potomac to the Swan Creek Club development.

The appropriation being sought is for the purpose of acquiring a 7-mile strip from the beltway to Fort Washington in Prince Georges County, Md. In 1957, 1959, and 1961 Congress rejected requests for appropriations for this project. During the period 1962 to 1965 no appropriations were requested.

The South Potomac Citizens' Crisis Committee and the allied citizen groups oppose the acquisition of property for the George Washington Memorial Parkway. Our specific objection is to the location of the approximately 2½-mile section running south from Broad Creek. In this area the National Park Service of the Department of the Interior and the National Capital Planning Commission propose a 2.7-mile shoreline route. The citizens' groups affected propose an alternative 2-mile route, equally scenic, which would run inland one-fourth to one-half mile, which route is the same as was unanimously proposed and recommended in November 1965 by the Maryland National Capital Park and Planning Commission.

In comparing the shoreline route to the inland alternative route, it is important to keep certain factors in mind. First, there is no opposition from any source that we are aware of to the parkway route to the extent that it runs north from Broad Creek or south from a point approximately opposite the Swan Creek Club development at Swan Creek Road. When we speak of the shoreline route versus the inland or alternative route, we are speaking only about that approximately 2½-mile section between Swan Creek Road and Broad Creek where the Maryland

[1] See map 12, as of October 1950, entitled "National Capital Region—Regional Park Plan" of the National Capital Park and Planning Commission.

National Capital Park and Planning Commission's proposed route and the Interior Department-endorsed National Capital Planning Commission route diverge. It should be stressed that, along the 5-mile uncontroversial sections of the proposed parkway, there are very substantial segments which do follow the shoreline. In addition, should additional shoreline mileage be required it could be provided along those sections of Fort Foote Park and Fort Washington Park where the current proposals now bring it inland.

COSTS

The total estimated cost of land acquisition from the beltway to Fort Washington, according to NCPC estimates dated September 7, 1965, is $5,056,000 (685 acres) plus "10 percent" contingencies, $505,600; totaling $5,561,600. The Federal 50 percent matching amount would thus be $2,780,800. Included in this estimate is an acquisition of 180 acres for the area in question between Broad Creek and Fort Washington totaling, including the 10 percent contingencies, $2,897,400. The NCPC estimated an acquisition cost for the 60 acre Maryland-NCPC alternative route of $695,000, a saving of $2,132,900.[2]

It is apparent from this comparison that the alternative route, unanimously proposed by the Maryland NCPC and endorsed by our organization, requires approximately one-third less highway construction and approximately two-thirds less land acquisition. From the standpoint of new expenditures, the alternative route would save more than $2 million, one-half of which would come from the Federal Treasury, the other half from a bond issue pledged by the people of Prince Georges County, Md.

This saving is based on the land acquisition costs as estimated by the NCPC. However, we believe the NCPC estimates to be grossly underestimated with respect to land values along the shoreline. Their estimate of 180 acres at a total cost of $2,634,000 assumes an average value per shoreline acre of approximately $14,600—$695,000 for 60 inland acres assumes a market price for inland acreage of approximately $11,583 per acre—in fact, recent sales indicate that one-half acre lots along the shoreline have been selling for amounts ranging from $15,000 to $17,500 thus indicating a very possible market value for shoreline property in excess of $30,000 per acre.

Should this land acquisition along the shoreline proceed to condemnation trials, and, for the sake of argument, should the courts valuate the property at $30,000 per acre the acquisition of the 180 acres would cost $5,400,000—a figure approximating the NCPC estimate for the entire 7½ mile parkway land acquisition program and a figure in excess of twice the value currently ascribed to the shoreline route under discussion. (On the Virginia side NCPC's estimates were one-third of ultimate court condemnation awards.)

In addition, the above estimates do not include the value of the homes in the taking line which currently improve the value of the property. We estimate that just seven of the homes in the Riverview Estates area which could be affected may be valued in excess of $300,000.

Finally, none of the above figures includes land acquisition costs resulting from awards for severance damages or relocation costs. Nor do our estimates add "the 10-percent contingencies." Therefore, by adding the $5,400,000, $300,000 for homes, and $570,000 as 10 percent of the above sum, our total estimate for land acquisition of the alternative route would be $6,270,000 as compared to NCPC's estimate of $2,634,000 for the shoreline route and as compared with $5,562,000, NCPC's estimate for the entire land acquisition in Prince Georges County from the Beltway to Port Washington.

In other words, we estimate that the actual cost of acquiring the shoreline 2.7 miles or 180 acres would cost the Federal and county governments in excess of 3 times the cost estimated by the NCPC and nearly 10 times the NCPC's estimate for the alternative inland route.

COMPARISON OF ROUTES

As has been indicated, the NCPC's route will run for approximately 2.7 miles from a point on Broad Creek approximately opposite Harmony Hall, over a causeway to be built on the water in front of five homes in Broadwater Estates, across

[2] In fairness it should be noted that this saving is somewhat overestimated by the fact that the remaining 60 acres of the alternative route would pass through Government-owned land which, while not a part of the current land acquisition program, should be evaluated in making a proper comparison.

a bridge to be constructed over a small boat harbor adjacent to the homes, then on to the shore following the coastline around and through Riverview Estates taking a number of homes, and finally turning inland, avoiding the Swan Creek Club development to rejoin the Maryland NCPPC's route approximately at its intersection with Swan Creek Road.

The alternative route proposed by the Maryland-NCPPC which we endorse, takes no homes, runs only 2 miles, approximately one-half of which is already owned by the Federal Government and scheduled as surplus, requires no expensive causeways or bridges, and runs through farm and woodlands.

While we are not here discussing the costs of constructing the ultimate road, we feel it is relevant to point out that the route acquired will have a bearing on the future costs of construction. We believe no one would deny that the shoreline route, even without bridge and causeway, would result in substantially more expensive road construction costs. We believe, in fact, that the shoreline road including bridge and causeway would cost approximately twice that of the inland route. While we have seen no engineering comparisons, we believe the comparison is on the order of $4.5 million versus $2 million or approximately a $2½ million saving with the inland route.

In addition, however, an issue has been raised concerning the proposed bridge and causeway. It is our understanding that in previous years there was a proposal to bridge Broad Creek from a spot near Indian Queen Point across to a point in the Riverview Estates area. We understand further that this plan was rejected for engineering reasons related to the soft bottom including more than 30 feet of silt. If this is true, it would be important to clarify the chances of actually building the proposed bridge and causeway. We point out that should it later be concluded that the bridge and causeway are economically unfeasible to build the NCPC would be required to acquire further land on the Broadwater Estates shore, thus taking 5 and possible 10 additional homes and adding further to the costs of acquiring property.

PROTECTING SHORELINE BEAUTY

We believe that no one and no group is opposed to the objective of preserving the beauty of our Potomac shoreline. This goal is shared equally, we believe, by the U.S. Congress, which enacted the Capper Cramton Act; the Maryland Legislature and the Prince Georges County officials, who will have to make it possible to provide the local 50-percent matching funds to acquire the necessary property; the Maryland National Park and Planning Commission, whose duty it is to plan the orderly development of the community; the National Park Service of the Department of Interior and the National Capital Planning Commission, who have joint responsibility for the planning of the George Washington Memorial Parkway and the Potomac shoreline in general; and finally the shoreline homeowners and homesite owners, many of whom have held this property for generations and all of whom have planned to blend their homes into the natural wooded beauty of the shore.

Questions of esthetics, however, are often highly controversial. Taste is invariably a matter of individual preference; beauty is in the eyes of the beholder. Witness the controversy not many months ago over the plans for the Franklin D. Roosevelt Memorial or the expressions both of admiration and outrage concerning the appearance of the Rayburn Office Building.

In the name of protecting the beauty of the Potomac there are those who would condemn the shoreline, construct a causeway and bridge, and clear enough of the trees to build a "beautiful" concrete shoreline highway. To such proponents we would remind that there is a great difference between "highway beautification" which we condone, and beautiful highways which we assert do not exist except perhaps in the eyes of some roadbuilders.

There are those who, in the name of beauty, would condemn the shoreline, construct a causeway and bridge, preserve the shoreline trees, permit the existing homes to remain for a few years (in the name of life estates), clear the trees somewhat inland to construct a 25-foot, two-lane park drive which roughly parallels by a few hundred feet the existing Riverview Road. We doubt that this is the kind of parkway that the officials and representatives of Prince Georges Count, Md., have had in mind.

And, there are those who, in the name of beauty as well as in the name of the George Washington Memorial Parkway, would condemn the shoreline for park purposes, caring little if the highway is never built. To this suggestion, we point out that regardless of the route selection of this 2½-mile segment, there will be

major park facilities along the 7-mile stretch, including extensive waterfront, at Fort Foote Park, Harmony Hall, and Fort Washington Park.

There is no one, including officials of the Department of the Interior and NCPC, who has or would deny that this 2½-mile stretch along the Potomac River is, in fact, beautiful as it now stands. We believe that the intent of the Capper-Cramton Act would be fulfilled by the inland alternate route so long as the present character of the shoreline were preserved. To this end, the property owners along the shoreline have pledged to negotiate with the NCPC and the Department of the Interior for scenic easements which would preserve in perpetuity the present one-half-acre rural-residential zoning restrictions—a proposal which, incidentally, has fallen on deaf ears. In this respect, the conclusion is obvious that the NCPC and the National Park Service are not so much interested in the construction of the George Washington Memorial Highway as they are committed to acquiring this shoreline property for a park.

What is the plan for which the NCPC proposes this land acquisition? What are its goals with respect to park and highway? We assert that it is now impossible to be sure just which goal the Federal planners are aiming for. In discussing this matter with officials of the NCPC and the National Park Service, we find that some are talking about a George Washington Memorial Parkway on the Maryland side comparable to the Mount Vernon Highway on the Virginia side. Others are talking about a narrow two-lane road through the park from Fort Washington all the way to Fort Foote, expanding to a four-lane highway only north of Fort Foote to the beltway.

Others tell us that a parkway does not mean a highway but rather it means a park with, incidentally, a road through it. Whatever the road is going to look like, there are those officials who say it will run along the shore while others tell us that while they plan to condemn the property along the shore the road will run along the inland side of the "taking line." The only portion of the plan that everyone seems to be agreed upon is that an agreement was made to run the road out across a bridge and causeway at Broadwater Estates along the south bank of Broad Creek. But even here there seems to be some question as to the feasibility of constructing such a causeway.

If it can be assumed that a shoreline highway is planned, we urge that such is not the best, let alone a necessary, method of protecting the beauty of the Potomac shoreline. We find ourselves in complete accord with Dr. Irston R. Barnes, chairman, board of directors, Audubon Naturalists Society, Wallingford, Conn., when he stated the following last May 24, at the White House Conference on Natural Beauty concerning "the design of the highway," (and I am quoting from page 205 of those proceedings entitled "Beauty for America") :

"The most important thing that this panel could recommend would be to have a set of values which would guide the location of highways and it should begin by recognizing that no highway improves the beauty of a natural landscape. It is an intrusion. We should recognize it as such.

"Now, these are perhaps unpleasant truths, but I think these are the truths that represent the public point of view as opposed to the engineer's point of view. I should like to see the public's point of view at least acknowledged in the report of this panel."

We agree with Mr. Theodore R. Rogowski's statement at page 209 of the same White House Conference, when he recommended "that a greenbelt preferably with the existing trees intact, be preserved to maintain the natural visual beauty of the river, to protect the river from the oil, refuse, and sun-baked pavement of the highway." And we applaud his "definition of ugliness: a highway encroaching upon a river bank."

Recognizing that to date, no engineering plans have been made for either the road or the causeway-bridge complex (this point also has a bearing on the question of subsequent road construction costs), we wonder if NCPC or the National Park Service have considered the very important insight provided the White House Conference by Mr. Edwin G. Michaelian, president, National Association of Counties, White Plains, N.Y., based on Westchester County's experience with the Bronx River and Hutchinson River Parkways (at p. 217) :

"There is one thing that we must watch very carefully, once having constructed parkways, and I can tell you this from our own experience. Care must be taken to prevent erosion and erosion can be prevented by the appropriation of sufficient funds to protect not only the highway itself, but its slopes, shoulders and the vistas. This is particularly applicable where streams, rivers and the sea are concerned. Construction where necessary, of channels, berms, seawalls, jetties, or other proper precautionary measures, must be undertaken."

Let me cite just a few additional quotations from the White House Conference proceedings. Also from the panel on the design of the highway are:

Chairman William P. Babcock, director of highways, North Carolina State Highway Commission, Raleigh, N.C. (at p. 177):

"There are numerous facets in the design of the highway * * *. It must be located to do the minimum possible damage to private and public property."

Mr. Francis W. Sargent, commissioner, Department of Public Works, Boston, Mass. (at p. 179):

"Our aim is to protect the dignity and grace of this area. We know it will cost more, but why can't esthetics have an equal seat at the conference table with construction costs and road user benefits?"

Normally, the planners have to justify added expense in the name of esthetics. In our case, the more esthetic inland route for the highway is also cheaper. It might well be asked.

Why pay more for ugliness?

From the panel on water and waterfronts:

Honorable Philip A. Hart, U.S. Senate (at p. 152): With respect to helping "us preserve some of the beauty we have inherited * * * [and] as we move ahead with a national system of scenic roads and parkways * * * We must not permit ribbons of concrete to be strung along our presently remote shorelines, destroying the very scenery we seek to enjoy."

Dr. Roger Revelle, Harvard University, lends an ironic note (at p. 175):

"We need to use much more widely and effectively the concept of the 'scenic easement' that Stewart Udall has invoked along the Potomac."

Finally, we note that even Mr. Charles Conrad, Director of the NCPC has characterized a "parkway along the bluffs of the Potomac" as "a ruinous road." We agree. Mr. Conrad was speaking about preserving the Palisades along the Potomac shoreline in Fairfax County, Va., but we believe the principle to be equally applicable to both shores. The Fairfax experience, even to the extent of expressing NCPC opposition to scenic easements is so close to the present issue that I would like to quote the entire short article about it which appeared at page B–4 of The Washington Post of February 10, 1966, under the byline of Kenneth M. Boyd:

"FAIRFAX SUPERVISORS SHOULD SURVEY ON PRESERVATION OF POTOMAC PALISADES

("By Kenneth M. Boyd, staff writer)

"A decision on how best to preserve the Palisades along the Potomac River shoreline in Fairfax County was temporarily avoided yesterday as the board of supervisors called for a study of the area before taking action.

"The issue was raised last week when Supervisor Harriet Bradley charged that the NCPC was 'ignoring' three scenic easements along the river between the Cabin John Bridge and River Bend.

"Appearing before the board yesterday Commission Director Charles Conrad said his group feels that the three-quarter-mile stretch 'should be in the public ownership' and that the commission recommended the purchase of 790 acres as parkland.

"Mrs. Bradley who last week charged that the county would be asked to contribute $3.2 million in matching funds which the county 'doesn't have' said yesterday that only through protective scenic easements 'can the river front be enjoyed scenically.'

"The Dranesville supervisor explained that after the lands were acquired as a park, access road would be needed which would 'ruin' the property.

"She said that in the nearby Scott's Run watershed a 50-foot sewer right-of-way 'has pretty well ruined the valley.'

"Conrad said that 'no parkway along the bluffs of the Potomac is being considered by the commission' and that his group 'would oppose such a ruinous road.'

"Mrs. Bradley also charged last week that if the commission proposal were adopted homeowners who have been trying for 2 years to get scenic easements to protect the palisades would be forced out of their homes.

"Conrad answered yesterday by saying that as a result of a commission meeting this week the proposed parkway boundary had been 'changed' so that only four homes would be taken.

"The supervisors directed the county park authorities to work with the commission and homeowners in the area in preparing a survey for board consideration at a later date."

CONCLUSION

On behalf of the South Potomac Citizens' Crisis Committee, Mr. Chairman, I oppose the $2.9 million appropriation to the National Capital Planning Commission for the George Washington Memorial Parkway land acquisition. I oppose it for the following reasons:

1. To the extent they plan a parkway comparable to the Mount Vernon Parkway on the Virginia side, they will not be preserving the beauty of the shoreline.

2. To the extent they want this little stretch of shore for a park it is both unnecessary because of the ample major parklands which completely surround it, and it is unfair and capricious to disregard the owners' proposals of protective scenic easements for the shore and the slightly alternative taking which would be equally suitable for a park or parkway at one-tenth the cost thus saving $6 to $10 million.

3. We feel that a little park connection cannot justify the condemnation of homes when an adjacent parcel involving no homes will do the job.

4. While the Capper-Cramton Act envisions the taking of some shoreline property in order to build a highway, it also cautions against acquiring particularly expensive shoreline property. In any event, should the parkway in Prince Georges County include the slightly inland portion proposed by the Maryland-NCPPC, it would nonetheless permit more shoreline driving than is now possible on the companion Virginia parkway.

5. The NCPC has made accommodations to avoid taking homes in the three other residential areas along the shore. In view of the alternatives available to them and the concessions only this group has offered, no justification can be made for this acquisition.

For all of these reasons, Mr. Chairman, we urge that funds not be provided for the George Washington Memorial Parkway in Prince Georges County, Md., as presently planned.

Comparison of land acquisition costs—Broad Creek and Fort Washington

[It can be assumed that the Federal route will entail at least twice as much highway building costs, hence the alternative route will save upward of $2,000,000 to $3,000,000]

NCPC route	Mileage	Acreage to be acquired	Valuation	Improvement	10 percent contingency	Total	Savings
NCPC estimate	2.7	180	$2,634,000	[1]	$263,400	$2,897,400	None
Maryland NCPPC route (NCPC estimate)	2.0	60	695,000	None	69,500	764,500	$2,132,900
NCPC route (our estimate)	2.7	180	[2] 5,400,000	$300,000	570,000	[3] 6,270,000	None
Maryland NCPPC route (NCPC estimate)	2.0	60	695,000	None	69,500	[4] 764,500	5,505,500

[1] Presumably included in base.
[2] At $30,000 per acre.
[3] NCPC's estimate for entire 7.2 miles (660 acres) is only $5,562,000.
[4] Fairness requires us to caution that NCPC's estimate for the local alternate is in all likelihood also too low.

NOTE.—Following the Maryland NCPPC's alternate route will result in savings sufficient to purchase the remaining 5 miles of parkway.

Hon. CARL HAYDEN,
Chairman, Appropriations Committee,
U.S. Senate, Washington, D.C.

DEAR SIR: I am writing to you concerning the route of the proposed George Washington Parkway route in Prince Georges County, Md.

We have lived on Broadcreek Bay since 1957, before the present route, proposed by the National Capital Park and Planning Commission, which comes off the Potomac around Broadcreek Bay through our home. For the past 8 years the threat of condemnation by the NCPC has kept us in a turmoil for several months annually. Why must taxpaying law-abidding citizens be treated so unfairly?

The NCPC has never consulted the people of the Broadcreek area who are directly affected to try and work out a livable solution. They have hopscotched their route through other areas of Indian Queen Point and Hatton Point going off the shore to avoid homes, but not in our area. Why?

We have our surrounding bay and feel the cement and asphalt of a road would do great injustice to its beauty. As a professional artist I have spent hours painting scences of the waters, lands, birds, and flowers of the Broadwater landscape in which I live. The ever-changing sounds, colors, and mood of this big bay land have greatly influenced my life as an artist. Two of my paintings of this land and water have won first place awards, and four others were selected to be represented in the American Fine Arts Exhibit. So you see, sir, these banks off the Potomac are very close to its inhabitants and we respect and care for it deeply.

When President Johnson stated that he wanted the banks of the Potomac preserved, surely he did not mean with cement and asphalt. There is no way a highway or parkway can go by the banks of Broadcreek Bay without destroying three-fourths or more of its beauty. The Canadian geese would no longer settle on its waters each evening at dusk, the birds and deer in the adjoining forest would have to go, no longer would the eagles nest here, gone would be the graceful blue and white cranes, in adition to the other wildlife and wild shrubs.

We feel the only solution is the alternate route as proposed by the Maryland-National Capital Parks and Planning Commission which moves the parkway inland south of Broad Creek avoiding the destruction of our home and our neighbors' homes. The route inland also represents a savings of several million dollars over the shore line route. Please help us by considering this alternate route off our Broadcreek Bay. Thank you.

I request that this letter be made a part of the record of your committee hearings concerning the George Washington Memorial Parkway in Prince Georges County, Md., on March 9, 1966.

Thank you for your time.

Very sincerely,

Mrs. Ruby M. Grady.

Prince Georges County, Md.

Introduction and Statement of Mr. Chesley

Mr. Naftalin. Mr. Chairman, I intend to be as brief as possible.

My name is Micah Naftalin and I represent the South Potomac Citizens Crisis Committee. At this point I would like to introduce the chairman of that committee, Col. John W. Chesley, Jr. With the chairman's permission Colonel Chesley would like to make a few introductory remarks before I summarize my statement so he can present for the record a couple of points with respect to easements and intention of some of the landowners in this area and to show a couple of pictures.

Senator Proxmire. Colonel Chesley's written statement will be place in the record at this point.

(The statement follows:)

Opposition to National Capital Planning Commission Request for Funds for George Washington Memorial Parkway

My name is John W. Chesley, Jr., and my home address is 11001 Mariner Drive, Silesia, Md. I am chairman of the South Potomac Citizens Crisis Committee, a group composed of the Prince Georges County home and property owners directly in the path of the GWMP as presently being advocated by the National Capital Planning Commission. I speak in opposition to that portion of the NCPC appropriations request which totals $6.1 million for the GWMP. This is composed of $2.9 million for Prince Georges County and $3.2 million for Fairfax County, Va. There are many cogent reasons for opposing this project and include needless expense, destruction of many beautiful homes, and the desecration of a beautiful wooded shoreline by a shiny ribbon of a roadway. I do not wish to repeat these facts but do wish to stress what I believe are three important points.

1. In 1961 the Congress authorized one-half million dollars of matching funds for the purchase of three parcels of parkland which lay in the path of this project. I understand that the authorization stipulated that these parcels were not to be connected by a roadway. Five years later these parcels are still tied up and have not been acquired. Also, five years later a request is submitted to connect these same parcels with a parkway.

2. Much propaganda has been spread of the idea that no homes will be taken by this project. It is true that "life estates" have been discussed but it has been difficult to obtain firm information of what is intended. I have been advised specifically that homes would be condemned and title pass to the Federal Government. Also, that present owners could reside in the houses for their lifetimes. However, I was told that there was no guarantee that these "life estates" would be honored if the Government later required the area they occupied.

3. After many years of proposing a parkway which has been considered by the public to be a usable highway similar to the GWMP in Virginia, in the last few days the NCPC has stressed the idea that they really do not care about a road at all but merely desire the land to connect the three or four large Federal parks in the area. I believe that such a concept should be widely publicized before funds are authorized.

We the landowners directly in the path of any route that this parkway might take have been urging the Government agencies involved to accept our donations of scenic easements to protect our beautiful shoreline. If our homes and shoreline are spared by the Federal bulldozer we as private citizens can accomplish far more to preserve our natural environment that can be done by this proposed project.

COMMITTEE REPRESENTATION

Senator PROXMIRE. You may proceed, Colonel.

Colonel CHESLEY. I apologize for being in uniform.

Senator PROXMIRE. No need to apologize for that uniform.

Colonel CHESLEY. We represent the homeowners in this area of Prince Georges County through which the George Washington Memorial Parkway runs according to the Interior Department's present plan, except for one or two small areas which have not signed up with us; we are this area.

OBJECTION TO SHORELINE CONDEMNATION

I would like to show you some pictures of the area that we have taken and as to why we feel the way we do. This is a picture of our house which is right here in the center of this. We have neighbors scattered around. We oppose what the Interior Department is trying to do by condemning our shoreline for a parkway.

One reason is that here is what has happened on the Virginia side directly opposite us where the road is close to the water. It takes approximately 500 to 600 feet of waterfront on the Virginia side right here. The houses have crept down behind it and to us from where we sit, it certainly destroys the very idea that we think the Interior Department is trying to put across.

In direct opposite to that, just below it, the road was moved inland to leave the existing homes and the private area intact. Across from us in this area near Commonwood and Wellington there are various scattered, very pretty homes on large tracts of land. That is what we wish to do or preserve in our area rather than having them take the shoreline and allow the development to close in behind us. They are planning about a 500-foot strip, which is very narrow for this area.

Here is a view of our area taken from just up on the bluffs so that from up here you can see the river.

PROFFER OF SCENIC EASEMENTS BY HOMEOWNERS

Here are further examples of what happens when they build highways along the shoreline. These pictures were taken up just above the Capital Beltway where they have stripped off the hillside and built these big highways. Therefore, we oppose the taking of the shorelines supposedly for a roadway. We have heard that this is secondary at this point. The local citizens have tried to offer scenic easements to the Interior Department and the National Capital Planning Commission in an effort to preserve this very shoreline that they wish to take.

As representatives of all of these people in here we have offered to cooperate and do what we can if they will save our shore. They can put their parkway behind us and we will preserve what we have between the parkway and the river. We feel that their proposal to take a very narrow strip along here will defeat the very purpose they claim for the bill.

Senator PROXMIRE. Thank you, Colonel.

Mr. Naftalin?

COMMMITTEE OPPOSITION TO APPROPRIATION OF REQUESTED FUNDS FOR PRESENT COMMISSION PLANS

Mr. NAFTALIN. Mr. Chairman, the South Potomac Citizens Crisis Committee is an organization which speaks for the rules 40 and 45 homesite owners which Colonel Chesley has pointed to on the map. These are the only persons involved in the appropriations for the George Washington Parkway.

I might point out we will be speaking of a slight inland portion. These owners are the same owners who own the property where the inland segment would run, so it is not a situation in which we are suggesting that land of neighbors be taken. It is the same people on the land in either case.

We oppose the $2.9 million appropriation but I should say that we only oppose it as it is presently planned.

INLAND PARKWAY LAND ACQUISITION SAVINGS

We oppose it for a number of reasons which I will try to make very briefly here.

The approximate one-quarter mile inland deviation that we are suggesting running for approximately 2 miles in length between Broad Creek and Swan Creek, which is the proposal that was made in November 1965 by the Maryland National Capital Park and Planning Commission, would result in approximately one-tenth the land acquisition cost and I am comparing figures of $764,500 versus $6,270,000, or a net saving by our proposal of $5.5 million.

ROAD CONSTRUCTION SAVINGS AND NONMOLESTATION OF HOMES

Additional savings of $2 to $3 million in the subsequent road construction costs, and in addition would avoid the taking of between 12 and 25 homes, depending on the utlimate alinement of the road.

Much has been said over the past few weeks about our trying to kill this George Washington Parkway. We would like to set the record straight that this allegation is just not true.

The following is, I believe, a rather objective analysis of the opposing positions:

NONCONVENTIONAL PUBLIC USE OF PARKWAY

NCPC's interest in the subject portion of the Potomac shoreline—that is, Broad Creek to Swan Creek—is first to preserve for posterity beauty of the Potomac and the Potomac shoreline under the Capper-Cramton Act. A parkway would involve no active public use in the conventional sense of that word but would merely provide a two-lane, 24-foot-wide parkroad comparable to Beach Drive in Rock Creek Park.

This road would be for the purpose primarily of connecting two active park centers and facilities at Fort Washington and Harmony Hall; Fort Washington being here below and Harmony Hall being right here above.

SHORELINE BEAUTY PRESERVATION THROUGH SCENIC EASEMENTS

In response to these requirements we contend that by acquiring the slightly inland area proposed by the Maryland group and providing protective easements all the way to the shore from a nominal to zero cost which the landowners have offered, first, the beauty of the shoreline would be more broadly protected because this would be a wider area.

Second, more useful parkland would be permitted since the route would run through the Government-owned antenna field soon to be turned over to NCPC for surplus and, third, eliminating the need for a supposed causeway which they have suggested here which would be a causeway out across this point here.

We make the point that to the extent that NCPC wants this little stretch of shore for a park is unnecessary because of he ample major park land which amply surround it, and we believe it is unfair and capricious to disregard the owners' proposals to select the easements for the protective shore.

As I said, this would be at a saving of $6 million to $10 million.

BALANCING OF CONVENIENCES

In addition, we feel a little park connection cannot justify condemnation of homes when a partial condemnation of the land would be adequate. We are proposing an inland route, first, and they are proposing a shoreline route and we point out to the committee that, even with our slightly deviation inland, the Maryland side of this George Washington Parkway would still have three-tenths of a mile or more shoreline driving than does the Virginia side which was built under the same act.

In conclusion, Mr. Chairman, stripped to its essentials, it seems to us effective and well beyond the boundaries of public purpose for the Government to condemn an extensive section of private property with the resultant taking of homes and homesites for a little strip of park which will not be designed for active use for the public when, with easements, all of the legitimate public purposes could be accomplished by moving the site slightly inland, with no relocation of homeowners required and a great reduction both in acquisition and construction costs to the public.

For all of these reasons, Mr. Chairman, we urge the funds not be provided for the George Washington Memorial Parkway in Prince Georges County unless—as it is presently planned—unless assurances can be secured from the NCPC that the alternative route would be employed.

SAVINGS DERIVING FROM INLAND PROPOSAL

Senator PROXMIRE. You are saying, No. 1, it would cost less?
Mr. NAFTALIN. A great deal.
Senator PROXMIRE. By how much?
Mr. NAFTALIN. It would be about $5 million less just in this year.
Senator PROXMIRE. What are the two figures?
Mr. NAFTALIN. The two figures are $764,500.
Senator PROXMIRE. Who is the authority for that estimate?
Mr. NAFTALIN. That is the NCPC's estimate for the inland route—and these are our figures, $6,270,000.
Senator PROXMIRE. You say they are your figures. Is there a dispute about the figures?
Mr. NAFTALIN. Yes, there is. The dispute is that we are taking the same acreage that they use. NCPC estimates a $2 million saving. We estimate $5.5 million saving and the difference in figures is this: If you divide acreage into their dollar figure, it comes out to approximately $14,000 per acre. We point out that the recent sales—and we have a number of them over the past 2 years—on shoreline property have all been running approximately in the range $15,000 to $17,500 for half an acre.
So we computed this at $30,000 an acre and based on their acreage figures we came out with this figure as opposed to their figure.
Senator PROXMIRE. At any rate, there is no dispute that there is a saving; but you say the saving would be $5.5 million and they say it would be $2 million. In the second place, the purposes can be accomplished by easements.
Mr. NAFTALIN. Yes, sir.
Senator PROXMIRE. All of the purposes?
Mr. NAFTALIN. Yes.

PURPOSE OF CONTEMPLATED SHORELINE PARK

Senator PROXMIRE. Including the park.
Mr. NAFTALIN. Yes, sir; because they are not planning a park to be used as a park. They are planning this park only as a means of connecting Fort Washington to Harmony Hall. With respect to the park the only value of the park other than that connection as a road is to preserve the beauty of the shoreline.

PRINCE GEORGES COUNTY COMMISSIONERS ENDORSEMENT OF SHORELINE ROUTE

Senator PROXMIRE. What is the reaction of the Prince Georges County commissioners to the inland route? Have they stated a position on it?
Mr. NAFTALIN. They opposed the inland route officially.
Let me just say this, and I can't speak for the Prince Georges County commissioners, but I feel that the Prince Georges County officials have taken the position, inasmuch as NCPC said they will not build the

parkway unless they can have this little section, the county commissioners have taken the position they have to go along with the NCPC. I don't think, historically, they have been wedded to one position or the other. They are concerned in getting the parkway. As a strategic point, I would say it is fair to say they have come out for this route.

MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION PROPOSAL OF INLAND ROUTE

I think it should also be pointed out that the Maryland National Capitol Park and Planning Commission proposed the inland route and published their map. That is a route that cannot become a final route without the county commissioners approval. I think it is fair to say in the nature of things at the time they proposed it, which was last November, they had the concurrence of the Prince Georges County commissioners.

They have since changed their position and we believe as a matter of legislative strategy and not on the merits. I am not quarreling with that if that is their views, but in terms of the merits of the proposal I don't think the county commissioners would oppose a compromise here if they thought they could accomplish the purpose of having a parkway through Fort Washington.

Senator PROXMIRE. Thank you very much. You have made a convicing and strong case so far.

Colonel Chesley, may I say our friends in Virginia have a similar problem on their hands with a $3.2 million, which they will get to later.

STATEMENT OF CHARLES B. MacDONALD, PRINCE GEORGES COUNTY CIVIC FEDERATION AND THE POTOMAC FOUNDATION

GEORGE WASHINGTON MEMORIAL PARKWAY

Senator PROXMIRE. Our next witness is Mr. Charles B. MacDonald, Prince Georges County Civic Federation and the Potomac Foundation.

Your written statement will be placed in the record at this point.

(The statement follows:)

My name is Charles B. MacDonald. I live at 9233 Hatton Point Road, Oxon Hill, Md. I appear as spokesman for the Prince Georges County Civic Federation, which encompasses 93 local citizens' associations throughout our county. I speak also as chairman of the Potomac Foundation, a group of some 125 citizens of southern Prince Georges County who recently defeated in the Maryland courts a proposal to build 20-story apartment buildings across the Potomac from Mount Vernon. I speak in support of appropriations requested by the Department of the Interior for the purchase of lands for the George Washington Memorial Parkway.

The civic federation, along with my own local citizens' association of Swan Creek, has long advocated the purchase of Potomac shorelands for conservation purposes, eventually to be included in the parkway system. We have not always had the 100-percent support from our county government that we have today. We have not always had the support of House and Senate Appropriations Committees—in the 1930's, there was the depression; in the 1940's, World War II; in the early 1950's, Korea; then, in later years, other public works projects that these committees deemed more pressing. Yet, even so, the Congress and our county government have each contributed $750,000 toward this effort to keep this part of the Potomac River scenically worthy of our Nation's Capital.

We are conscious now of the urgency that the President himself has attached to purchase of these lands as part of his program to make the Potomac "a

model of conservation" for the Nation. Thus, we in the civic federation and those who have fought last ditch legal battles against scenic encroachments are hopeful that despite the exigencies of the war in Vietnam and other requirements, you will act to complete this vital land acquisition program.

There has been some local opposition to this project in the past, and a small core of opposition remains, despite the best efforts of sensitive planning officials to accommodate objections. Yet it would hardly be reasonable or fair to eliminate Prince Georges County from the shoreline preservation program on the basis of the objections of a small group.

As seen by all responsible officials, there can be no further deviation from the shoreline route of the roadway if it is to do what it is supposed to do: prevent high-density development of the Potomac shore. Many of us who reside in the immediate area find the intrusion of a parkway objectionable, yet we recognize that this is the only effective tool for saving something of the present beauty of our region for millions of Americans who will follow us.

I have seen how hurt some people have been who have built their homes on or near the land to be taken. As members of this subcommittee, you may know how bitter some of these people are. Yet if we delay further on this worthy project, there will be even more people who will buy and build on the preservation area, only to join and enlarge this tragic group. We have seen the price of this land almost triple in the last 10 years. We have seen the area to be purchased dwindle in size and beauty. The American people are going to pay for this; let us help them now before it becomes even more costly in terms both of money and of human emotions.

The tactics of those who would again defeat appropriations for the George Washington Memorial Parkway in Prince Georges County have now become apparent.

With the exception of a few opponents who live in Broad Water Estates, all of these people bought their land—some within the last few years—in full knowledge that this parkway was approved and one day might come, unless they could defeat it by the device of crying, "Save our homes." The parkway route since 1930 has always encompassed all this area except Broad Water Estates, where Federal officials plan a causeway to avoid all homes.

Yet such protests have these people raised that Federal officials have made extraordinary efforts to accommodate them. Then they turn and use the very concessions the Federal officials have made—the causeway, reduction of the taking area, a two-lane instead of a four-lane parkway—as arguments against the parkway. This is hardly fair.

Except those who bought their land quite recently, these people have known for at least 10 years that there has been intensive agitation for this parkway. They could have at any point, instead of defeating the parkway, proposed "scenic easements." Yet only now, when the parkway seems assured, do they suggest this device. They do not say who will pay for these scenic easements, nor do they figure costs of scenic easements in their estimate of savings achieved by their inland route. Once one landowner demands payment, all will. Without payment, this is just another device to beat the parkway.

These people claim now that they are conservationists. Theirs has been a deathbed conversion.

Already on the north shore of Broad Creek another group has gone to court to force county officials to grant them building permits in the path of the parkway. A year from now they will be forming another crisis committee and claiming that Federal officials have done them wrong. They will raise the pitiful cry, "Save our homes."

Let these machinations be rewarded in this case and every conservation project still unfunded will be jeopardized.

I submit for the record a copy of the civic federation's resolution on this matter and respectfully ask your support for the appropriation of $2,900,000 as asked by the President and the Department of the Interior.

RESOLUTION

(Passed unanimously by delegates to the Prince Georges County Civic Federation at the regular meeting of March 2, 1966.)

Whereas the Congress of the United States authorized in 1930 the construction of the George Washington Memorial Parkway; and

Whereas no portion of that parkway in Prince Georges County has yet been constructed; and

Whereas the U.S. Department of the Interior has requested the Congress to appropriate in the coming fiscal year $2,900,000 for the acquisition of land for the parkway on a Federal-county matching basis; and

Whereas the best interests of this county and of the Nation would be served by immediate purchase of the parkway lands to protect the shoreline of the Potomac River: Be it

Resolved, That the Prince Georges County Civic Federation urge both the House Appropriations Subcommittee on Interior Appropriations, the Senate Appropriations Sucommittee on Interior Appropriations, and the Prince Georges County delegation to the general assembly to authorize bonds and appropriate funds, as proposed by the board of county commissioners and by the Department of the Interior, to facilitate purchase of lands for a shoreline route for the parkway; be it further

Resolved, That the authorization for county bonds now before the general assembly be amended so as to delete the provision making the bond authorization null and void if the Congress fails at this time to appropriate the Federal share of funds.

Support of National Capital Planning Commission Budget Request

Mr. MacDonald. Mr. Chairman, I will try to be even more brief in my summary of the statement than I have been in the present.

I am Charles B. MacDonald, of Oxon Hill, Mr., and I am speaking for the Prince Georges County Civic Federation of which I am a member of the board of trustees.

Mr. Chairman, I speak in support of the funds of the National Capital Planning Commission and the President have asked for the George Washington Memorial Parkway in Prince Georges County.

In the interest of time and with the knowledge of how receptive this committee has been to this project in the past, we have made no effort to turn out a mass of speakers here today. I hope in some small measure my remarks can carry some of the interest and support of the vast majority of people in Prince Georges County have for this project. This committee had the project completely restudied by the Interior and Insular Affairs Committee and we were told it was necessary and desirable.

Preservation of Entire Shoreline

This committee has devoted funds, but those funds except on one case was blocked by the House. The House is more friendly now and we feel this is an opportune time because it is urgent. If the President is to fulfill his pledge that the Potomac is to be a model for the Nation then we feel this part of the Potomac shoreline should be preserved along with adjacent shorelines.

People buy land in this pathway. Because of the delay over the years, the Prince Georges County commissioners are unable to deny zoning permits.

Washington Post Article

I would like to ask permission to insert in the record a clipping from today's Washington Post about this area.

Senator Proxmire. Without objection it may be submitted.

(The clipping follows:)

[From the Washington Post, Mar. 16, 1966]

OWNERS SUE TO BUILD IN ROAD'S PATH

A suit seeking a court order to compel Prince Georges County to grant building permits for seven single-family homes in the path of the proposed route of the George Washington Memorial Parkway was filed yesterday in Prince Georges circuit court.

The suit, on behalf of seven property owners in Indian Queen Estates near the mouth of Broad Creek, asked the court to overturn the county's building department in denying the permits.

Wilfred M. Dyer, Jr., lawyer for the property owners, argued that the subdivision plat for the seven lots was approved by the Maryland National Capital Park and Planning Commission in August 1964.

County officials admitted the permits were denied because the land is in the taking line of the proposed parkway, but could not say immediately how they would fight the suit.

COMMISSION ACCOMMODATIONS TO SOME PEOPLE

Mr. MACDONALD. The citizens have sued the county in the past on this.

Some of the parts which the gentelmen who preceded me are objecting to are accommodations the Planning Commission has made in an effort to meet as many of the objections of the people in this area as possible.

Senator PROXMIRE. He had one objection to taking shoreline over the inland.

Mr. MACDONALD. They have cut down the taking. It was originally to be a four-lane parkway and they have cut it down to two lanes. All of these things, I believe, were made in an effort to accommodate the objections of the residents.

WASHINGTON POST EDITORIAL

I would also like to ask permission to insert an editorial from the Washington Post of March 16, 1966, and I urge that we do not delay any further lest more people would be hurt by this parkway.

Senator PROXMIRE. It may be inserted.

(The editorial follows:)

[From the Washington Post, Mar. 15, 1966]

PARKWAY IN PERIL?

The crucial moment has arrived for action on the Prince Georges County leg of the George Washington Memorial Parkway. The Maryland Senate has passed a bill authorizing a bond issue to provide that State's share of the funds required to purchase the required right-of-way. If these funds are forthcoming, there are strong indications that Congress will appropriate the $2,900,000 matching fund. This would make possible completion of a project which all the planners deem essential for a first-class park system in this Capital City.

But on the eve of a meeting of the Prince Georges delegation tonight at Annapolis there are murmurs of dissent and complaint about the taking of property in the path of the proposed right-of-way. If this grumbling is allowed to defeat the bond issue, the entire project may be sacrified. The compromise shoreline route has the support of the National Planning Commission, the National Parks Service, the Prince Georges Board of Supervisors and many civic groups. It could not be changed at this late date without jeopardizing the entire project.

In an undertaking of this kind it is utterly impossible to satisfy every property holder. The current proposal is to pay current values for the land, high though they are, and to allow residents of the area to continue living in their homes for

the remainder of their lives. Thus it is not only fair; it is very generous. In the circumstances the property owners would be well advised to withdraw their objections and aid the consummation of a plan that is vital for the whole community.

But, in any event, the decision has to be made on the basis of the general public welfare. We can scarcely imagine any public official staking his future on a knifing of this propect at this important moment of decision. Let the petty bickering of the past float down the Potomac and let every public-spirited official and citizen lend support for the final hurdle clearing at Annapolis and Capitol Hill.

OBJECTION TO FURTHER DELAY TO ACCOMMODATE ADDITIONAL PEOPLE

Mr. MACDONALD. This is a worthy conservation project and we should move in order that others will not be hurt.

I thank you for your attention.

Senator PROXMIRE. To be sure I understand. The preceding gentleman made two points, one that it would be cheaper to take the inland route; and, two, that you achieve all of your objectives by taking the inland route. Is he wrong on either count and if so how?

Mr. MACDONALD. Sir, our position has been in this that we are not the people but the responsible officials and the Federal Government and the Prince Georges County commissioners who put up the funds.

Senator PROXMIRE. Have you any reason to dispute the arguments?

Mr. MACDONALD. I have no reason to dispute the figures. If there were a scenic easement and it did not again delay the parkway, this would certainly accomplish many of the objectives of the bill. I am shocked, sir, at the thought of another delay. These people now north of Broad Creek, who are suggesting to the county commissioners to get the permits in their areas, what are we going to do to accommodate them? This has been going on so long that is why the problem arises.

Senator PROXMIRE. You want action and you want it now, and if it is possible to accommodate the objections and do it more cheaply for less cost, that would be fine, but you don't want to delay it further.

Mr. MACDONALD. Yes, and to meet the objectives of the bill.

Senator PROXMIRE. Thank you very much, Mr. MacDonald.

STATEMENT OF JAMES F. GALLAGHER, BROAD CREEK CITIZENS ASSOCIATION

GEORGE WASHINGTON MEMORIAL PARKWAY

Senator PROXMIRE. Mr. Gallagher. I understand you represent the Broad Creek Citizens Association.

Your written statement will be placed in the record at this point.

(The statement follows:)

My name is James F. Gallagher. I live at 9255 Hatton Point Road, Silesia, Md. I am here today as president of the Board Creek Citizens Association, whose 183 members live in an area affected by the proposed George Washington Memorial Parkway.

In order to put our presentation in the proper perspective, I would ask you to remember these facts about our association. We represent the overwhelming majority of residents in our area. Our activities are varied and include sponsorship of a scholarship to the Prince Georges County Community College, an annual art show, and a music festival that this year will have over 220 children participating. We have endeavored to be a positive factor in our community, and it is from this view point that we ask you to consider our testimony today.

We are opposing the $2.9 million for the George Washington Memorial Parkway from the District line to Fort Washington. This opposition has been studied and reflects the following considerations, the first of which is economic:

Interior's request, plus matching funds that may be voted in Annapolis, total $5.8 million for land acquisition. This figure is woefully inadequate. I would ask you to direct your attention to the area on the map from Harmony Hall to Fort Washington. Acquisition of this 2.7-mile stretch will cost the taxpayers $8,025,000. This figure has been honestly arrived at by using recent land sales in the area and the breakdown follows:

1. Approximately 2.7 miles times average 600-foot taking line equals 217 acres times $30,000 per acre	$6,510,000
2. 30 homes times $25,000 per home	750,000
3. Administrative and legal fees for the condemnation proceedings	730,000
4. Appraisers fees, 70 pieces of property, 2 appraisers each	35,000
Total	8,025,000

By way of explanation, the waterfront values are based on one-half acre purchase in Riverview Estates for $15,000. The average home price is a studied estimate. The legal and administrative fees are figured at 5 perecnt each and this is the result of my personal experience. The appraisers fees at $25 each are reasonable estimates.

Property owners on the Virginia leg of the George Washington Memorial Parkway were awarded condemnation compensation three times the NCPC estimates. Develop this thinking for the 7.5 miles in Prince Georges County and you begin to approach a realistic cost to the citizens of this Nation. Simple arithmetic shows this figure to be $17.4 million; add construction costs of $600,000 per mile and you are now studying a request for over $22 million. Now, I would like you to consider these questions. Has the NCPC demonstrated a need for a project of this magnitude? Does it serve the national defense? Is it a vital link in a major highway system? Is it the only access to a needed park area? It is our opinion that NCPC could not truthfully answer "Yes" to any of these queries.

There is, however, a demonstrated need for a commuter road in this area, but should the Federal Government build and finance a road that is clearly the responsibility of the State and county governments?

This committee has considered this budget item in years past and in 1959 expressed concern over "the confusion and unsettled conditions that have prevailed among property owners in the area during the period Federal appropriations have been under consideration * * *." Today these conditions still exist, and if anything they have been magnified.

If the preservation of the shoreline is the major concern, the majority of residents are more than willing to consider scenic easements; but when the NCPC turns down a large gift of land as they did in 1958 from Mr. Henry Bartholomew, you wonder if their real interest is in the George Washington Memorial Parkway.

Gentlemen, in closing I would ask that you consider this budget request as objectively as possible, as well as our honest opposition to it.

Thank you, it has been an honor for me to appear here today.

Commission Budget Request Inadequate

Senator Proxmire. We are happy to have you.

Mr. Gallagher. My name is James F. Gallagher. There is a statement that I have prepared and I am the president of the Broad Creek Citizens Association. We reside in this area right here [indicating].

Senator Proxmire. Your association includes the 45 families who have property that would be directly affected?

Mr. Gallagher. That is correct.

We are speaking in opposition to this $2.9 million appropriation for the George Washington Memorial Parkway plus matching funds that might be voted in Annapolis of another $2.9 million, because we feel that this figure is woefully inadequate.

The cost estimates that the Broad Creek Asociation has arrived at for the 2.7 miles from Harmony Hall along the shoreline to Fort Washington is an $8,025,000 figure based on the same $30,000 an acre plus 30 homes that run $25,000 an acre and administrative and legal fees and pricers' fees. All of these are very realistic costs. The Federal Government took some of my property and I know what it costs to do this.

VIRGINIA CONDEMNATION PROCEEDINGS

We also know that on the Virginia leg of the George Washington Memorial Parkway condemnation compensation was awarded three times the National Capital Planning Commission. If we were to develop this thinking for the entire length of the George Washington Memorial Parkway, we are going to come up with a figure of $17.4 million and using a $600,000 a mile construction figure for an average road. You are going to be talking about $22 million.

My point is this, sir: We have $5.8 million total that might be appropriated, half by the Federal Government and half by the State of Maryland. If the realistic and actual cost would be $17 to $20 million, what would happen to the properties in this taking line? Would you not have more suits as you have here?

In 1957, 1958, 1961 we have gone through this fight. Money has been authorized to buy three separate parcels of land by the appropriate committees. It has been appropriated for Harmony Hall, Fort Foote, and the entrance here by the Tantalon complex and in 5 years that land has not been bought. This adds to the confusion, to the unrest of the people in this area.

EASY ACCOMPLISHMENT OF EASEMENTS

We are vitally concerned with this because it takes so many waking hours of your day. We have lovely homes. There is no question about the easements. These easements could be obtained in 2 days if the Federal Government would cooperate.

1958 ORIGINAL INLAND ROUTE

We had in 1958, sir, in the original inland route which is not the inland route they are talking about now, but swung around here, Mr. Henry Bartholomew, one of the largest landowners in this area, offered to donate 1 mile through this way—donate it to the Federal Government to put the road this way and they refused him. They turned him down cold. My position very honestly, sir, is: Does the National Capital Planning Commission really want a George Washington Memorial Parkway or do they want a park land?

We are talking about public and private ownership again, and this is a difficult question.

COMMISSION REPRESENTATIVES' TESTIMONY BEFORE STATE LEGISLATURE

Mr. Conrad and Mr. T. Sutton Jett, appeared before the Legislature of the State of Maryland last night, before the Prince Georges County delegation and many of us were privileged to hear them, but I personally was appalled at the lack of information that they were able to give the county legislators on the $2.9 million bond issue that they

are considering. They were talking about the life estates. Mr. Conrad mentioned this. This is how they are going to fund this and take care of these people so they won't lose their homes, but a life estate could mean that this thing might not be built for 50 more years. They didn't know.

These two top Federal officials did not and could not give answers to the questions the legislators asked them about the living estates they are talking about. We are talking realistically and honestly of the people and we are a government of the people, by the people, and for the people and we cannot force these people by and these people are very interested, Senator, in what happens to this area.

Proffer of Scenic Easements

This Capper-Cramton Act had been authorized in 1930. Dr. Vehoffer here has been in that area since 1917. The Bartholomew farm, the Potomac Valley farms—they started purchasing in there in the early twenties.

Mrs. Tufts, who will appear this afternoon, and her family has lived there many, many years. These are all landowners. They are not interested in developing this for their own interests. These are people interested in the scenic interests and these are the people the Federal Government is turning down and we ask you, sir, to consider our position as objectively as you possibly can.

We have tried to be honest and forthright and I am sure that we are opinionated on our own side, but we ask you to consider this and consider it in light of the total appropriation that you will really be making if you appropriate $2.9 million.

Inland Route Advocacy

Senator Proxmire. Then you support the same position as Mr. Naftalin, I take it.

Mr. Gallagher. Yes, sir.

Senator Proxmire. In other words, you favor the parkway as soon as possible but you say the inland route is more economical and you say it would accomplish all of the objectives that are sought to be achieved?

Mr. Gallagher. Yes, sir.

Senator Proxmire. I think you make a strong and impassioned plea and I appreciate it very much.

Mrs. Tufts is next.

Mrs. Tufts. I should like to waive my time in favor of other representatives of the area.

Senator Proxmire. You have a statement here and that will be put into the record and called to the attention of the other Senators.

(The statement follows:)

I speak as a homeowner and one who has lived in my present home since 1939 and whose family has owned the property since 1925.

Our home is located approximately halfway between Broad Creek and Swan Creek. It is a large brick house on the bank of the Potomac. It is built of pink brick from what was known as the Old Senate Office Building that was razed to make way for the present Bureau of Agriculture Building, and from parts of several other historic buildings.

The proposed route of the George Washington Memorial Parkway would either destroy this house or seriously spoil our property. It would drive away much of the wildlife and the peace and joy of our neighborhood.

The alternate route, an equally scenic road, proposed by the Maryland-National Capital Park and Planning Commission and approved by Mr. Tufts and myself and the majority of property owners involved—though many of us see no need for this expensive highway at all—is one-third shorter, many millions of dollars less costly for land acquisition alone, many more millions less costly for road construction, requires acquisition of only half as many private properties, does not require needless taking of homes in this 2½-mile area, when homes in all other areas of the Parkway have been spared. Moreover, the alternate (inland) route would keep any real estate developments, possible high-rise buildings, and so on farther back from the shoreline since the property between the shoreline and the alternate route is privately owned and these property owners are willing to grant covenants or scenic easements.

I urge that the U.S. Senate Committee on Appropriations refuse to approve the appropriation of Federal moneys for land acquisition and construction of the George Washington Memorial Parkway through southern Prince Georges County, Md., unless the U.S. Department of Interior agrees to adopt an alternate or inland route that will not disrupt dozens of homes, thereby causing unnecessary anguish and hardship to a settled community of outstanding citizens.

STATEMENT OF MRS. TOMMY ISHEE, HOMEOWNER, PRINCE GEORGES COUNTY, MD.

GEORGE WASHINGTON MEMORIAL PARKWAY

Senator PROXMIRE. Mrs. Ishee, it is nice to have you here. Your written statement will be placed in the record at this point. (The statement follows:)

My name is Maryclaire McCauley Ishee, Mrs. Tommy Ishee, and with my husband and our 10 children I own 2 acres of land and a cabin along the Potomac River at Broad Creek, Md.

I oppose this appropriation because it is for a nonessential project; it involves nonproductive land acquisition funds, and will tend to be inflationary.

I oppose it also because we feel it will permit an unwarranted seizure of our property that will be not only against our interests, but against the interests of the public as well.

Our property will be seized simply because it is scenically beautiful. The seizing agencies disagree among themselves as to what use will actually be made of our property; they agree only that no use will be made until some indefinite future time—possibly 40 or more years from now, when present homeowners die. Whatever compensation is offered to us now will be unjust and unfair in terms of fair market price at the time our property is actually needed for public use, if it is ever so needed.

Under the enabling legislation, as it has been amended, we condemned property owners will have nowhere except before the U.S. Congress appropriation committees to protest the seizure of our property or to contest its validity in terms of public need, or interest.

Mrs. Lyndon B. Johnson, in a recent speech in Denver, said: "We must improve the public hearings, which the law requires to be truly open hearings and openminded hearings, at an early stage of planning * * *. Citizens deserve not only the right to be heard, but the right to be heard sympathetically."

This conflict of posterity's scenic rights versus the rights of present property owners will ultimately affect every owner of scenic property along waterways, or in mountain or other areas throughout the United States. We believe that no inequitable precedent or pattern should be set here in the seizure of our properties; that the law should require public hearings before condemnation of private property for any reason.

I would not protest this seizure of my family's property if I believed that it was necessary to protect the Potomac shore, or to give the public needed parkland or water recreational facilities.

Within walking distance of my 2 acres there are almost 4 miles of federally owned shoreline, and almost 800 acres either now used as parkland (Fort Washington and Fort Foote), or readily available for such use. In addition, there are

almost 5,000 acres of State- and county-owned land in Prince Georges County either now used as parkland or under contract for such use. How much public parkland is needed?

Every sincere conservationist opposes putting any more highways along the edges of our rivers. Use of our land for a highway would be against the public interest.

The shoreline below Broad Creek is lovely now because private property owners have for generations kept it so. These same owners have offered to guarantee, by whatever scenic covenants are necessary, that the present scenic beauty will be maintained in perpetuity. Our offers have been ignored.

The designated "taking line" for the shoreline route of the parkway varies from about half to a whole city block from the water's edge. This will provide little more than a riverside "front lawn," bought and maintained at taxpayers' expense, for the towering apartment buildings that will rise immediately behind the Government-owned land. An application for just such a 28-story apartment complex was heard only last week. Such towers of concrete will effectively block any scenic views of the river.

Maryland State planners proposed a somewhat inland route, about one-fourth mile inland, following conservation recommendations. It would be millions of dollars less costly; could be just as scenic, would take no homes, and would involve land owned almost entirely by owners of the shoreline properties.

With the one-fourth mile area behind the water's edge protected by scenic covenants restricting housing density and building heights below the treetops, and with the additional "buffer zone" of the parkway, towering structures could not be built closer to the river than about one-half mile. This would far better serve the public interest and preserve the present scenic vista of the river.

We believe this appropriation should not be approved now until all the facts and rights involved are studied most carefully.

Opposition to Commission Budget Request

Mrs. Ishee. My name is Mrs. Tommy Ishee and I own 2 acres along the tip of Broad Creek which will be in the taking line. I oppose this appropriation because I don't believe that as now designed that it is in the public interest. I don't think that this narrow strip of land is going to accomplish any park purpose. The strip of land now proposed to be taken is just as wide—I suppose you recognize Foggy Bottom and that is Watergate. That is just about the width of the strip.

This area, as you have seen, is the area down at Broad Creek and it is a very lovely area, pastoral, and it is not a great deal different from the time when George Washington walked through there. The people who own it, and I claim no credit for this because I am a relatively newcomer, owned it for three or four generations, and they have practiced the best conservation methods. They followed all of the Department of Interior recommendations and they have been good citizens, and what is happening to them now is that someone has decided that because their land is beautiful it must go into the public domain.

If this were to be a usable park, this would make some sense; it is not. It is merely a strip that will connect two parks, Fort Washington and Fort Foote.

At the present time there is a road, Riverview Road, which is not shown on this map, about 1,000 feet inland from the shores. It takes, over Riverview Road, it takes about 5 minutes to go from Fort Washington to Fort Foote. That road has been in daily use and has been there for a long time. Any two- or four-lane road that is built will have to go in this 1,000-foot strip between Riverview Road and the shore. It will have to parallel it almost exactly. It cannot be more scenic. You can get some lovely river views from Riverview Road right now.

I personally can find no justification for putting another road in there. Riverview Road might have to be widened or something like that but there really isn't any necessity for another road. If it is not going to be used as park land and they don't need another road I find no necessity for taking the land. I am in favor of park land, highly in favor of it. I work here on the Hill with youth groups. I know the necessity.

We tried last year in every way to get more recreation land and I will appear tonight at a recreation meeting designed to get more recreation land. But merely to take a strip of land, put it in cold storage, so to speak, for a long, long time, and some of these owners are 25 years old and are being offered life estates. This makes the land useless for public land for the next 40 years or so.

I really cannot find it justified for the public good or for private good.

INLAND PARKWAY ADVOCACY

Senator PROXMIRE. I do not want to misunderstand you. Are you saying you are against this project; period—against any appropriation, against an inland or a river route?

Mrs. ISHEE. No, I think on the whole that this would not be the most advantageous time to pass this appropriation. I feel that it is a land acquisition fund, it is not productive and it might be inflationary. But since the pressure is apparently overwhelming, and I was at the Maryland State Legislature last night, and I was also a little appalled at some of the pressures that seemed to be in favor of it, if the pressure is so overwhelming, for reasons which I do not understand, that the parkway must go in at this time, then I think that it should not go along the shore. That is the worst possible place.

I don't know where it should go, but I think anywhere inland—don't take that lovely shore line for nothing.

I think there is another fact here. Since the other route is cheaper and all results can be accomplished, the only reason it is being taken is it is scenic and this is beautiful. This is the very opposite of what happened in Southwest Washington where the property was taken because it was ugly.

I think this question should be looked into. Can the Government simply walk in and say this is a beautiful piece of property and sometime, somewhere we need it so we take it now? I feel this is an extension of eminent domain. I am not a lawyer but it seems to me as a private citizen this is an extension of eminent domain and I think it should be studied.

If it were put inland I don't think this question would arise. Then validly it is cheaper. This is good reasoning. You are not taking it simply because it is scenic. This might avoid setting a precedent, which I think will be set here and will affect everybody who has a little old cabin as we have a couple of acres along any river, any stream anywhere, and that essentially is my position on it.

Senator PROXMIRE. Thank you very much.

STATEMENT OF EDWARD ALBERT, BROAD CREEK YACHT & RECREATION CLUB

GEORGE WASHINGTON MEMORIAL PARKWAY

Senator PROXMIRE. Mr. Edward Albert, Broad Creek Yacht & Recreation Club.

Your written statement will be placed in the record at this point.

(The statement follows:)

My name is Edward Albert. I live at 413 Broadcreek Drive on land that the U.S. Department of Interior wants to take for the parkway we are here to discuss tonight.

The board of directors of the Broad Creek Yacht & Recreation Club has asked me to represent the club in place of our new president, Mr. David Creson, who is hospitalized.

I would first like to make it clear that we are not reactionaries opposing progress and the public good as some of our opponents would have you believe. While there is a legitimate question whether this particular parkway is needed at this particular time, we have not taken a position opposing it. We are, instead, appealing to you on the basis of fair treatment and economy to amend the bill you are now considering.

We believe that the public good will be better served if the parkway follows the direct route proposed by the Maryland National Capitol Park and Planning Commission and by the Broad Creek Citizens Association. That route will provide a scenic connection between the large area parks, will prevent the needless destruction of fine residential areas, and will save several million dollars of public funds.

The exhibit is a view of our recreation area which is threatened by the Federal parkway plans. It is located about a mile from the Potomac River on the south shore of Broad Creek.

In 1957, several of our members helped in the successful fight against that year's version of the parkway. The plan then called for the elimination of Broadwater Estates and our club.

We believed that the threat to our community and recreation area was permanently squashed then by congressional action. We began to build the club up over a period of years. It took more than money, it took hard work. Many individuals have contributed time and labor to create a pleasant and safe recreation area.

We continue to believe that the Broad Creek Yacht & Recreation Club should to allowed to continue serving the community.

Thirty families participated in our nonprofit community club activities last season. Our swimming and boating facilities are available for the recreational use of any well behaved people who wish to join us.

We believe that our club fills a public need at no public cost. If we are allowed to continue, we will provide recreational opportunities for many Prince Georges families. We will do this at no cost to the Government, but rather on a taxpaying basis.

I would like to close by discussing the so-called compromise route. You have, no doubt, heard of this proposal to "save" Broadwater Estates by building a waterlevel causeway along our waterfront and building a bridge over the Broad Creek Yacht & Recreation Club.

We oppose this "compromise" for reasons of economy, for reasons of fair and equal treatment, and because it is not a compromise.

A causeway and bridge would add considerable extra cost to the already unnecessarily costly federally proposed route. The same Federal planners who support this compromise have told us in past years that a causeway across Broad Creek is economically and technically unfeasible. Yet Broad Creek is nowhere more than a few feet deep.

We propose the parkway follow the direct route from Harmony Hall to Fort Washington to save several million Prince Georges and Federal tax dollars.

Federal planners vigorously advocate a shore route parkway south of Broad Creek. Yet the same plans avoid the shore at Indian Queen Point and Hatton Point. Those areas afford far better views of the Potomac scene than our Broadwater Estates area does.

Also, the comparable section of the parkway in Virginia, directly across the Potomac River from us, avoids the established residential area from Wellington to Collingwood.

We propose the parkway follow the direct route from Harmony Hall to Fort Washington in an appeal for equitable and just treatment.

Finally, as you all know quite well, compromise is settlement by mutual concessions where each side yields a part of its position.

I have discussed this compromise either personally or with representatives of nearly every person whose land is directly affected by it.

No one among these people took part in any arbitration.

No one among them agrees with the proposal.

The Broad Creek Yacht & Recreation Club membership does not want to pursue its recreational activities amid the supports and in the dark shadow of a bridge.

We propose the parkway follow the direct route from Harmony Hall to Fort Washington with no compromise.

STATEMENT OF THE BROAD CREEK YACHT & RECREATION CLUB, INC., IN OPPOSITION TO THE NATIONAL CAPITAL PLANNING COMMISSION'S REQUEST FOR FUNDS FOR THE GEORGE WASHINGTON MEMORIAL PARKWAY IN PRINCE GEORGES COUNTY, MD.

By unanimous vote of all members present at general elections held on February 13, 1966, the newly elected officers of the Broad Creek Yacht & Recreation Club, Inc., were instructed as follows: "* * * to speak in our behalf opposing the shoreline route of the George Washington Memorial Parkway through Broad Water Estates."

Therefore, on behalf of 56 resident/associate members (based on last year's rolls), the Broad Creek Yacht & Recreation Club, Inc. (a nonprofit community organization) respectfully requests that matching funds for the hug-the-Potomac route from Broad Creek south to Fort Washington not be appropriated.

Broad Water Estates (with its swimming and dock facilities) was recorded in Prince Georges County in October 1956. Construction began in the spring of 1957. It was not until June 1958 that the National Capital Planning Commission authorized a route which would swing around the shore of Broad Creek taking homes and recreational facilities in Broad Water Estates.

The Department of Interior and the National Capital Planning Commission now come again to this committee with a request for funds to build a parkway through our property along Broad Creek, which they couch in terms of absolute necessity to preserve the beauty of the Potomac.

A route with a causeway along the bluffs and a bridge over the recreation facilities at Broad Water Estates has been proposed by the NCPC. However, on January 21, 1966, Mr. Waybright of the NCPC said that the NCPC had no knowledge as to whether or not this causeway and bridge were engineeringly or economically feasible. If the $2.9 million requested for land acquisition is granted and should the causeway and bridge be deemed infeasible, the affected property owners will be forced to wait until Congress appropriates the additional large grants necessary to condemn the lands and homes of our members, and meet the severance damages as well as relocation and other costs incident to the acquisition of these additional parcels.

"History repeats itself" is an old saying, but it has lost none of its validity The NCPC said in 1958 that Broad Creek could not be crossed because of the silt problem. However, Mr. William Finley, then Director of NCPC, admitted in a letter written in December 1958 (6 months after the crossing of Broad Creek was discarded) that no soundings had been taken in Broad Creek. Letters addressed this past month to Mr. Conrad, the present Director of the NCPC, and to Mr. T. Sutton Jett, regional director of the National Park Service, requesting information as to whether any soundings or engineering studies had been officially made elicited no response from Mr. Jett and an evasive reply from Mr. Conrad.

When will the members of our association be able to make plans for the future of their homes and their recreation and docking facilities? Is there any doubt as to why confusion has reigned in the minds of the affected landowners in view of the following statement? According to an article in the Washington Post on February 10, 1966, this same Mr. Charles Conrad of the NCPC, when speaking to the Fairfax County Board of Supervisors with respect to acquisition of land under the Capper-Cramton Act in Fairfax County said that "no parkway

along the bluffs of the Potomac is being considered by the Commission," and that his group, "would oppose such a ruinous road." It is extremely difficult to understand why Mr. Conrad and his group feel that such a parkway would be "a ruinous road" in Virginia, yet insists on its necessity along the southern shore of Broad Creek.

While mentioning the Virginia shore, it should be pointed out that from Chain Bridge north to Cabin John there are 4.5 miles of parkway; all of this is inland. From hunting Creek to Mount Vernon, 1.3 miles of parkway are inland. And, following the route advocated by Mr. Udall and the NCPC, 1.9 miles of parkway are inland at Indian Queen Point, Md. The George Washington Memorial Parkway on the Virginia side not only bypasses numerous homes, but also a commercial restaurant. Consequently, Secretary Udall's and the NCPC's insistence on a shoreline route is certainly inconsistent.

Our organization has been consistent in its efforts to keep Broad Creek clean, dredged, and beautiful. We feel that money would be better spent in cleaning up the Potomac than in the building a shoreline parkway. There seems to be little sense in having a parkway next to a filthy river which is, at times, completely covered with dead fish.

The inconsistency of this most recent proposed causeway-shoreline route, the adamant demands for riverfront property only in the Broad Creek area of Prince Georges County, the failure of the NCPC and the Interior Department to adequately estimate the true cost of land acquisition and damage fees, and many other compelling reasons demand that the Broad Creek Yacht & Recreation Club, Inc., respectfully urge that the requested appropriation for funds for acquisition of land for the George Washington Memorial Parkway be denied.

CAPRICIOUS AND NEEDLESS DESTRUCTION OF RESIDENTIAL AREAS

Mr. ALBERT. My name is Edward Albert. I live in Prince Georges County and own land which is affected by this land for this parkway that we are discussing, and I also represent the Broad Creek Yacht & Recreation Club.

I think between our two statements they summarize quite well the points that I would like to make, so I will simply summarize the other points.

I agree wholeheartedly with several of the preceding speakers that it is not the parkway itself but the Department of the Interior or the NCPC route that we oppose. We believe that fine residential areas are to be capriciously and unnecessarily destroyed and that these residential areas can serve to preserve the beauty of the area without public expense.

The second point I would like to make—I have this picture. Is it possible to enter it into the record?

Senator PROXMIRE. I am afraid not, since it is impossible to put anything that beautiful in color in the record. It is an exquisite color picture with the swimming pool behind it. Words fail me.

Mr. ALBERT. This is located right here about a mile from the Potomac River in Broad Creek.

Senator PROXMIRE. It looks closer than a mile.

Mr. ALBERT. We are looking across Broad Creek. The Potomac is off this way to the left only a mile.

The latest version of the route is favored toward the parkway by the Department of the Interior and the NCPC is one that runs along the shoreline and actually puts a bridge across this piece of property that belongs to the community club. It is not very appealing to think of continuing a community club amid the pillars in the shadow of a bridge there.

We think that this area is beautiful and we think that if it were allowed to continue as it is this section of river road would remain beautiful.

That is all I wish to summarize.

Sharing of Scenic Beauty With General Public

Senator Proxmire. The only question that occurs to me on this now—and you are the last of the Maryland witnesses—is that perhaps the National Capital Park and Planning Commission and the Interior Department are thinking of an opportunity for the general public to enjoy the route by driving near it and seeing it. That would seem to be about the only argument that makes any sense.

How would you meet that contention?

Mr. Albert. You will find in one of the statements I submitted this is a membership club. We do not at the moment restrict our membership geographically. We would be quite pleased to have more members. In fact, we try to recruit members and the swimming pool, the boating facilities, are available to people.

Public Accessibility to Shoreline

Senator Proxmire. My question was, Does the public have any access to this beautiful area now? Can they go down to the river or is it all privately owned?

Mr. Albert. Perhaps some of the others are more conversant with that.

Mr. Vehofer. There is a road where you can see the river again and again. In fact, Riverview Road is the name of the community which is now being established. A number of people have actually been building and occupying homes which they recently built there.

We have a home on the waterfront that is accessible, but the Riverview Road is a public road and it goes from Harmony Road with a view of the river on to Broad Creek down to Fort Washington.

Senator Proxmire. Is there nearby access to the river so that people who want to take a motorboat ride on the river can get to it easily?

Mr. Naftalin. Could I respond to that point briefly?

First of all, I mentioned in my statement that when you look at the road as a whole, there is more river-view driving even with this inland section than the Virginia side has now. To answer your question specifically, this is a mile stretch, about 2 or 3 minutes of driving. On either side is ample, major, public parkland which is entirely waterfronted. Fort Washington is all waterfronted. The Harmony Hall is the same kind of frontage that the yacht club has.

In other words, from this point, here, all the way around the Government will acquire. All of this shaded area will be Government-owned and will be parkland.

Then, just above here at Fort Foote this entire area gives the public not only access to the water, but a major park facility. We have park facilities here, here and here and the overall route is a scenic river view route either way.

We could point out in addition this would really be a lovely drive. It would provide for some scenic overlooks and give you a view of the water and it would provide for some picnic areas and provide for

bicycle and hiking trails and the other kind of things that people want to do when they stop.

Senator PROXMIRE. That answers my question.

Mr. ALBERTS. I would like to point out this is a large waterfront area and much of it is not accessible to people walking through.

Senator PROXMIRE. Thank you very much.

STATEMENT OF MISS BARBARA KEYSER, HEADMISTRESS, MADEIRA SCHOOL, McLEAN, VA.

GEORGE WASHINGTON MEMORIAL PARKWAY

Senator PROXMIRE. Our next witness is Miss Barbara Keyser. Miss Keyser, you are mightly welcome. You are a headmistress of a very fine school. I have heard wonderful things about this all my life and we are delighted to have you here. We tried like the dickens to get our kids into several schools and it is good to be in this position with the headmistress.

Your written statement will be placed in the record at this point.

(The statement follows.)

OPPOSITION TO PROPOSED PARKWAY EXTENSION PLAN

My name is Barbara Keyser. I am the headmistress of the Madeira School.

Madeira is vitally affected by the proposed extension of the George Washington Memorial Parkway, a project which we understand may involve the taking of land along the Potomac Palisades to be used for recreational purposes. The school's property runs along the river. The school also has property which runs between route 193 and the river. The National Capital Planning Commission proposes to take all of our river frontage land and additional land back to route 193 to create an area of maximum concentration for car parking and an access road to the river's edge.

The Madeira School has been in existence since 1906. It is a private secondary girls' school attended by approximately 260 girls. We have both boarding and day students from the Washington metropolitan area.

Since the school moved to its present site in 1931, the school has carefully maintained the scenic beauty of its land and it has in no way disfigured or harmed the beautiful Potomac Palisades.

The school is forced to oppose the plan proposed to extend the George Washington Memorial Parkway at this time for a number of reasons which can be succinctly stated.

First, the plan is altogether too fuzzy. In spite of repeated efforts on our part it has not been possible to determine where the taking lines will be or how much property will be taken. We are advised that these are all matters which are subject to negotiation. We do not believe that the Congress should give any agency such broad sweeping indefinite authority. A specific plan delineating the precise taking lines should first be submitted for the advance approval of the Congress.

Second, in order to keep in the school's hands as much property as possible to carry on its educational functions, the school has been willing to grant scenic easements but it has been impossible to determine to what extent easements will be used or how they will be fashioned. Any plan should be specific in this regard. The contour line, if any taking must take place, should be very low so that the necessary fencing will not mar the beauty of the school or the vista from the river.

Third, the school vigorously opposes the taking of a substantial portion of its property to be used as a parking area in a so-called area of maximum concentration in close proximity to existing school buildings. It seems to us that if the river border is to be used for recreational purposes there is no need to put in a large number of access roads. Parking is not recreation. It is particularly disadvantageous to the school to put a parking area on its land. This creates serious policing problems given the fact that the school houses a large number

of young female boarders. It also takes from the school land which is essential to its long-term development. The amount of level land available because of the rugged terrain must be kept for school purposes or it will be necessary to move earth and engage in other projects inconsistent with the best preservation of the land.

Fourth, we do not believe that Congress should be asked to approve this particular program until some other vital questions have been settled. We cannot determine whether this extension of the Parkway is to be open 24 hours a day or only during daytime hours. In any event, arrangements must be made for it to be policed. In addition, there must be provided in any appropriation adequate fencing to stop members of the public, particularly enthusiastic young male teenagers, from invading the school from the rear. We point out that one of the key points in the project is the beautiful pond now owned and used by Madeira which will attract a large number of people for bathing, beer drinking, and the like, if this proposal goes through. If we are to turn this precious school asset into a park, we must have our right to privacy on neighboring land fully respected and protected.

In short, we ask that no funds be made available for this project at this time, that scenic easements be used and a minimum amount of land, if any, be taken. The details of the operation of the parkway, its protection, the contour lines and all other aspects of the program should be thought out before it is again submitted to the Congress. We strongly urge that no area of maximum concentration be placed on the school property.

We would point out that the Great Society has many important missions. Recreation and beauty is one of the missions. Education is another. Since The Madeira School has taken and will continue to take good care of its land, the school's educational mission should not be hampered in the name of beauty and recreation.

PROFFER OF SCENIC EASEMENT

Miss KEYSER. We showed great restraint in not asking Senator Pell's and Senator Symington's wives to flank me.

I have submitted a statement so I shall be very brief.

We have roughly 400 acres of land of waterfront and the National Capital Park and Planning Commission plans to take our waterfront, but it also plans as it shows on its map, a large parking lot or an area of maximum concentration on a part of the Madeira canvas with an access road to the waterfront area. We have tried to negotiate and discuss with Mr. Conrad and Mr. Jett and we are told that their purpose is to preserve the natural beauty of the waterfront. This is what we are asking for in appropriations.

We think we have done a pretty good job in some close to 37 years of occupation of the land and in preserving the natural beauty of the waterfront and we would like to continue to do so. To that end, we have also offered scenic easements to negotiate with them on this subject.

We find that they still have an area of maximum concentration marked on us and an access road to the waterfront.

If they plan on taking the waterfront and if they plan on putting in parking lots on our land, we feel a grave danger to the school. We are a boarding school. We are a boarding school for part of our girls. Putting parking lots right next to the girls' dormitories, I think, will require very heavy fencing and extremely heavy policing on both sides of the fence.

OBJECTION TO TAKING OF WATERFRONT AND INLAND PROPERTY

We do not quite understand how this is going to preserve the natural beauty of the waterfront. We think that the gentlemen are creating somewhat of a dichotomy for us. They have also created a dichotomy

for us in the sense that if they plan on taking the waterfront which we are only too agreeable to, if it is going to preserve the natural beauty of the waterfront. This, we have very much in mind ourselves but we would like to do it through the easements, if this is agreeable. But, if they are going to take that waterfront and also as they tell us, if they are going to take our land on the other side of us for highway, because in this particular part of the highway they are planning on running it inland and not along the waterfront. We have large acreage but it is very rough terrain and in order to build the buildings which will be necessary for the school to even take in children and the growing Washington community, we would have to go into something we do not want to go into and this is earthmoving in order to get leveled areas to put up these buildings for the children and to have playing fields for the children.

We, also, think that if they are going to take our waterfront land, we would like it to be at such a contour line as to follow their own purpose and that is to maintain the scenic beauty so it would not be necessary to have fencing that would mar the beauty either from the river or from the land side.

RESTRICTION OF COMMISSION POWERS

We particularly ask your committee, Senator, that you not grant to the Commission such sweeping powers and such a broad delegation of the power of eminent domain until all of us who wish to cooperate can have a clear idea of exactly what is going to be done and what their purposes are.

Thank you, sir.

Senator PROXMIRE. Thank you.

You say that you have ample acreage and this is not a problem. Is that correct?

Miss KEYSER. We have a great deal of acreage but it is very rough terrain.

INCONVENIENCES TO SCHOOL

Senator PROXMIRE. This means if you lose this land, you would have to perhaps abandon some of your buildings and rebuild.

Miss KEYSER. We will lose some of our buildings, if we look on both sides and we will lose at large part of our playing fields and we have to have playing fields for the children, too.

Senator PROXMIRE. So, this would mean a very heavy expense in developing the land that you have. It would be possible but the expense would be very great.

Miss KEYSER. It would be possible and I think it would be disastrous from the point of conservation of natural resources because it would mean cutting in woods. It would mean moving land in order to get level areas.

EQUIVOCATION OF COMMISSION REPRESENTATIVES

Senator PROXMIRE. Have you discussed this with anyone?

Miss KEYSER. We have discussed it with Mr. Jett and Mr. Conrad.

Senator PROXMIRE. What is their response? Your argument seems very logical.

Miss KEYSER. They said they would be willing to negotiate in such a way to prevent this. We thought we accomplished the agreement

whatever was done on the waterfront would be done in such a way as to take care of our problems. Then we find the map presents the same picture that it presented when we first went to them to talk to them. We went back in August, beginning in August, to try to talk to them about it.

In other words, in negotiating with them, we feel a little bit like Alice in Wonderland.

Senator PROXMIRE. They do not specify the purpose, do they?

Miss KEYSER. First, they said it was to preserve the Potomac Palisades concept, and they say in order to keep that beauty they would move the road inland. But now, if they are going to have a public park along the waterfront with access roads and parking areas, this does not seem to me consonant with preserving the natural beauty of the waterfront.

Senator PROXMIRE. Is there a need for a park at that point?

Miss KEYSER. I think, as some of the people who will follow me, there are very large parks very close to us and on the waterfront. Great Falls Park is just to the north of us on the waterfront.

Senator PROXMIRE. I am going to ask the staff of the committee to show your testimony to the National Capital Planning Commission and get their reaction, because I think you certainly have made a convincing case. They should make their position clear and we should at least know what they are doing before we proceed on this.

Thank you very, very much.

STATEMENT OF SCOTT SEEGERS, VICE PRESIDENT, VIRGINIA POTOMAC VALLEY ASSOCIATION

GEORGE WASHINGTON MEMORIAL PARKWAY

Senator PROXMIRE. The next witness is Mr. Scott Seegers, vice president of the Virginia Potomac Valley Association.

Mr. Seegers, we are very happy to have you present.

Your written statement will be placed in the record at this point.

(The statement follows:)

OPPOSITION TO BUDGET REQUEST FOR $3.2 MILLION FOR 790 ACRES OF POTOMAC RIVER SHORELAND IN FAIRFAX COUNTY, VA.

Project unnecessary for conservation—Free easements available

About 2 years ago the Interior Department paid $744,000 for a scenic easement on 46 acres of Potomac River shoreland at Merrywood, near the residence of Secretary Udall.

Since that time I have been working with the National Capital Planning Commission and my neighboring owners of river shore property in an effort to donate a similar scenic easement covering greater acreage and a greater length of river shore further upstream. In February 1965, we accepted all the suggestions of the NCPC General Counsel for the form of such an easement. Our acceptance was never acknowledged, and the easement was never submitted to the Commission.

However, the Interior Department has now concluded that the three-quarter-million-dollar Merrywood easement, considered adequate protection for the river shore in that neighborhood, is inadequate in our neighborhood—a short distance upstream. They propose to condemn and purchase the entire area at great public expense, though our offer of free perpetual easements still stands.

Project unnecessary as a park

The National Park Service already has possession of the 790-acre Pepco tract, a short distance upstream of our properties. It also owns well over 600 acres of

riverside parkland in Fairfax County east of the Cabin John Bridge, a short distance downstream. This is a total of 1,400 acres in one of the county's less densely settled areas.

Project unnecessary for George Washington Memorial Parkway extension

Except for very narrow strips where stream valleys touch the roadway, the project contains no land for highway right-of-way. Funds for right-of-way acquisition will be requested separately.

Project more costly than estimated

Gen. Howard A. Davis recently paid $14,000 for a half acre lot in River Oaks subdivision, which lies within taking area. Moreover, several expensive homes are within taking lines.

Past record shows NCPC estimates consistently low on taking for George Washington Memorial Parkway. In Arlington County, Smoot, Sand & Gravel Co. tract estimated at $113,000; awarded, $324,000—nearly three times estimate. Howard Silsby tract estimated at $3,000; awarded, $8,350—again, nearly triple.

No matching funds for project

The Capper-Cramton Act requires matching funds from local jurisdictions. The Fairfax County government does not have these funds available, and has made no commitment.

Destruction in Prince Georges County, Md.

In Prince Georges County, the NCPC proposal is a highway hugging the river shore. On July 11, 1957, the National Capital Planning Commission's own expert consultant, Mr. Charles Eliot, told the Senate Interior Committee that:

"The construction of the parkway on the lines proposed in 1939 (which was the riverside route) would be more expensive and more destructive of its scenery than its probable usefulness would justify for many years to come, or forever, for that matter * * *."

Mr. Eliot was speaking of the Fairfax County portion of the project; but as one interested in the Potomac Valley as a whole, it seems to me that needless expense and destruction of natural beauty in Prince Georges County today is just as undesirable as it was in Fairfax County when Mr. Eliot made his statement.

NATIONAL CAPITAL PLANNING COMMISSION,
Washington, D.C., September 1, 1964.

Mr. SCOTT SEEGERS,
Vice President, Virginia Potomac Valley Association,
McLean, Va.

DEAR MR. SEEGERS: Reference is made to our several recent conversations concerning the proposed program for the donation to the United States of America of certain limited permanent rights-in-land by riverfront property owners in Fairfax County, Va., generally between the Cabin John Bridge and the Madiera School, for the purpose of protecting the scenic, historic, and conservation values of the Potomac River and its palisades and the form of deed which would be used for this purpose.

You have presented the following comments on the form of deed transmitted by our letter to you of May 15, 1964:

1. The statement in the first recital clause on page 2 of the draft deed that the subject property adjoins the George Washington Memorial Parkway in Montgomery County, Md., is not accurate.

2. The phrase "or structure" in the last sentence of the second restriction on page 3 should be deleted wherever it appears.

3. The word "domestic" should be substituted for the phrase "farm or single-family residential" in the third restriction on page 3.

4. The deed should contain a prohibition or limitation on acquisition by the United States of fee simple title to any of the properties in which limited permanent rights-in-land are donated.

With respect to your first comment, the authority of the National Capital Planning Commission to acquire permanent rights-in-land is limited to properties adjoining park property. (See the first recital clause in the draft deed.) It is necessary, therefore, to establish that the lands in which such permanent rights-in-land are being donated is adjacent to park property; i.e., the George Washington Memorial Parkway in Montgomery County. The Potomac River between

Mount Vernon and Fort Washington and Great Falls lies within the George Washington Memorial Parkway on the Maryland and Virginia sides as authorized under the Capper-Cramton Act; islands within the river have been and are to be acquired as part of the parkway; and, for purposes of the act, the lands on each side of the river are regarded as adjoining the lands on the other side.

There are no objections to the changes suggested in your second and third comments.

We cannot agree to the suggestion that the deed contain a prohibition or limitation on subsequent fee simple acquisition by the United States of properties for which limited permanent rights-in-land have been donated. The Commission is without legal authority to so bind the United States and, in any event, we believe that it would not as a matter of policy attempt to so preclude acquisition of lands which the Federal Government may require in the future for a valid public purpose. We understand that your suggestion is prompted by the possibility that, in the absence of such a restriction, the United States might hereafter acquire fee simple title to the subject properties for the parkway notwithstanding the donation of limited permanent rights therein. Section 1(a) of the Capper-Cramton Act provides in part:

"As to any lands in Maryland or Virginia along or adjacent to the shores of the Potomac within the proposed limits of the parkway that would involve great expense for their acquisition and are held by [the National Capital Planning] Commission not to be essential to the proper carrying out of the project, the acquisition of said lands shall not be required, upon a finding of the Commission to that effect."

Perhaps such a finding by the Commission and the inclusion of an appropriate recital clause in the form of deed would substantially meet your concern in this matter.

We appreciate very much the opportunity to cooperate with you in seeking to protect the Potomac River Palisades and your leadership in developing a program for the donation to the United States of "scenic easements" in this area. In this connection, there is enclosed a copy of Revenue Ruling 64–205 in which the Internal Revenue Service holds that a gratuitous conveyance of a restrictive easement in real property to the United States to enable the Federal Government to preserve a scenic view afforded certain public properties is a charitable contribution. This ruling is an outgrowth of the program for the donation to the United States of limited permanent rights-in-land in the Merrywood area of Arlington and Fairfax Counties and should be of assistance to you in obtaining the cooperation of property owners in this area in which you are working.

Sincerely yours,

DANIEL H. SHEAR,
General Counsel.

THE VIRGINIA POTOMAC VALLEY ASSOCIATION,
McLean, Va., February 8, 1966.

DANIEL H. SHEAR, Esq.,
General Counsel, National Capital Planning Commission,
Washington, D.C.

DEAR MR. SHEAR: I refer to yours of September 1, 1964, regarding the proposal of a number of members of our association to donate to the U.S. scenic easements in our riverfront land in Fairfax County in the area between the Cabin John Bridge and the Madeira School.

With one minor amendment, to which I am certain you will agree, most of my riverfront neighbors now agree to the terms set out in your letter, as follows:

We agree, for purposes of the donation, to accept the proposition that the lands in question adjoin those of the George Washington Memorial Parkway in Maryland.

We are glad to note that you are willing to delete the phrase "or structure" wherever it appears in the scenic easement deed.

The amendment concerns point 3 in your letter, and refers to restriction (3), page 3 in the deed. Instead of "domestic" being substituted for "farm and single-family residential," we prefer that it be added, thus to read: "farm or single-family residential or other domestic purposes * * *."

None of us wants to delete the "single-family" stipulation wherever it might appear. Of course, it is pretty well nailed down in restriction (1) on page 3. Still, the single-family residential stipulation is the very heart of what we are

trying to do, and we prefer to keep the phrase. We accept your assurance, given me verbally, that "other domestic purposes" will cover such uses as tennis courts, swimming pools, etc.

As a substitute for a guarantee as against future U.S. acquisition of the lands, we also accept your suggestion that our concern will be met if the NCPC will invoke the Capper-Cramton Act authority to declare surplus to the needs of the parkway the lands on which the easement has been given.

You may be interested to know that a number of my more reluctant association members have been moved to acceptance of these terms by the emphasis that President Johnson is now placing on preserving the natural aspect of the Potomac. As a matter of fact, a number of owners of riverside property far west of Great Falls are now listening more attentively than ever before to proposals that they donate scenic easements, including perpetually frozen minimum lot sizes. These, of course, are not members of my association, and their lands lie outside the area of our immediate concern. However, if we can get this agreement finalized, it will be a powerful stimulus to similar action by property owners farther up the river.

We have noted with concern the reports that a move is afoot to water down the restrictions in the Merrywood easement. Since that easement was paid for with a very substantial amount of public funds, to relax the restrictions will weaken considerably any argument that others should donate similar easements. Any reversal of today's attitude of acceptance on the part of property owners will increase enormously the cost of what the Government hopes to accomplish in the Potomac Valley, and is likely to make it correspondingly harder to get the cooperation of the appropriate congressional committees. We hope very much that the Merrywood restrictions will be adhered to.

I shall look forward to hearing from you.

Very truly yours,

(Signed) SCOTT SEEGERS.

FUTILITY OF NEGOTIATION

Mr. SEEGERS. I can substantiate the testimony of Miss Keyser and the other witnesses from Prince Georges County who are attempting to negotiate on any kind of dependable, consistent basis with the National Capital Planning Commission and the National Park Service, is an exercise in ultimate futility.

It was more than 2 years ago that I started working—this was long before they devised this project—to try to organize the people of my community which begins at the eastern boundary of the Madeira School and runs down to the Capital Beltway. Are you familiar with the area, Senator?

Senator PROXMIRE. No, I live in Cleveland Park and I am afraid I am not familiar with the area.

Mr. SEEGERS. It must be about a mile and one-quarter or perhaps close to a 2-mile stretch of river; very heavily wooded ravine sort of thing. My proposal is based partly on some very fine material I got from the Wisconsin Department of Conservation.

Senator PROXMIRE. You could not have a better source.

PROFFER OF SCENIC EASEMENT

Mr. SEEGERS. They sent me information on scenic easements.

Our position was we wanted to give scenic easements in that area to protect it. I negotiated with the National Capital Planning Commission for the better part of a year and at the end of that time on September 1, 1964, I had a letter from the National Capital Planning Commission's general counsel which set forth all of the conditions required by the National Capital Planning Commission for the form of an easement that they would consider in lieu of fee simple taking. I took

this letter and circulated it around among my neighbors and by the time I got nearly all of them to agree to it, several months had elapsed.

My letter dated more than a year ago, February 8, 1965, accepted every one of their points, every one of their suggestions for this scenic easement and asked that one provision be made a little more restrictive. That letter has not yet been acknowledged nor have repetitioned calls——

Senator PROXMIRE. What is the date of the letter?

Mr. SEEGER. February 8, 1965. A facsimile of my letter is in my statement and a fascimile of their letter setting forth the conditions under which they would consider an easement in lieu of taking is also attached to my testimony.

This easement except in the most minor points is identical to the easement for which the Government paid $744,000, an easement, mind you, not property, on the Merrywood tract which is a short distance down the river from us.

The easement that we wanted to grant maintains the area in larger lot sizes than the Merrywood tract. The easement covers a considerably greater area than the 46 areas protected by the Merrywood easement and it protects a considerably longer stretch of the shoreline. We want to give it to them.

This Merrywood area is the neighborhood of the Secretary of the Interior. That easement was widely held as adequate or more than adequate to protect the natural aspect of the river shore in that neighborhood.

After more than a year of negotiation and after their final suggestions and our acceptance of them, now we find this identical easement or practically the identical easement is somehow inadequate to protect the natural aspect of the river shore in our neighborhood. This is difficult for us to understand.

PUBLIC ACCESS

On the business of where the public has access, this easement of ours does not provide for public access, because none of us along there is rich. We do not feel able to provide land for a public park and then where the public has access then no longer is private practice.

However, if the neighbors of the Secretary of the Interior would grant public access across their portion of the Potomac shoreline, I am sure that we, in exercise of civic responsibility, could hardly agree to do less. I think that we would be quite willing to do that, if they were willing to do it.

There is a rather flagrant example of the favoritism on the Prince Georges County side, if I may refer to it for a moment on Indian Queen Point. You will notice that the shoreline is all in public land down to here. The parkway roadway which runs fairly close to the river; at this point the roadway swings well back from the river, and the park taking stops here. Right here there is a large beautiful house of Mr. Dudley Balis who at the time that parkway was planned was a parkway designer for the National Park Service. More recently, he has been the chief parkway designer for the National Park Service.

Here is Indian Queen Point and here is his house, and the public does not have access to this stretch of the river shore in Prince Georges either.

I feel there is a slight imbalance there in their notions of what areas of the river shore should be made available to the public and which should not.

Here is the Madeira School, incidentally.

Beginning here, the Government owns this entire area and it owns all of the Pepco tract, as it is called, 790 acres adjoining the school. This is the Capital Beltway and the Cabin John Bridge. From here, it owns the entire Virginia shore to the Arlington County line and that is an area of more than 600 acres. This is a sparsely settled area of Fairfax County. They have nearly 1,500 acres of parkland already in the area.

County Matching Funds and Inadequate Estimates of Land Values

Now, as to the cost, their $3.2 million must be matched by Fairfax County funds. Fairfax County has made no commitments and has no money with which to supply the matching funds.

In past condemnation talks for the parkway in Arlington County, I have a couple of good examples here. The estimate on the Smoot Sand & Gravel Co. just for the parkway is $113,000. The award was $324,000, almost three times as much.

The tract owned by Howard and Eleanor Silsby was estimated by the National Capital Park and Planning Commission at $3,000 and the award was for $8,350, again very nearly three times the estimate. We do not feel that is very good estimating. A commercial appraiser operating on that basis would be out of business in 30 days.

Good Faith Negotiation

We would like this appropriation stripped from the budget. We were negotiating with them in good faith. We want to preserve the area.

The very reason that that area is still heavily forested and in its primeval condition is because the property owners have kept it that way for 300 years. When the National Park Service gets hold of a piece of land, what happens is they strip mine, in effect, 140 magnificently wooded acres of the Virginia shore in this same neighborhood for the CIA and this was with the vote of Conrad Worth who at that time was the Director of the National Work Service. He voted to put the CIA there in his facet as a member of the National Capital Planning Committee. Just across the river from there, just a little bit up our way, the architecture hideousity of all time anywhere is the David Taylor Model Basin which takes well over half a mile of land that was originally set aside to be protected and preserved under the Capper-Cramton Act. There is no record that the Park Service objected to the use of this land.

Those are two examples. There are a score of them.

Needless Expense and Scenic Beauty Destruction

You asked one very valid question of the Prince Georges County group that I would like to answer, if I may. That is, Is a riverside highway necessary or desirable in that area? I would like to answer that with the words of the National Capital Planning Commission's

own expert consultant in the Senate legislative hearings in 1957. He was speaking of the Fairfax County portion, this portion where we are beleaguered right now. He said:

"The construction of the parkway on the lines proposed in 1939—

that was the riverside route along the river—

"would be more expensive and more destructive of its scenery than its probable use would justify for years to come or perhaps forever.

That was the National Capital Planning Commission's own witness. It seems to me that needless expense and destruction of natural beauty in Prince Georges County today is just as unnecessary and just as reprehensible as it was in Fairfax County when he spoke.

I would hope you will strike out the appropriation and we would still like to give the scenic easements.

Senator PROXMIRE. Thank you, very much.

In conclusion I ask that statements of three other Fairfax County residents be entered in the record.

Senator BYRD. That may be done.

(The statements referred to follow:)

STATEMENT OF MRS. HARRIET F. BRADLEY, SUPERVISOR, DRANESVILLE DISTRICT, FAIRFAX COUNTY

To my personal knowledge, most of the owners of river shore property between the Cabin John Bridge and Madeira School have for the past 2 years been negotiating in good faith with the National Capital Planning Commission, in an effort to work out the terms of a scenic easement which would protect the Potomac shore, while permitting them to retain ownership of their property. This easement was almost identical to the one covering the Merrywood property a short distance downstream; however, it was to be donated to the Federal Government—not purchased a great public expense as was the case at Merrywood.

More than a year ago, in a letter dated February 8, 1965, this group of landowners accepted every suggestion made by the General Counsel of the National Capital Planning Commission for an easement that would accomplish both objectives. To date their letter has not been acknowledged.

Land acquisition under the Capper-Cramton Act requires matching funds from the local jurisdiction—in this case, the County of Fairfax. Even if a majority of the members of the Fairfax County Board of Supervisors were to favor National Park Service acquisition of this stretch of the river shore and stream valleys, Fairfax County does not have the matching funds available. All funds from a planned $5 million Fairfax bond issue for parks have been committed to projects in other parts of the county, where the need for parks is far greater than in this area, where the National Park Service has already acquired, or is in the process of acquiring, more than 1,400 acres of riverside parkland.

Moreover, the impossibility of policing the rough, heavily timbered, irregularly shaped tract that the NCPC wishes to acquire is alarming to the residents of the area. The 790-acre Pepco tract at Great Falls has been a constant policing problem since the National Park Service took it over under a long lease some four of 5 years ago.

Since this land is not really needed as an addition to existing parks, since the owners are willing to donate protective scenic easements, since the county has no source of matching funds, and since the conversion of this area into a park might be an actual threat to the peace and safety of the neighborhood, I respectfully request that the $3.2 million appropriation not be made at this time or until such time as there are solutions to these problems.

STATEMENT BY ALFRED H. MOSES

My name is Alfred H. Moses. I live on Swinks Mill Road in Fairfax County. Although my property would not be directly affected by the Commission's proposal to acquire for park purposes the Potomac shoreline and stream valleys in

Fairfax County, between the Cabin John Bridge and River Bend, I oppose the Commission's request for $3.2 million.

I support wholeheartedly the President's broad objective to preserve the natural beauty of the Potomac Palisades. In seeking to carry out this objective, the Commission proposes that the Government acquire by condemnation, or threat of condemnation, the entire shoreline between Cabin John Bridge and River Bend as well as the principal stream valleys in this area from Route 193 to the river. This property, which is largely undeveloped, would then become part of our National Park System. I oppose the Commission's proposal for two reasons.

First, there is no demonstrated need for additional park property in this area. The Government already has, or will shortly have, 790 acres of park property along the Virginia shore of the Potomac from Cabin John Bridge to River Bend. It has another 600 acres of park property along the Virginia side of the river east of Cabin John Bridge. Certainly, this is more than sufficient land for park purposes. In fact, little, if any, of the 600 acres of park property east of the Cabin John Bridge is now being used, or even being made available to the public, for park purposes.

In addition to the absence of any foreseeable need for such additional parkland, it should be recognized that under the Commission's proposal, public access to the proposed park property will be provided by means of roads down the three principal stream valleys running from Route 193 to the river. These are narrow stream valleys and the construction of roads through these narrow passages will result in desecration, not conservation. Tangible evidence of this fact exists today in one of these stream valleys, the Scotts Run Valley. Last year a sewerline was constructed in the valley. The result was the wanton destruction throughout the right-of-way of that which nature had created and the successive owners of the property had preserved for over 300 years. If the installation of a sewerline can wreak such destruction, and I invite the members of this committee to view the damage done here, a roadway, many times greater in width, is certain to result in even greater desecration.

My second reason for opposing the taking of this entire shoreline for park purposes is that the objective as set forth in the President's proposal, can be met more effectively and with less expense to our taxpayers by means of scenic easements. Mr. Seegers, who testified earlier today, mentioned the fact that a majority of the landowners in this area have agreed to donate to the United States scenic easements, which will, as a practical matter, preserve the Potomac Palisades in their present natural condition. As to those propertyowners unwilling to make donations, easements can be acquired by condemnation. Easements consistent with the present zoning, with perhaps more restrictive provisions in the immediate area of the river, will meet the President's proposal for preserving the natural beauty of the Potomac Palisades for a small percentage of the cost of acquiring a fee interest in the property.

STATEMENT OF MANNING GASCH, GEORGETOWN PIKE, MCLEAN, VA.

My name is Manning Gasch. I live near McLean, Va., in the house that has been my home since childhood. I have seen the area change from a horse-and-buggy rural community to one subjected to today's advantages, abuses, and pressures.

I own no riverside property in the NCPC's present project area, but I oppose the $3.2 million requested by them to take the river shore between the Capital Beltway and River Bend. The owners of this land have proved far more trustworthy custodians of natural beauty than the NCPC and the National Park Service have ever been. The very fact that the land is still in its primitive condition is clear proof of the owners' concern to keep it unspoiled. Homes have been built on lots of 3 to 5 acres, and few trees cut.

By contrast, I invite you to look at the record of the National Park Service along the Potomac shore. They made no protest against wiping out a full half mile of forested hillside on the Maryland side for the construction of the world's largest quonset hut, the David Taylor Model Basin. Just across the river, the CIA had the National Park Service blessing (Conrad Wirth, Director of the NPS, voted as a member of the NCPC to locate the CIA where it is) to cut and blast and strip mine 140 beautiful acres right down to bedrock for the sake of the enormous building and even bigger parking lot.

On the Maryland side again, the NPS disregarded the collective protests of citizens' groups, conservationist organizations, and just plain people who liked to walk along the towpath, in order to build the four high-speed traffic lanes of the George Washington Memorial Parkway within a few yards of the once-beautiful C. & O. Canal.

A little farther down the river, what was once one of the most prolific waterfowl nesting and feeding grounds on the Potomac is now the National Airport.

Every one of these destructive projects occupied land set aside under the Capper-Cramton Act as having natural beauty worthy of being preserved and protected. Instead they have been destroyed, with the acquiescence, and sometimes with the active help of the National Park Service.

Another grave problem inherent in the present NCPC proposal is that of public safety. The land is all steep ridges and ravines, heavily forested, impossible to police effectively, and therefore perfect for casual or premeditated violence. To extend the National Park Service holdings would be simply to bring into this neighborhood the alarming conditions prevailing in other Washington area parks. I refer especially to the 800-acre Pepco tract at Great Falls, which since the National Park Service took it over some 3 years ago, has become unsafe for casual strollers.

Finally, the NCPC's chronic practice of drastically underestimating the value of the land they propose to take guarantees that the project would cost between two and three times their estimate.

I respectfully ask the committee to strike out the funds requested for this proposal.

STATEMENT OF MRS. DOUGLAS PATTESON-KNIGHT, FAIRFAX COUNTY, VA.

George Washington Memorial Parkway

Senator Proxmire. Our next witness is Mrs. Douglas Patteson-Knight of Fairfax County, Va. We are very happy to have you.

Mrs. Patteson-Knight. My name is Frances Patteson-Knight. I live on Tebbs Lane, in Fairfax County, Va., not far from the area where the National Capital Planning Commission proposes to take a long section of the river shore for a park.

Opposition to Commission Budget Request

I have no property that would be directly affected by the taking. However, I feel strongly that the NCPC request for funds should not be granted, for several reasons.

1. The National Park Service already has between 1,000 and 2,000 acres of Potomac River parklands in this area.

2. What use there is of these parks is alarming. The 800-acre Pepco tract, especially, seems to attract rowdy elements that are not restrained by the few Park Police in evidence. The practical result is to deny peaceful use of the park by the citizens whose money was used to buy it.

3. The area that the NCPC proposes to take has been kept quiet and peaceful by the property owners, who have agreed to give scenic easements that will keep the river shore from being destroyed by tree cutting or high-density development.

4. Fairfax County certainly has no money to provide the matching funds for this acquisition, and if it had, other parts of the county are in far greater need of parks than we are.

So, since the taking would be unnecessary, extravagant, and an actual threat to public safety, I ask you please to strike out the funds requested.

Senator PROXMIRE. Thank you, very much. That is a very nice, concise presentation and we appreciate it.

Our next witness is Mrs. Graydon Upton. Bull's Neck Hundred Corp., Fairfax County, Va.

STATEMENT OF MRS. GRAYDON UPTON, BULL'S NECK HUNDRED CORP., FAIRFAX COUNTY, VA.

GEORGE WASHINGTON MEMORIAL PARKWAY

Mrs. UPTON. My name is Anne Upton. I am speaking for the Bull's Neck Hundred Corp. This is more of a neighborhood than a corporation, being a group of property owners who live between the Georgetown Pike and the Potomac River, near the Madeira School in Fairfax County. Our organization is legally committed to retaining our neighborhood in low-density residential use, by restrictive covenants that we placed on our land 7 or 8 years ago.

COMMISSION REPUDIATION OF ITS SUGGESTED EASEMENT PROFFER

Thus, we were very glad to join with the Virginia Potomac Valley Association in their effort to preserve the Potomac shore by means of a scenic easement donated to the Federal Government. We are sorry that the National Capital Planning Commission, which seemed so interested in this project 2 years ago, now seems to repudiate its own suggestions for the form of a satisfactory easement.

We are also distressed at the prospect of our entire river frontage being condemned, along with the new expensive homes of two of our members.

CONGRESSIONAL HISTORY AND OWNER PRESERVATION OF NATURAL ASPECT

Over a period of several years the Congress of the United States has consistently denied funds when the NCPC has tried to take land in our neighborhood. This has indicated to us and our neighbors that the Congress has been willing to leave this portion of the river shore in private hands, provided the owners would make satisfactory guarantees against destruction of the natural aspect of the area by present or future owners. Accordingly, we have built our homes on 5-acre tracts, we have kept the trees, and we have fought attempts to rezone to higher density. We are ready to donate perpetual protective easements, and we hope that the Congress will continue to support us.

Senator PROXMIRE. Thank you, very much. I appreciate your presentation.

CONCLUSION OF HEARINGS

I am very happy I had a chance to come down and hear this testimony today. I think the witnesses were all logical and persuasive. This concludes the hearings on fiscal year 1967 budget estimates for the Department of the Interior and related agencies.

The committee will stand in recess.

(Whereupon, at 5:10 p.m., the hearings were concluded and the subcommittee was recessed subject to the call of the Chair.)

ADDITIONAL MATERIAL FOR THE RECORD

CLERK'S STATEMENT.—Pursuant to directions received from the chairman of the subcommittee the following material will be printed in the record.

STATEMENT OF SENATOR MORSE

PRESERVATION AND ENHANCEMENT OF NATURAL RESOURCE ASSETS

The paragraphs that follow contain my statement in support of appropriations for the Bureau of Land Management, the Fish and Wildlife Service, and the Forest Service for fiscal 1967. These appropriations are of prime importance because they relate to the preservation and enhancement of natural resource assets within the custodianship of the Department of the Interior and the Forest Service. It is our duty to make certain that the funds we appropriate for these Government agencies are adequate; that they are spent wisely. It is my plea to the subcommittee that all of the budget items applicable to these agencies be reviewed carefully with special reference to their long-range purposes and to their sufficiency to carry on extremely important work in the public interest. Because of time limitations, my statement will refer primarily to appropriations of special importance to the State of Oregon. But I assure the subcommittee that my interest in these appropriations extends far beyond the boundaries of my State.

I urge this committee to correct the oversight and imbalance in the budgets before you. For example, the proposed budget actually reduces funds for the Bureau of Land Management. This agency performs a vital mission. Over the years the public domain forest and range has been terribly neglected even though its 180 million acres of range and forest are essential to the West's water, grazing, wildlife, timber, and recreation needs.

BUREAU OF LAND MANAGEMENT

MANAGEMENT OF LAND AND RESOURCES

Land classification and mineral examination

The request for this activity totals $4,473,000 for fiscal 1967, a reduction of $150,000 as compared to the fiscal 1966 budget request and appropriations. Of this amount, $500,000 is scheduled for use in Oregon.

An additional amount of $200,000 could be used by the Bureau, effectively and efficiently, if approved by the Congress. My request for this addition is based upon the following considerations:

Protection of archeological sites

At least $150,000 should be devoted to the protection of high value archeological sites discovered on Bureau of Land Management lands; $57,000 of this amount is needed for identified sites in Oregon for work already done under contract which has disclosed very significant values.

Classification and multiple-use act program

The proper management of BLM lands in Oregon requires an orderly classification of lands within the agency's jurisdiction. This was made patently clear during the course of a serious controversy which arose over land-exchange proposals in Oregon during 1965. Classification activity is also of primary importance in connection with the State's land selection program in Oregon. There is a real need to respond affirmatively to congressional directives in the 1964 Public Land Acts. Oregonians want positive action so that the future of the public domain may be charted clearly. I ask that $57,000 be appropriated for acceleration of the land classification program, especially in western Oregon.

Range management

The budget request of $5,389,000 for the coming fiscal year is $23,000 below the fiscal 1966 budget request. The development of our Western ranges brings returns by way of increased cover crops, greater utility, soil and watershed improvements and larger Federal revenues from these lands.

Proper soil and watershed development on our Western BLM rangelands calls for additional personnel to carry out this program. I recommend an increase of $80,000 in the range management budget for this purpose. Money spent on this conservation work benefits ranchers as well as all who use the multiple resources of the public range.

Forestry

The budget request of $6,836,000 for BLM forestry management reflects a token increase over last year's budget, but it fails to include adequate funds for the orderly thinning of young stands of trees which exceed the normal volumes of growing stock.

(a) Western Oregon forestry program

(1) Commercial thinning of second-growth timber.—Intermediate cuttings are an essential action in any forest management plan. Recent forest inventories in western Oregon have provided necessary data regarding mortality caused by weather, insects, disease, and age. In addition, the BLM has determined the volume in young stands that is in excess of the normal growing stock. Proper harvesting of unneeded small trees and normal morality provides increased employment, improves forest site and lessons fire danger.

The return on thinnings varies from one location to another because of installed mill capacity and utilization standards. In the Coos Bay area, milling is geared to old growth while in Salem and Eugene areas, industry has retooled to permit utilization of small trees on an economical basis. In the latter areas, sales price on recent thinning sales has closely approximated the bid amount of the old-growth stumpage.

I ask approval of at least an additional $200,000 to make possible the offering of 21,000 M.b.f. of BLM second-growth timber. I also ask the committee to instruct BLM and the Forest Service to come in next year with a program designed to promote a long-range second-growth management operation of major dimensions. This report should lay out the costs and the benefits—dollar and otherwise. I predict this program can sell itself based on dollars alone.

Soil and watershed conservation

Last year, I was proud to join with Senator Metcalf, of Montana, in proposing a $6 million increase in the fiscal 1966 budget request of $12,130,000 for this item. I was deeply pleased when the Senate Appropriations Committee approved the increase. This action demonstrated the committee's awareness of the depletion of our Western rangelands, the losses of this natural resource through erosion and the destruction of its natural beauty. The conferees are deserving of high commendation for this foresight in approving an increase of $3 million.

In my testimony of last year, I pointed out that 6 million acres of BLM rangeland were in deplorable condition and that another 44 million acres were on the critical list. I also indicated that an additional 125 million acres continue to deteriorate.

The fiscal 1967 budget contains a request of $14,777,000 for BLM soil and watershed conservation, of which $2,200,000 would be allocated to Oregon.

(a) Vale range rehabilitation project; other Oregon grazing units

The fiscal 1967 budget request for the Vale project is $1,062,000. The budget request for the coming fiscal year will not be sufficient to keep the rehabilitation work at the level which was indicated when the rehabilitation was originally programed. We have had extremely encouraging results and have learned so much as to what can be accomplished through the rehabilitation of these western grazing lands under the Vale project. There is justification for the project to go forward at a higher level than it now is. Therefore, I ask the subcommittee to review carefully with the witnesses for the Bureau of Land Management the matter of whether this year's budget request is really ample and whether it reflects an understanding of the benefits from a remarkably fine rehabilitation project over the first 4 years of its life.

It is my opinion that the funds for the Vale project could well be set at least at $2 million. Therefore, I ask that the presently budgeted request of $1,062,000

be increased by $938,000 to bring the total for the Vale project to $2 million for fiscal 1967.

In addition, there is a great danger that continued deterioration of the range in the Burns, Lakeview, Prineville, and Baker units in Oregon will permit the land to deteriorate, wildlife values to suffer and grazing use to be cut unless prompt action can be taken to rehabilitate these ranges so as to correct a long period of resource depletion. Ranchers have nowhere else to turn for range but Vale proves they will cooperate in deferred use when a solid program is put into action. The fiscal 1967 budget request for all grazing units in Oregon other than the Vale unit is $873,000. This figure, as in the case of Vale, should be at least $2 million. Therefore, I ask, in the interest of wise conservation practice, that an additional $743,000 for rehabilitation work on the four units just mentioned be approved, and that another $384,000 be devoted to the following uses:

(1) $144,000 to continue rehabilitation of the Warner unit, Lakeview District, by seeding, fencing, water development, and similar activities. $68,000 was allocated in 1966 to initiate this project which has a total estimated cost of $237,000.

(2) $150,000 to initiate rehabilitation of the Drewsey unit, Burns District, by seeding, fencing, water development and brush control. (The total estimated cost of rehabilitation of the Drewsey unit is $550,000.)

(3) $40,000 for removal of barriers (logjam, etc.) which stop migration of anadromous fish on major salmon and steelhead-producing streams in western Oregon.

(4) $15,000 for stream habitat improvement to increase quality of fish habitat in vicinity of recreation facilities.

Let us move ahead on conservation. Let us recognize that overall we are talking about an investment of one-fifth the proposed cost of the Redwood Park and this investment is on the 160 million acre western watershed and game range.

Fire protection

The budget request of $3,437,000 for fire protection on BLM lands exceeds last year's request by $308,900. Of the fiscal 1967 total, $322,000 would be expended in Oregon. Funds invested in fire protection reflect commonsense management of forest assets, but a strengthened program of fire protection would reduce losses now. An additional $240,000 would permit increased work in hazard reduction, fire zone planning, presuppression activities, including contractual requirements for aircraft used in fire detection and retardant transport, training and hiring of initial attack crews and replacement of obsolete equipment. I urge approval of a proposed $240,000 increase to stamp out fires and needless losses to our resource base.

Oregon and California roads

It has long been recognized that most main access roads should be financed and built by the Federal Government. This will allow the roads to be constructed under multiple-use standards and in a manner most economical for serving all of the timber tributary to the road. It will also permit better control of construction to preserve other resource values and to prevent erosion. There is considerable merit in preroading timbered areas to allow proper management. Timber damaged by fire, insects, disease, and blowdown can be harvested before it deteriorates. Also we can take advantage of fluctuating market demands. Sales can be easily made to smaller purchasers. Roads will also be available for fire control and other forestry purposes.

The budgetary enforced absorption of $3 million in flood damage by BLM in western Oregon can only hinder the pace of needed roads to sensibly manage the forests. I urge that the committee rescind this action and add $3 million for timber and resource roads. This is a moneymaking investment.

Last year I criticized the BLM for its rate of progress on the flood damage restoration program for roads. I am satisfied that the BLM and its agent, the Bureau of Public Roads, have conscientiously worked this program over, and toned up its operation. They have used tight and proper standards for classifying damage. They are entitled, in my judgment, to a reward for efficiency by not having to absorb out of regular programs the cost of flood damage restoration. The benefit will be felt by the Treasury in increased timber revenues.

FISH AND WILDLIFE SERVICE

BUREAU OF COMMERCIAL FISHERIES

Construction

(a) Fish passage facilities, Willamette Falls, Oreg.

Proper upstream passage at Willamette Falls has long been considered as one of the most significant potential improvements that could be obtained for the salmon and steelhead resources in the entire Columbia River watershed. This natural barrier and the industrial developments located there seriously hinder fish passage into the Willamette system above this point. Existing passage facilities are inadequate during low-flow periods, the passage is completely blocked during high flows. Even so annual escapements above the falls now average about 50,000 to 60,000 salmon and steelhead.

Improvement of fish passage conditions at the falls will make approximately 10,200 square miles of watershed drainage available for anadromous fish production, especially for developing runs of fall chinook and coho salmon. It is estimated that the new fishways, including both new ladders, would increase the total escapement of salmon and steelhead by 177,900 fish, consisting of an increase of 6,400 spring chinook, 100,000 fall chinook, 48,500 coho, and 23,000 steelhead trout. This increase is valued at $3,883,000 annually, with the commercial value estimated at $1,576,000 and the sport fishery increment at $2,307,000.

On February 4, 1966, the Oregon Fish Commission awarded a contract for the construction of the first fishway at Willamette Falls under the Columbia River fishery development program. The additional benefits exceed the one-time cost of this first fish ladder.

The second fish ladder at Willamette Falls is necessary to complete the planned fish passage system to enable the potential benefits to be realized from that system. I find, however, that it is not provided for in the budget for the Bureau of Commercial Fisheries. The total cost of the second fish ladder at Willamette Falls is estimated at approximately $2,400,000 of which 83.7 percent or approximately $2 million would be a Federal cost with the remainder to be contributed by private industry. The annual benefits from the second ladder are estimated at about $219 million.

The project has the enthusiastic support of Oregon State officials, the Oregon Fish Commission, the Oregon State Game Commission, and the Pacific Marine Fisheries Commission. The construction of the second fishway is long overdue. I ask approval of this $2 million increase for the construction of this essential project.

(b) Federal aid for commercial fisheries research and development

Recently the Fish Commission of Oregon brought these comments to my attention:

"We are very much concerned with the public funding for the Commercial Fisheries Research and Development Act of 1964 (Public Law 88-209). We have been informed that the budget contained $3.2 million for funding this act in fiscal 1967, of which $2.6 million would be available for apportionment to the States on a matching basis. Oregon's share on this basis would be only $76,200. This is drastic reduction from the $4.1 million available to the States in fiscal 1966, of which the State of Oregon received $118,300. Full implementation was planned at $5 million annually. We strongly urge the reinstatement of funds at least equal to last year's appropriation into the budget for the Bureau of Commercial Fisheries and offer the following information as justification:

"This act comes at a particularly appropriate time. Ocean resources are becoming increasingly important; the human population explosion is demanding food and driving many nations to the sea for their protein with attendant increases in fishing and competition for the available fish. There is no question that the effort and catch of bottom fishes in the waters off Oregon's coast will increase considerably in the next few years. Now is the time we should be gathering data on the stocks of fish that are and will be exploited so that sound conservation measures can be applied to insure a maximum sustained production.

"Contemplating a steady level of support we have begun a number of studies under this program. They include: (1) Study on the distribution and abundance of pink shrimp off Oregon; (2) investigation of the abundance and recruitment of bottom fish off Oregon with emphasis on Dover sole; and (3) control rearing of dungeonous crab larvae and the influence of environmental conditions on their survival. In addition we are progressing in plans to construct a laboratory to

house our marine and shell-fishery staff. Presently they are scattered along the Oregon coast in generally inadequate structures. This move would centralize operations and result in a great increase in efficiency."

I urge that the $3,200,000 budget request for this program be increased to $4,700,000.

BUREAU OF SPORT FISHERIES AND WILDLIFE

Construction

Development of Oregon wildlife refuges.—The Bureau of Sport Fisheries and Wildlife has acquired land for the following wildlife refuges in the Willamette Valley of Oregon: William L. Finley Refuge, Basket Slough Refuge, and Ankeny Refuge. The Oregon Duck Hunters Association advises me that:

"Although they are ideally located, the wildlife potential of these refuges cannot be fully realized without development. It is our understanding Interior's budget contains only a token or no construction fund for the above refuges.

"Considering the investment we already have in these areas, combined with steadily increasing population and productivity of the Willamette Valley, we feel that it is not good business to let refuges remain in their present condition."

The association asks an appropriation of $150,000 to begin a development program in these areas.

It appears that these amounts could be used by the Fish and Wildlife Service if the Congress were to appropriate such funds:

(1) $60,000 for preliminary development of wells, canals, ditches, sprinklers at the William L. Finley Refuge:

(2) $30,000 for the development of 100 acres of marsh and cropland at Ankeny Refuge; and

(3) $10,000 for development of recreation facilities at all three refuges.

I ask approval of the $100,000 total for the purposes just mentioned.

FOREST SERVICE

FOREST PROTECTION AND UTILIZATION

Forest land management

National forest protection and management

It is somewhat reassuring to note that this year's net budget request for national forest protection and management is $146,589,000, an increase of almost $7 million over last year's budget. Despite this increase we need additional funds if the Forest Service is to manage our priceless heritage of the national forest at maximum efficiency. My comments on essential increases appear in the paragraphs that follow:

(*a*) *Increased timber sales through salvage and thinning*

We need $2,600,000 in additional appropriations to undertake a new and far-sighted program of salvage and second-growth thinnings in the West. Roundwood material from these sources is now receiving greater market acceptance. It is adding to the total raw product base and furnishing new and sustained employment. This relatively untapped roundwood supply is often considered to be "unregulated," which means that it is not included in allowable cut calculations that are designed to assure sustained yields of forest crops. Since wood from salvage has not been readily marketable in the past, the benefits that could be derived from it have been lost through decay or the product has been burned as a slash disposal and fire prevention measure. Thinnings have been considered a supplementary supply of wood which could be used if, by chance, there was an economical opportunity to do so.

There are several ways that salvage and thinnings are handled: (1) Salvage of insect-disease killed or infested trees; (2) prelogging; (3) postlogging salvage; (4) low value species salvage; and (5) commercial thinnings.

Because such sales are small in volumes and values compared to sales of old growth timber, it costs more to administer these sales than it costs to handle typical old growth stands. But the volume is over and above that which has been available without such a program and it is really designed to replace waste with jobs.

Inventory and related information for the Western national forests and regions show what could be accomplished in fiscal year 1967 if funds and manpower were available. These volumes are in addition to current annual cut. Continu-

ance of this rate of thinnings and salvage into future years depends upon availability of roads or other access. New roads would be needed in areas that required thinning and salvaging of low-value species.

Region	*Board feet*
Pacific Northwest	250,000,000
Northern Rocky Mountains	130,000,000
California	110,000,000
Southwest	50,000,000
Total	540,000,000

If the access road program in the Pacific Northwest could be further supplemented with $1,600,000 per year for a period of at least 5 years, an additional 142 million feet of thinnings and mortality salvage could be placed on the market. This would increase the Pacific Northwest output of thinnings and salvage from 250 million board-feet to 392 million. A further manpower increase of 36 men and $260,000 would also be needed.

As a start, an annual program such as is outlined above (540 million board feet) would cost $2,600,000 or approximately $5 per thousand board feet of roundwood recovered. Stumpage returns for this increased cut can be expected to be roughly equivalent to the cost of handling it. The increased cut would show up primarily in the year following the one in which the sales were made.

Other important benefits would be realized in most such sales. These include: (1) fire hazard reduction; (2) improved stand composition; (3) growth improvement; (4) improved conditions for planting and seeding; and (5) improvement of wildlife forage.

The additional volume of timber when absorbed by the market would create about 4,800 year-long jobs in the four regions. Unless there is an increase in this item, this additional timber will remain unavailable.

Disturbing evidence of a drive to increase the allowable cut of national forest timber, despite the consequences in terms of lost forest conservation, manifested itself in recent months in the State of Oregon. I discussed this challenge to our wise conservation and forest management in the Senate on January 17 and February 16, 1966.

Adoption of the salvage and second-growth thinning program described herein, would constitute a major step forward in halting the destructive drive to increase the allowable cut in our forest resources, in excess of wise conservation practices.

(b) Recreation-public use

In my presentation last year, I expressed disappointment over the small sum proposed for this activity which is so woefully short of meeting public needs in the national forests of Oregon and in all other States as well. I am now even more disappointed to learn that the funds provided for this work will be increased even less than they were last year, even though additional programs and services and increased wage rates must be met. I question whether the increase proposed will even provide the increased sanitation services required for the larger number of users—summer campground hikers, and winter sports enthusiasts—that the forests receive.

A few years ago most of us enthusiastically endorsed a development program for the national forests which would have enabled the Forest Service to meet the public needs in a planwise, orderly growth fashion. Now I note that for fiscal 1967, the sum proposed for outdoor recreation use on the national forests is but 35 percent of what the plan proposed, and this in face of the fact that the Congress has recently enacted wilderness, land and water conservation fund, and national recreation area establishment legislation that has increased the needs over and above that contemplated by the plan.

The budget request for fiscal 1967 is $29,876,000 for this item. I urge the subcommittee to make a substantial addition to the inadequate $1,123,000 proposed increase for this item.

(c) Range resource management

For fiscal 1967 the budget request relative to range resource management is $11,619,000. This is not adequate to do the job.

In the hearings on the budget for fiscal year 1966, I commented on the omission of any increases for range resource management and urged that additional funds be made available to cover important range needs. The 1967 budget again contains no requests for increases in range resource management. This is deeply

disturbing. The job of range management both on BLM lands and in the national forests simply is not getting done.

I am told the Forest Service knows what is needed to build up the range and how to do it in many areas. And they are doing a good job so far as they go. However, range development is being done too slowly. My rancher constituents tell me they want to cooperate in range improvement work on the national forests but in numerous cases are turned down because the Forest Service cannot provide its share of the development costs. Other needed range work is lagging. Ranchers who are dependent upon the national forests and national grasslands for livestock forage need as much grazing from these lands as it is feasible to provide and the Forest Service needs to know the impact of reductions in numbers of livestock upon the welfare of the permittees.

Where funds or opportunities for building up the range are not available, adjustments in numbers of livestock or lengths of grazing seasons have been made to protect the soil and other basic resources. While these adjustments have helped prevent soil erosion or other range deterioration, I am concerned about their adverse effect on the ranchers and communities involved. It is my feeling that the Congress should see that the Forest Service steps up its range work in measuring the economic impact of adjustments upon ranchers long dependent upon the national forests for livestock forage. The potential of our resources must be developed for the benefit of the people.

To cover these and other needs, the Congress should provide financing for range resource management up to the levels proposed in the development program for the national forests. The $4 million of added financing required should let the Forest Service cooperate more fully with ranchers on development of range management systems needed to provide a higher level of conservation management.

The committee's approval of an increase of $4 million for range resource management would be a step forward in the importance of our range resources within the jurisdiction of the Forest Service.

Forest Research

Research benefits reach way beyond the Forest Service. They serve the entire resource community, public and private.

Forest and range management research

(a) Wilderness research at Portland

In the past two decades, pressures for wilderness and other land uses have intensified tremendously and we can expect these demands to become greater in the years ahead. Pressures for wilderness and other recreation areas have been countered by pressures for conflicting commercial uses of the same resources. Conflicts between interests often find policymakers and public land administrators in a quandary trying to serve all needs equitably and appropriately. Underlying these public demands and resulting conflicts are basic resource needs which must be compatibly provided. Who visits the wilderness? What are their interests? Who will be the wilderness visitors a few years from now? How many? How much of what quality land is essential to meet these needs? How can wilderness be used and enjoyed, but not destroyed? If resource administrators are to most effectively meet these needs they must better understand what they are, better predict the demands which will result from them, and better allocate and manage the land resources in their trust. Considerable competent research is needed—and needed now.

Wilderness recreation is not only a major type of outdoor recreation use, but inherent in this type of use are some of the most delicate land administration problems. Also, inherent in wilderness recreation are some of the most profound experiences—some of the richest of recreation values. Despite a small staff, the Forest Service's wilderness research project at Portland has made an excellent start on these problems. Particularly, they have opened up and identified the major problems. But as things stand there are far more questions than answers—and decisions are being made each day which research would greatly improve.

An increase of $150,000 will eventually be required to adequately establish this wilderness research program. I ask that this amount be approved for fiscal 1967.

(b) Eastern Oregon forest research—Bend, Oreg., laboratory

Millions of acres of land in eastern Oregon are of high value for timber production. Timber industries which contribute millions of dollars a year to the

local economy depend on these forests for raw material. In addition, these forests are valuable ranges for livestock and wildlife, and are important to the recreation industry. To continue their productivity, they must be managed properly; but not enough research has been done to develop reliable guides for the management of these forests.

Most of the effort to date has been directed at the Ponderosa pine forests. A minor amount of research has been conducted in the lodgepole pine forests. Very little concerned the mixed conifer type, which is becoming increasingly important in eastern Oregon. This forest type includes white fir, western larch, Engelmann spruce and Douglas-fir, as well as lodgepole and Ponderosa pine.

In these three forest types an urgent need is to find out how to get another stand of the most valuable species prompty after harvest cutting. Forest managers cannot afford to wait years for a new crop of trees nor to spend excessive amounts in starting a crop. Another need is to find out how to manage dense stands of trees too small for use in order to speed up the growth of crop trees. Forest managers also want to know how to determine the best sites to grow each species in order to maximize growth.

A newly constructed laboratory at Bend, Oreg., is available to serve the unfilled need. It should be properly staffed. The citizens of eastern Oregon are anxious to see a step-up of research to guide forestry practices on public and private land in the region. It is estimated that $200,000 annually will be needed to provide scientists and supporting staff to attack these crucial problems.

In support of the Bend Silviculture Laboratory's maximum utilization, a civic leader of Bend, Mr. Robert Chandler, publisher of the Bend Bulletin, has written to me as follows:

"As you know, the silviculture research project, headquartered in Bend, has the assignment to conduct research in development of improved cultural practices leading to the above objective. Your assistance in the past in obtaining Federal appropriations for construction of a modern laboratory to facilitate this work was an outstanding start in coming to grips with east side timber cultural practices. Of equal significance was your support during the hearings before the Appropriations Subcommittee, March 1965, where you requested the necessary $200,000 annually to fully activate the silviculture research project. It was a real disappointment that your recommendations were not more widely supported, especially since delay in getting on with this work aggravates the already critical situation of limited timber supply for industry's current needs.

"There should be no doubt about the justification for appropriation of funds to finance a project that will provide scientifically sound management guidelines for a multibillion-dollar natural resource. The benefits of such research are almost immediately reflected economically. In addition, such research helps guarantee full use of the forest land resources for our next generation of citizens."

This extremely important research facility deserves an immediate increased appropriation of $200,000. I ask approval of such an increase.

(c) *Roseburg, Oreg., brush control program*

Oregon has been for years and will probably continue to be the leading State in timber production. Timber harvesting and processing is the leading industry in the State. Public forestry agencies are under constant pressure to increase the allowable cut. Although there is this great need to increase the cut, some 2 million acres of brush-covered timberland add nothing to the harvest. These lands are capable of growing about a billion more board feet per year. They are growing brush and not trees because cheap and satisfactory techniques have not been worked out to get rid of the brush. Research can solve the problem but we now have funds for only one scientist on this project, now located at Roseburg, Oreg. The knowledge and techniques developed in this project will be of great value to foresters in other timber areas of the West.

To solve the problem of brush control, research is needed to find more effective, more selective, and less hazardous chemicals to kill brush. Research is also needed on combinations of chemical treatment with fire and mechanical brush removal. Supporting research must develop methods for determining the most productive soils and sites for investments in brush control. And to prevent the establishment of future brushfields, research is needed on methods for prompt renewal of existing stands after timber is removed.

An additional $100,000 will be required for scientists and supporting staff in order to speed up the research on these important problems. I ask approval of this amount.

Forest products and engineering research

(a) Balloon, helicopter and aerial logging

There is an urgent need to accelerate the development of balloon and other aerial logging systems to economically harvest timber from difficult access areas while protecting multiple-use values. Achievements of these objectives will be a great step forward in conservation logging.

Research work to date has shown that aerial logging systems can materially reduce, perhaps by as much as 50 percent, the mileage of roads required to harvest timber in mountainous areas, thus reducing costs, land taken out of production, and soil disturbance. Aerial systems will make it feasible to log in many sensitive areas without major impacts on soil, water, and esthetic values. It is estimated in the Douglas-fir region that advanced aerial logging systems could probably economically log 500 million board feet annually from areas now considered inoperable under present logging technology.

Balloon logging has been shown to be technically feasible, but to make the system economically feasible requires studies of various balloon configurations, wind tunnel tests, development of cheaper gas supply systems, means of deicing and ground handling and transport facilities. Accelerated research could result in making the balloon logging concept of aerial logging operational in about 2 years. Several weeks ago, members of my staff and professional staff members of the Senate and House Appropriations Committees were privileged to observe moving pictures depicting pilot balloon logging operations conducted by the Bohemia Lumber Co. of Culp Creek, Oreg. Mr. Faye Stewart of the Bohemia Co. discussed various phases of the project during and after the presentation of the film. Those who saw the balloon logging films were convinced, I am sure, of the prospects for success of the conservation-type logging operation after further research has been undertaken.

In addition, the chairman of the Oregon State Highway Commission has given me the benefit of his counsel for several years past concerning projects for helicopter logging. This dedicated public servant, Mr. Glenn Jackson, of Medford, Oreg., is strongly of the opinion that helicopter logging can do a tremendous conservation job in the forest lands of Oregon.

The Department of Defense has undertaken experiments in heavy lifts by helicopter and various utility companies throughout the Nation have been experimenting in lifts of electric line and telephone poles in mountainous areas. The activities of the Department of Defense in the trial use of helicopters for lifts of heavy loads present excellent opportunities for the Forest Service to work on cooperative experiments with the Department of Defense. This is the type of research which could save the taxpayers millions of dollars of losses in the years ahead.

An increase in Forest Service research of $500,000 annually would be required to bring into early operational use urgently needed aerial logging systems. This amount warrants approval.

Before moving to the next item I wish to discuss, may I take this opportunity to commend the committee for recommending in fiscal 1966 a total of $400,000 for balloon and helicopter logging research. I share the committee's disappointment that we were unable to retain this amount in the conference on H.R. 6767. In the interest of conservation, I urge you make the effort again.

(b) Accelerated forest products utilization research—Portland, Oreg.

The timber industry in the Pacific Northwest contributes more revenue and employment to the national economy through the production and distribution of wood products than any other region. Yet, there are critical problems impeding still greater contributions from this high value timber area. Two forest products utilization problem areas need increased attention by research; one deals with new construction concepts for wood and the other with the development of improved timber quality standards.

The forest industries, because of their composition and through no fault of their own, lack the kind of organization needed adequately to undertake a strong and coordinated wood research program to develop new construction concepts of design, fabrication, and erection, as well as improved performance. Competing construction materials, such as metals, glass, plastics, etc., are making great inroads into the construction market, by far the largest single outlet for timber products. Wood's proportion of these markets has dropped from about 75 to 40 percent since 1920. Although much of this decline has been obscured by increases in total construction due to the rise in population, a

stronger research effort is essential to make wood more competitive in cost, performance, and appeal. A good start has been made in the Pacific Northwest on research aimed at developing new opportunities to use western woods in engineered structures. An increase of $150,000 will materially accelerate this important Forest Service effort.

Present standards for judging quality of the vast timber resource in Oregon and the Pacific Northwest are poor. Without good working tools to recognize and evaluate quality, all segments of the forest enterprise suffer huge monetary losses; forest landowners cannot accurately determine the highest market value of standing timber and logs, and the forest products industry lacks a basis for controls of materials and processes to attain the greatest return in a uniquely complex market. The Forest Service has a small-scale timber quality research project at Portland, Oreg.

The national forestry research program projects should have an additional $120,000 to bring the level of financing more nearly in line with the magnitude and urgency of the problem.

Forest research and construction

(*a*) *Forestry Science Laboratory, Corvallis, Oreg.*

The first stage of construction for forestry research at Corvallis was funded by an appropriation in fiscal year 1961. A laboratory was built with these funds on the campus of Oregon State University. It was planned that this facility would take care of the needs of the research staff during the early phases of program development and that a second stage of construction would then follow. The first stage can no longer accommodate the research headquartered at Corvallis. The second stage of construction now is needed to make more room for the work underway and to allow further consolidation of the forest insect and disease research.

The cost of additional facilities for the projected program is $2,500,000. Architectural and engineering plans and specifications are estimated to cost $180,000. A site for the laboratory funded in fiscal year 1961 was provided under free lease by Oregon State University and a similar arrangement has been offered to accommodate the addition.

The research at Corvallis includes work on the fundamental biology and ecology of forest insects and diseases, aiming at development of safe and effective biological and silvicultural controls. Related to the research on insects and diseases is an investigation of pesticide residues in forest soil and water. This complements broader studies of forest-water relationships including intensive work on forest soil characteristics, and the effect of timber stand treatment and forest development on water yield and quality.

Other studies aim to develop basic silvicultural principles and practices for harvest, regeneration, and culture of forest crops in the true fir-mountain hemlock and coastal Sitka spruce-western hemlock forests. Associated work is aimed toward genetic improvement of Northwest trees with emphasis on seed orchard management.

This research is closely coordinated with the work of scientists on the staff of Oregon State University and offers many opportunities for mutually beneficial cooperation. On this subject, Dean W. F. McCulloch of the School of Forestry, Oregon State University has stated:

"I regret that the 1967 budget for the Forest Service includes no research increases for the Pacific Northwest where our economy is so greatly dependent on timber. It seems shortsighted to propose a cut for forestry research nationally when just the opposite is needed. Research is the key to resource management. I hope that reconsideration will be given to the urgently needed forest research construction, specifically, completion of the Forestry Sciences Laboratory at Corvallis.

"Acceleration of population pressures accelerates demands upon our forests, and we cannot allow practices to outrun knowledge. The facts upon which the productive forests of tomorrow will depend must be unearthed and applied soon; but first, we must have the facts through research.

"On compus here at Oregon State University, we have both opportunity and urgent need to develop one of the outstanding forest research capabilities in the country. The Forest Service Laboratory is an important element in this complex, properly so because national forest land predominates in the Northwest. As Director of the State of Oregon Forest Research program, I testified to the excellent research being done in that laboratory and to the fine climate of cooperation between the Forest Service and the university."

Time is of the essence on this priority research project. Therefore, I ask the committee to approve the requisite $180,000 in planning funds for this project in fiscal 1967 plus whatever funds can be utilized in undertaking construction during the coming fiscal year.

(b) Range and Wildlife Habitat Laboratory, La Grande, Oreg.

Modern laboratory facilities will be highly beneficial to the Forest Service scientists headquartered at La Grande, Ore., for research on improvement of livestock ranges and habitat for wildlife in the Pacific Northwest. Modern equipment is an essential to efficient progress on the study of high priority range and wildlife habitat problems including some phases of the ecology of forest and bunchgrass ranges that cannot now be included in the program. The space now occupied by the scientific staff is in an old hotel building. Even these completely inadequate quarters will no longer be available after July 1, 1966. The building is to be demolished.

Alternative office space is certain to be less usable for research than that now being occupied. The only possibility for a reasonable solution to this critical problem is through construction. A laboratory building initially capable of housing the present staff with needed equipment is estimated to cost $350,000. Architectural design and plans would cost $28,000. A site for the laboratory has been offered on the campus of Eastern Oregon College.

The native ranges of eastern Oregon and Washington are essential resources for the livestock industry in that region. Maintenance of a high level of forage production and its full utilization are fundamental to the health of that industry. Some 2 million beef cattle and over 1 million sheep are affected by the condition of this range. Also, large wildlife populations are supported by the same acreage. Wildlife is a resource in which the public has a great interest as shown by the increase each year in the number of hunters.

The range and wildlife habitat research at La Grande aims at the development of management practices adapted to the production of both livestock and game. Much range land is intermixed with forest, and much game requires woodland cover. The program thus involves both range improvement and better systems of management. The research must also provide for production of timber and water under the methods of management proposed for study.

The complexity of the management problem calls for understanding of the elements that contribute to it. The nutritional requirements of the various plants need to be known. The relationship of soil characteristics to these plant requirements needs investigation. Environmental factors that affect herbage production and allowable utilization also need intensive study. Modern facilities are essential for the success of this research.

Excellent local cooperation has been manifested for this project by Eastern Oregon College of La Grande. In a letter addressed to me recently, president A. M. Rempel of the college had this to say:

"On behalf of Eastern Oregon College, I would once again express our interest in the establishment of the U.S. Forest Service laboratory building at La Grande.

"Not only do we still welcome the construction of the laboratory on our campus, but we have reserved a 4-acre site for the project in our campus development plan. These development plans have been officially approved by the Oregon State Board of Higher Education."

I urge that $28,000 be approved for completion of the planning on this laboratory and I appreciate the committee's approval of this amount last year. Unfortunately, it was lost in the conference on H.R. 6767.

Forest Roads and Trails

Insofar as forest development roads and trails are concerned, the amount of authorization is a limiting factor in determining size of the program. Usually, the size of appropriations asked for by the administration is based on an estimate of cash needed to pay off obligations when they become due.

Since the 10-year program for the development of the national forests was presented to Congress, the accumulated authorization for construction has lagged behind planned amounts by $169 million.

Authorizations for forest development roads and trails comes before the Committee on Public Works, whereas appropriation of funds for timber sale preparation comes before this Subcommittee on Interior and Related Agencies, Committee on Appropriations. An imbalance has occurred between these two activities. Timber sale preparation has been increased 97 percent of the planned

amount, whereas roads and trials have only increased 67 percent of the planned amount in fiscal year 1966.

I urge the committee to approve appropriation of the full amount currently authorized. This includes the remainder of the $38 million added by amendment in 1965 for repair of the flood damage which occurred in the Northwest in December 1964 and January 1965.

Assistance to States for Tree Planting

This program for which the fiscal 1967 request is $1 million, is designed to put idle land into producing commercial timber for the Nation's future. The State of Oregon participates in this program under title IV of the 1956 Agricultural Act. During 1965, over 10,600 acres were reforested on State forests, mainly on burned areas, by planting and seeding at a total cost of $438,000. The Federal share was $103,500. Last year the State completed the seeding of all areas suitable for direct seeding. From now on the reforestation work will consist of site preparation and the planting of nursery grown stock.

The reforestation work on burned areas is progressing satisfactorily. There is still a big job ahead to get all idle forest acres on State forests back into timber production.

I urge approval of the request of the National Association of State Foresters for an appropriation of $1,500,000 for this program in fiscal 1967.

CONCLUSION

Once again, I wish to express appreciation to the subcommittee and the committee for the thorough and sympathetic consideration that they have always given my requests for appropriations for Oregon projects within the jurisdication of the Department of the Interior and the Forest Service. I appreciate very much having had the oportunity to present these views to the subcommittee and on behalf of the people of Oregon I thank you for having made time available from your busy schedule for the consideration of these views.

Summary of fiscal 1967 appropriations requests by Senator Morse

Item	Fiscal 1967 budget request	Amount requested by Senator Morse
BUREAU OF LAND MANAGEMENT		
Management of lands and resources:		
Resources management, conservation, and protection:		
Land classification and minerals examination	$4,473,000	$4,673,000
Range management	5,389,000	5,469,000
Forestry	6,836,000	6,836,000
(a) Thinning of second growth	0	200,000
Soil and watershed conservation	14,777,000	14,777,000
(a) Additional funds for Vale pilot project	0	958,000
(b) Additional funds for other Oregon grazing units	0	1,127,000
Fire protection	3,437,000	3,437,000
(a) Increased funds for hazard reduction	0	240,000
Oregon and California grant lands: Increased funds for BLM timber and resource roads	0	3,000,000
FISH AND WILDLIFE SERVICE		
Bureau of Commercial Fisheries:		
Construction (a) Willamette Falls Fishway	0	2,000,000
Commercial fisheries research	3,200,000	4,700,000
Bureau of Sport Fisheries and Wildlife:		
Wildlife refuges in Oregon	0	100,000

Summary of fiscal 1967 appropriations requests by Senator Morse—Continued

Item	Fiscal 1967 budget request	Amount requested by Senator Morse
FOREST SERVICE		
Forest protection and utilization:		
Forest land management:		
National forest protection and management	146,589,000	146,589,000
(a) Timber resource management: (1) Additional funds for salvage and thinnings	0	2,600,000
(b) Increased recreation and public use	29,876,000	[1] 29,876,000
(c) Increased range resource management	0	4,000,000
Forest research:		
Forest and range management research:		
(a) Increase for wilderness research at Portland	0	150,000
(b) Increase for research at Bend, Oreg., Forest Laboratory	0	200,000
(c) Increase for brush control research, Roseburg, Oreg	0	100,000
Forest product and engineering research:		
(a) Balloon, helicopter, and aerial logging	0	500,000
(b) Accelerated forest product utilization research, Portland	0	120,000
Forest research construction:		
(a) Forestry Sciences Laboratory, Corvallis, Oreg	0	180,000
(b) Range and Wildlife Habitat Laboratory, La Grande	0	28,000
Increase to accelerate salvage and thinnings	0	1,600,000
Additional personnel to manage access program	0	260,000
Assistance to States for tree planting	1,000,000	1,500,000

[1] Plus an additional amount to bring program back on schedule.

Statement of Representative Johnson of California

Import of Proposed Budget to California

On behalf of the people of the 19 counties which make up the Second Congressional District of California, I want to express my deep appreciation for your consideration here today of the appropriations for the various Interior Department agencies and the National Forest Service appropriations which are of such vital importance to the mountain-valley counties which I represent.

First, as a matter of background, I would like to point out that the Second Congressional District includes 53,000 square miles in which is located a great preponderance of Califronia's natural resources. In this congressional district, which is a little larger than the entire State of New York, we have some 12½ million acres of national forests; we have another 5 million acres of public lands administered by the Bureau of Land Management; we have six national parks facilities including Death Valley, Devil's Postpile, Yosemite, Lassen Volcanic, Lava Beds, and the Whiskeytown-Shasta-Trinity National Recreation Area which was established by the 89th Congress just last year. The Fish and Wildlife Service maintains major hatchery facilities and the most important water fowl refugees on all of the Pacific flyway in the northern counties of my congressional district, and the Bureau of Indian Affairs has several rancherias and other installations in the district.

The Second Congressional District is the location of much of California's mineral activities and, therefore, the Bureau of Mines and the Geological Survey are both active in our area; and, of course, since outdoor recreation, winter and summer, is a prime industry, the Bureau of Outdoor Recreation has a major role in serving our district.

So you can see the appropriations bill which you have before you is of tremendous import to the Second Congressional District of the Golden State.

While I first of all want to express my complete support for the programs which have been outlined in the President's budget, I think there are a couple of items which in my own heart are deserving of further consideration.

Whiskeytown-Shasta-Trinity Recreation Area

First is the Whiskeytown-Shasta-Trinity Recreation Area. This complex, built around four reservoirs constructed and operated by the Bureau of Reclamation, is centered in an area of rapidly developing demand for all types of recreation; fishing, boating, camping, picknicking, and many other activities. It is estimated that this recreation area attracted more than 1½ million visitor-days of use during 1965. Conservative estimates predict, in a short period of 10 years, the visitor-days will exceed 4 million. My own experience along these

lines has been that the people are going to come to the water for recreation regardless of whether or not facilities are there. You can visualize the chaos which could be experienced if this volume of use is experienced without adequate facilities. Therefore, I think that we must begin with the job of providing these facilities and this of course starts with acquisition. I would recommend the land and water conservation fund allocations of $2 million for the Forest Service and $6 million for the National Park Service to permit a timely program of land acquisition in this recreation area. I feel that this would meet the commitments given in enactment of this legislation to provide these facilities.

If we fall behind in our acquisition program, we face a rather serious and expensive problem. Much of the land, and especially that in the vicinity of Whiskeytown Reservoir located within the boundaries of the Whiskeytown-Shasta-Trinity National Recreation Area, now is in private ownership. Some speculative and other subdivision development has already taken place. If we do not act now, this development will continue and the net result will be, we will be looking at property appraised as subdivision land rather than the agricultural land which it now is. I need not go further into detail before this distinguished committee as to the total impact this would have on the project costs. Again I must say we should get on with the job.

ANADROMOUS FISH ACT

The other item I would like to mention specifically relates to another bill enacted by the Congress last year, Public Law 89-304, the Anadromous Fish Act. Unfortunately, no funds were included in the budget to implement this program. The State of California is interested in participating in the Anadromous Fish Act. If this act is implemented by Congress, our department of fish and game informs me that it will be able to match $1 million of Federal funds in fiscal year 1967.

I respectfully ask your consideration of these two proposals.

FACILITIES FOR INDIANS

ALBUQUERQUE SCHOOL

STATEMENT OF SENATORS ANDERSON AND MONTOYA

Mr. Chairman, last year Senator Anderson made a presentation to your committee in support of funds for the construction of a new Indian school in Albuquerque, N. Mex. Your committee, after careful consideration of the evidence in support of the proposal, approved funds for the planning of this school. Unfortunately when the appropriations bill went to conference the House Members did not feel that a good enough record had been made in the House in support of this appropriation and, therefore, the House conferees would not agree to retain this item in the bill.

We are presenting this joint statement to your committee, again requesting that you include the planning funds for the Albuquerque Indian School in the appropriation for the Bureau of Indian Affairs. We believe that the need for immediate action now is critical, and the construction of the school must be accomplished during the next 2 years if the needs of hundreds of Indian children are to be met.

You will recall, last year it was pointed out that the present Indian school in Albuquerque, which houses approximately 1,100 boarding pupils, is antiquated being more than 75 years old. An engineer's report reveals that the school building and kitchen-dining room are structurally unsound and will have to be condemned. We are informed that the older dormitories are in such bad condition that they are fire hazards and constitute a threat to the students' safety. These buildings are overcrowded, dismal, and hard to keep in a sanitary condition. Engineers recommend condemnation of some of the buildings.

In view of these conditions, several alternatives have been suggested. One was to rehabilitate the existing plant. This idea has been rejected because, except for the newer dorimitories, rehabilitation is unfeasible, in the judgment of the architects and engineers.

Also it has been suggested by some that instead of building the new school, dormitories be built to house the Indian children and that they be put into the Albuquerque public schools. Several years would be required to provide the dormitories and then there is no assurance that the Albuquerque schools could possibly absorb these children. Even if they did, special programs and special

classes would have to be set up in the public schools, thus setting up segregation within the public schools in Albuquerque.

Past arrangements with the Albuquerque schools for taking Indian students have provided that the school district will not take Indian children who are 1 year over age or 1 year under achieving. Dut to this type of arrangement, we are advised that many Indian children cannot get into the Albuquerque schools, because there is insufficient room and they do not have the type of programs necessary for some of these Indian children.

Apprehension has been expressed that the construction of this school would be a move toward keeping the Indians segregated in the schools in New Mexico. We do not believe this to be true. We do not know anyone who wants this. However, there are special problems that must be given special treatment.

It is our understanding that for the most part the Indians who would go to the new Indian school are indigent children. They are under achieving and over age and they need special training if they are to go on to college. If they are unable to go on to college they should have vocational training so that they will be qualified for some type of employment when they have finished school. The new Indian school would provide vocational training for those unable to go on to college. It would provide special services and assistance to those below their grade level. It would serve a halfway house to fully integrated productive lives.

The Congress enacts the laws and sets the policy and has charged the Bureau of Indian Affairs with the responsibility for providing educational opportunity to Indians when it is not available from their State and local governments. The old Indian school in Albuquerque is unsafe and endangers the lives of students. It should be closed and proper school facilities should be provided for those Indian students who must attend and have special training and attention. The need is growing more urgent day by day. We, therefore, urge your committee to again include the planning money for this school and make every effort to retain this in the appropriation when it comes up for final approval.

We are attaching a copy of a letter received last year from the Navajo Tribal Council, a resolution from the All Pueblo Council of New Mexico and a letter from the Greater Albuquerque Chamber of Commerce.

LETTER FROM THE NAVAJO TRIBE

MARCH 11, 1965.

Hon. CLINTON P. ANDERSON,
Chairman, Joint Committee on Navajo-Hopi Indian Administration, U.S. Senate, Washington, D.C.

DEAR SENATOR ANDERSON: On behalf of my Navajo people, I wish to again express our sincere gratitude to you and the other Senators and Congressmen, who have exerted tireless efforts in bringing education to our needy people.

Because of many friends in the Bureau of Indian Affairs, dedicated to our worthy cause, our educational dilemma has been alleviated to a great extent. The task of placing our youth in schools has been met on a broad front which includes the following:

(1) The establishment of BIA day schools within the Navajo Reservation brought education to our people. This continues in areas which cannot be served by public schools.

(2) Concurrently, small trailer schools were established for the most remote areas—they are being replaced rapidly with permanent day school facilities.

(3) Locating of BIA boarding schools within the reservation—to overcome excessive absenteeism due to bad roads and to insure that children attend classes on full stomachs for better progress.

(4) Bordertown dormitories, which feed and house the students while attending municipal schools.

This multifacet and accelerated educational endeavor is both young and successful and automatically brings another massive challenge: that is, providing high school seats for increasing grade school graduates. This problem will become critical within the near future and requires action immediately.

Through your tireless support, high school enrollment on the Reservation is being increased as a result of new construction. This, together with existing bordertown schools offers a choice to our Navajo families, as well as the students.

In considering the overall program, we must conclude that this is the initial

phase which, by the very nature of our needy people with a humble background, requires special curriculums to meet their present unique needs. This special consideration will prepare our youth in a careful manner for the highly competitive educational world designed for those who are not by necessity conquering a foreign language at the outset. Most assuredly, like our makeshift trailer schools, we shall in the near future leave this requirement for special consideration behind. This needed special counseling and curriculum, we hope, will not be considered in the same context of today's emphasis on social struggles.

Another factor which supports the overhaul and expansion of the Albuquerque High School is that our enrollment in off-reservation schools (Chemawa, Oreg., Chilocco, Okla., etc.) is decreasing in favor of other Indian tribes of closer location than the Navajo tribe.

In light of the above, the Education Committee of the Navajo Tribal Council and I fully concur in the proposed construction of the Albuquerque Indian High School. This project will upgrade and expand the dilapidated facilities now in woeful existence and is the continuation of an education program of long standing. It is our understanding that the proposed new high school education program at Albuquerque will be phased out in favor of a vocational and technical school as post high school education. We are in favor of this plan and will be looking forward to this change. Heretofore, we have stressed only academic education. It is time for us to also strongly support those pursuing technical training. When the conversion is made, this vocational institute will be in an ideal location because of electronic industries in Albuquerque.

Thank you very much for giving us this opportunity to express our views. We hope that they may be of some assistance to your committee.

Sincerely yours

RAYMOND NAKAI,
Chairman, Navajo Tribal Council.

RESOLUTION OF THE ALL-PUEBLO COUNCIL

Whereas nearly 90 percent of the present enrollment of the Albuquerque Indian School are Navajos who do not have high school facilities on their home reservation, and this situation will continue for some years to come; and

Whereas the All Pueblo Council has been informed that a large number of additional off-reservation high school seats will be needed for Navajo young people in the years ahead, in addition to the high school facilities that can be provided on their reservation, and this proposed enlarged school can be a resource for a substantial number of these young people in addition to the present number; and

Whereas if the need for off-reservation high school seats decreases, this program can be phased out and post high school technical facilities increased to serve Indian young people of the whole Southwest Region; and

Whereas the All Pueblo Council recognizes the need for the proposed expanded school and on February 27, 1965, voted that a strong resolution be written supporting the project and including in it post high school training vocational and technical facilities for an initial 300 or more students, and

Whereas a 165-acre tract of federally owned land is available in an excellent location on the west side of the Rio Grande River upon which this enlarged school can be built: Now, therefore, be it

Resolved That the All Pueblo Council hereby requests that the Congress approve the project to construct a new Albuquerque Indian School and appropriate the necessary funds in fiscal year 1966 so that the school can be completed in the fall of 1967.

DOMINGO MONTOYA,
Chairman.

PAUL J. BERNAL,
Vice Chairman.

BENNY ATENCIN,
Treasurer.

CERTIFICATION

I, the undersigned, as secretary of the All Pueblo Council, hereby certify that the All Pueblo Council, at a duly called meeting which was convened and held on the 27th day of Febrruary 1965, at Santo Domingo Pueblo approved this resolution unamimously.

JOE H. HERRERA,
Secretary.

LETTER FROM THE GREATER ALBUQUERQUE CHAMBER OF COMMERCE

JANUARY 25, 1966.

Hon. CLINTON P. ANDERSON,
The U.S. Senate,
Washington, D.C.

DEAR SENATOR ANDERSON: This will reaffirm the resolution of the Greater Albuquerque Chamber of Commerce on the desirability of constrution of a $13 million Indian school and vocational institute in West Albuquerque.

As an earlier letter from the chamber stated, we endorse and firmly support the proposed Indian school and ask your assistance and that of the other members of New Mexico's congressional delegation in achieving this end * * * and further, to urge Congress to appropriate the necessary funds for the Indian school.

It is our belief that certain remedial education is required before the ultimate goal of total educational assimilation can be attained * * * and we further believe the present Indian school facilities are inadequate and, to some extent, unsafe.

If there is any information or assistance which the Greater Albuquerque Chamber of Commerce can provide, please call on us.

Sincerely,

GENE E. HINKLE, *President.*

HOUSE JOINT MEMORIAL, NO. 14, NEW MEXICO LEGISLATURE

(27th legislature, 2d session)

A joint memorial urging the Congress of the United States to appropriate necessary funds to provide for a new Albuquerque Indian school in New Mexico:

Whereas an emergency presently exists in New Mexico to provide adequate facilities for a basic education and post high school vocational training to an ever-increasing number of Indians; and

Whereas the present Federal Goverment Albuquerque Indian school in New Mexico has unsafe and unsuitable facilities for a modern educational program, and does not provide a much needed post high school vocational training program; and

Whereas the public schools in New Mexico are unable and will be unable to provide the education and training to Indians in time to meet this urgent need; and

Whereas if the Indians are to strike a telling blow against unemployment and poverty among themselves, expanded facilities for the education and training of Indians is required; and

Whereas it has been proposed that the Federal Government build a new Albuquerque Indian school to provide a basic education and post high school vocational training program for Indians so that they may compete on an equal basis with others in this modern world; and

Whereas the new Albuquerque Indian school could provide boarding facilities so that there could be a necessary transition for more and more Indians from reservation life to city life;

Whereas the new Albuquerque Indian school is endorsed by all major Indian tribes and pueblos in New Mexico including the Navajo Tribe, the All-Indian Pueblo Council, the Mescalero Apache Tribe, and the Jicarilla Apache Tribe: Now, therefore, be it

Resolved by the Legislature of the State of New Mexico, That the Congress of the United States is respectfully urged to appropriate necessary funds to provide for a new Albuquerque Indian school in New Mexico; and be it further

Resolved, That a copy of this memorial be transmitted to U.S. Secretary of the Interior Stewart Udall, and to the New Mexico delegation to the Congress of the United States.

BRUCE KING,
Speaker, House of Representatives.
ALBERT ROMERO,
Chief Clerk, House of Representatives.
MACK EASLEY,
President of the Senate.
JUANITA PINO,
Chief Clerk, Senate.

JEMEZ SPRINGS MUNICIPAL SCHOOLS

STATEMENT OF SENATORS ANDERSON AND MONTOYA

The problem of providing adequate educational facilities for the Indian children of the Jemez and Zia Pueblos in New Mexico has become serious and critical. We are presenting this statement to the Senate Appropriations Committee for the purpose of requesting that funds be provided in the fiscal year 1967 appropriations for the construction of essential additional classroom space for the Jemez Springs municipal schools.

Much pressure has been brought upon the Jemez Springs school system to provide additional and improved educational facilities but with 60.5 percent of all land in Sandoval County federally owned, school taxes have not been sufficient for this needed construction. The school district is bonded to capacity and has received all the financial help available from the State of New Mexico and from Federal authorizations under Public Law 815. The community has done everything it can toward securing a modern, up-to-date school, but unfortunately it has not been able to do so.

The plant facilities at the school have been termed "substandard" and "overcrowded" by those who have visited them. To substantiate this, we offer the following information: Four very old frame barracks buildings are being used for classrooms and other rooms are overpartitioned, creating a most difficult teaching and learning situation. Teachers do not have adequate lounge facilities and there is room for only one office—that of the principal; the superintendent must maintain his office in town several miles away from the school.

According to the information we have available, if six additional academic classrooms, an instructional facility for teaching practical arts, a general home economics laboratory and a music complex for band and chorus were to be constructed the district would have adequate facilities to meet the needs of the entire high school population in grades 7 through 12. This would permit the present elementary school of seven classrooms, with a multipurpose room attached, to be used for the beginners through the sixth grades.

At present, the total enrollment in the public schools is just under 500, and the latest figures we have show that in the elementary school here are 200 students of which 48 are Indian and 152 non-Indian. There are 284 students in the high school, of which 173 are Indian and 152 are non-Indian. This total of nearly 500 students is, as we stated earlier, already cramped and overcrowded and in the immediate future, the situation will become even more critical. This is because the Bureau of Indian Affairs is planning to close down a Government-operated day school at Jemez Pueblo which now accommodates 60 Indian children in grades 1 through 6. There is also a mission school attended by 200 children in the elementary grades and most of these children as well as those attending the pueblo school will attend public school from the ninth grade on, thus making a total high school enrollment of approximately 500 in a few years.

The estimated cost for these improvements, including architects' fees, on-site improvements, etc., is $643,437. The actual cost of construction would be an estimated $571,050 and would provide adequate school facilities.

We urge that the committee give every possible consideration to including these funds in the present appropriation in order that we may provide the quality education for our Indian children comparable to that in the public schools throughout the State.

Thank you.

TULAROSA SCHOOL DISTRICT NO. 4

STATEMENT OF SENATORS ANDERSON AND MONTOYA

The Tularosa (N. Mex.) School District No. 4 is faced with the serious problem of providing education to an ever-increasing number of Indian children from the adjoining Mescalero Reservation from grade 7 through high school. The junior high and high school buildings in this school district are obsolete and unsafe. Further, the school district is bonded to capacity and has a low property evaluation.

The situation that existed last year when the Senate Appropriations Committee included $450,000 for the Tularosa schools in the Bureau of Indian Affairs appropriations has grown progressively worse. The Mescalero Indians are so dissatisfied with the existing facilities they have indicated that unless conditions are greatly improved, they will request that a high school be constructed on the reservation by the Bureau of Indian Affairs.

We are submitting this statement to the committee to urge that you again include funds for the Tularosa (N. Mex.) School District No. 4, in the budget for fiscal year 1967.

To refresh your memories, we would like to point out some of the reasons why these facilities should be replaced. The Tularosa Junior High School Building was constructed in 1916 and, today, the building and classrooms are totally inadequate. The cafeteria was converted from a small auditorium and classroom in the basement of this building and it is extremely difficult to maintain even minimum sanitation and safety.

This 50-year-old building is obsolete, poorly lighted, and even though maximum maintenance efforts are being made, the plumbing is in exceedingly poor condition. The Building Facilities Division of the New Mexico State Department of Education, the Firemen's Insurance Co., the insurance carrier, and the State department of public health have all recommended that this building be abandoned at the earliest possible date. The building is hazardous and can by no means be considered as fire resistant. One hundred and ninety pupils are taught in this building, forty-seven of whom are Indian students.

The Tularosa High School Building was constructed under the WPA program in 1937 and while it has been reasonably well maintained, the school population, both Indian and white, has increased to the point where additional classroom space in mandatory.

In 1957–58, the need for additional space became acute and two Government surplus barracks were moved onto the campus. These are makeshift buildings and are very undesirable classrooms. They should be abandoned. Another building, constructed in the early 1940's as a Boy Scout lodge, is presently being used during school hours as an instrumental music building. This building is adequate for Boy Scout meetings, but is not the type of structure that lends itself to teaching instrumental music.

In 1960, an Inland Steel structure replaced a termite-ridden firetrap as a vocational building. This building is of cheap construction and prefabricated, falling far short of being the type to house a good vocational program. If a new building can be provided for the vocational program, the existing building can then be used for a school maintenance shop which is badly needed.

The library-science building has a very high maintenance cost because of poor design and poor construction in 1949. Although these costs are high, it will continue to be used since it is one of the better buildings on the campus. All in all, the Tularosa school facilities are a patchwork of inferior buildings scattered over the school campus. This could not be helped and is not the fault of the school district which has a small bonding capacity and low property valuation.

The district is now bonded to capacity and with the increasing number of both Indian and white children, it is imperative that an adequate plant be provided for this junior high and high school. We are advised that approximately 30 percent of the high school students are Indian and unless modern facilities can be provided at Tularosa, the Mescalero Indians will request the Bureau of Indian Affairs to construct a high school on the reservation. This would entail an expenditure of approximately $750,000 and would provide the Indians with modern facilities, but a segregated school.

It appears to be more economical to provide an appropriation of $450,000, which is the amount of Federal funds needed, for the Tularosa School District than to construct a new, segregated high school on the reservation. Government funds for the Indian portion would be added to from the district's bond issue and State funds to provide a modern, integrated facility for both the Indian and white students.

As we stated earlier, $450,000 was provided by the Senate Appropriations Committee for this needed construction last year; however, the House conferees would not agree and the funds were deleted from the final appropriation. We urge the committee to again give serious and thoughtful consideration to the inclusion of this amount in the budget for fiscal year 1967.

Thank you.

LAW AND ORDER

LETTER FROM SENATOR MCGOVERN

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
Washington, D.C.

DEAR MR. CHAIRMAN: I understand that the Interior budget contains $181,000 in Federal funds for assistance to Oglala Sioux Tribe in South Dakota for their law enforcement activities. The tribe and the area office advises me that conservative estimates indicate that at least $303,000 is necessary to conduct these activities properly. I am enclosing a letter from the Bureau of Indian Affairs, which sets forth the matter very well.

I call this matter to your attention, hoping that the committee will see fit to act favorably for this substantial increase in the budgeted amount.

Thank you for your courtesy.

Sincerely,

GEORGE MCGOVERN.

LETTER FROM BUREAU OF INDIAN AFFAIRS

Hon. GEORGE MCGOVERN,
U.S. Senate,
Washington, D.C.

DEAR SENATOR MCGOVERN: Further reference is made to your letter of January 25 with which you enclosed a copy of one from Mr. Enos Poorbear, president of the Oglala Sioux Tribal Council. Mr. Poorbear outlined the need for additional Federal funds to support the reservation law and order program, and requested that the total sum of $275,000 be made available for that purpose for the fiscal year 1967.

Mr. Poorbear indicates that while a total of $181,000 of Federal funds is being spent for law and order at Pine Ridge during the current fiscal year, the tribe is also spending approximately $73,000 for the same purpose. He stresses the limited tribal income and the tribe's inability to continue its financial support of the program. Mr. Poorbear asks that a total sum of $275,000 of Federal funds be made available during the fiscal year 1967 in order to relieve the tribe of its financial responsibility and at the same time provide for an adequate law and order program.

Our Aberdeen, S. Dak., area office reports that the Oglala Sioux Tribe has for many years made substantial contributions to the limits of its ability to the reservation law and order program. The Aberdeen area office supports the request of Mr. Poorbear but suggests that his estimate is somewhat conservative. The area director reports that a total sum of $303,000, or $122,000 more than is presently available, would be necessary to relieve the tribe of its financial responsibility and at the same time assure an adequate program.

There is no doubt but that the Oglala Sioux Tribe is in straitened financial circumstances and could use its limited income to better advantage if Federal funds were available to relieve the tribe of its law and order obligations. However, the budget requests for the fiscal year 1967 for law and order do not include any additional funds that would enable the Bureau to provide additional assistance to the Oglala Sioux Tribe.

The enclosure with your letter is returned.

Sincerely yours,

ROBERT L. BENNETT,
Deputy Commissioner.

PROBATION OFFICER, TURTLE MOUNTAIN INDIAN RESERVATION

LETTER FROM SENATOR YOUNG OF NORTH DAKOTA

Hon. CARL HAYDEN,
Chairman, Senate Committee on Interior Appropriations,
Washington, D.C.

DEAR SENATOR HAYDEN: For several years now I have been attempting to obtain the assignment of a probation officer to furnish services to delinquent Indian youth on the Turtle Mountain Indian Reservation in North Dakota.

Enclosed is a copy of the most recent letter I have received from the Bureau of Indian Affairs.

Senator Hayden, requests for a probation officer have come from the Rolette County welfare director, as well as from the Honorable Glenn K. Swanson, North Dakota State district judge for the State judicial district in which the Turtle Mountain Indian Reservation is located. I believe the assignment of a probation officer to assist these young people would be most helpful. I have had many complaints from businessmen in the area over the activities of, not only Indian youth I hasten to add, but young people in general. In most instances young Indians were involved along with some non-Indians.

I sincerely hope that in this year's Interior appropriations bills funds can be provided for this probation officer, along with appropriate report language that such an officer be assigned to the Turtle Mountain Reservation.

With warmest personal regards,

Sincerely,

MILTON R. YOUNG.

LETTER FROM BUREAU OF INDIAN AFFAIRS

Hon. MILTON R. YOUNG,
U.S. Senate,
Washington, D.C.

DEAR SENATOR YOUNG: This will acknowledge your letter of February 9 concerning the employment of a probation officer to furnish services to delinquent Indian youths on the Turtle Mountain Reservation.

You will recall our previous correspondence on this matter. We are enclosing for ready reference a copy of our letter to you of May 20, 1964. We have consulted with our Aberdeen area office and are informed that the continued limited personnel ceiling and limited funds made it necessary for the probation and parole officer position at the Turtle Mountain Agency to be abolished. On the basis of the expected level of financing of the law and order program during the coming fiscal year, we see no possibility of reestablishing and filling the position.

We are, of course, aware of the need for such a position and regret that a more favorable reply cannot be made. We appreciate Judge Swanson's interest.

The enclosure with your letter is returned.

Sincerely yours,

WILLIAM E. FINAL.
Acting Assistant Commissioner.

DEPARTMENTAL STATEMENT

Cost.—Grade GS–9, $15,300.

Duties.—Conducts presentence investigations and prepares reports on adult Indians convicted of offenses in Indian court. Supervises adult Indians placed on probation or parole by the court. Assists families of Indians serving sentences in jail. Develops community plans for potential parolees. Arranges for psychiatric examinations where indicated. Cooperates with probation and parole officers of other State and Federal agencies. Prepares reports of violations of supervision conditions by Indian probationers and parolees, and processes such cases in the Indian courts.

As caseload with adults permits, perform substantially same type of service for juvenile offenders.

The only way the Bureau can fill this position is to abolish at least three police positions. To take such a course of action would mean that the Bureau could not provide necessary protection to lives and property of reservation residents.

AGRICULTURAL EXTENSION

TELEGRAM FROM WHITE MOUNTAIN APACHE TRIBE

WHITE RIVER, ARIZ., *March 4, 1966.*

Hon. CARL HAYDEN,
U.S. Senator, Washington, D.C.:

The fiscal year 1967 of Federal budget, as submitted, will result in complete abolition of the agricultural extension program and a further reduction of the soil

and moisture conservation program on the Fort Apache Reservation. Due to the extremely important work to form by these two activities with and for the White Mountain Apache Tribe, I urge you to assist us to restore these two programs to their current level. I emphasize we are not asking for increase Federal funds, but merely a maintenance of existing program. Your assistance will be greatly appreciated.

LESTER OLIVER,
Chairman, White Mountain Apache Tribe.

(Identical telegram received by Senator Fannin)

STATEMENT BY SENATOR MONRONEY

The Oklahoma Cooperative Extension Service has been under contract to the Bureau of Indian Affairs to provide educational assistance for less developed Indian families for the past 10 years. The arrangement has been most successful from the standpoint of benefits derived by these Indian families.

Oklahoma has had one of the largest Indian contract programs in the Nation. In fiscal year 1966, the program was funded by $136,565 of Federal funds. During the past year, special contract extension employees worked with approximately 18,000 individuals in 31 of Oklahoma's 77 counties. These Indians represented 20 tribes, of which the population in Oklahoma is 43,000. Many thousands more received educational service through the regular extension programs.

In the present fiscal year, there are 14 professional, full-time contract extension agents working with Indian families in 31 counties in Oklahoma.

A map showing the location of the counties in which this extension contract is being carried out would coincide with the map of the counties eligible for assistance under the Economic Development Administration. Most of the programs under the President's poverty program place a special emphasis upon Indians due to the fact that among them are the lowest income, most poorly educated, and less healthy citizens of the Nation. Therefore, it seems to me at this time that to completely eliminate this contractual arrangement between the Oklahoma Cooperative Extension Service and the Bureau of Indian Affairs would be entirely contrary to the objectives of the President in his war on poverty.

I sincerely urge the Subcommittee on Interior Appropriations to restore the $136,565 in order that this program may be carried forward in a continuation of the effective manner in which it has been administered during the past 10 years.

LETTERS FROM SENATOR MONRONEY RE OKLAHOMA FACILITIES

MARCH 16, 1966.

Hon. CARL HAYDEN,
Chairman, Appropriations Committee,
U.S. Senate, Washington, D.C.

DEAR CARL: Despite the President's poverty program that is supposed to help, among others, the poor of our Indian tribes, I find the budget does not deal with our Oklahoma Indians in that fashion.

There are three items of utmost importance that should be considered in the Interior appropriations bill:

I. Funds for the special extension service for rural Indians were severely cut. I wrote you about this matter on February 22, but I now have more information.

The program is operated by the Oklahoma State Extension Service, under contract to the Bureau of Indian Affairs. Last year 14 extension specialists in Oklahoma worked with 1,557 Indian families and 2,864 Indian 4–H Club members. These people bring a valuable service to the Indians in an area where it is needed most. They help the Indian plan better use of food in the family, improved sanitation practices, and modern techniques of farming and gardening. They teach the Indian women to be better homemakers. The success of the service is evident in the rural Indian homes in our State. These extension specialists are helping the Indian families learn to live more modern, healthy lives. They are realizing a way of life which has not been possible for them before.

II. Funds should be provided to begin construction of a new dormitory at the Eufaula Indian School.

The Bureau of Indian Affairs has budgeted money to plan a new dormitory to house 128 Indian children who would attend Eufaula public schools. I urgently request additional funds be appropriated so that there will be no further delay in beginning construction of this facility.

The school was established 76 years ago by the Creek Nation. The original building was still in use when it was destroyed by fire 4 years ago. Some 50 Indian girls are now housed in inadequate wooden structures, and boys—who would attend school in Eufaula—must go elsewhere.

This year's Federal budget requests $37,000 planning funds for a new dormitory. We should increase this amount so that construction could begin as soon as plans are drawn, and not later than next year.

III. Immediate steps should be taken to replace the Claremore Indian Hospital. It is in unsafe condition. On any side of the building, you can see cracks in the walls. Inside you find an almost total lack of private bath and toilet facilities. Patients are in large wards, with very few private rooms for the seriously ill, or for isolation cases.

Dr. Kenneth B. Babcock, Director of the Joint Commission on Accreditation of Hospitals, visited the Claremore Indian Hospital in 1960 and called it "the most inadequate physical plant I have seen in my 12 years of hospital survey work." He added that the hospital is a "disgrace to the U.S. Public Health Service and American medicine," and said it would be a waste of funds to try and patch it up.

The hospital serves a 12-county area in northeastern Oklahoma with an Indian population of some 16,000. It was built in 1928, and the surgical facilities which are in current use were added in 1935.

This hospital should have already been replaced, and I hope that immediate steps can be taken to do so.

Your careful consideration of these particular items will be greatly appreciated.

Sincerely,

MIKE MONRONEY.

FEBRUARY 22, 1966.

Hon. CARL HAYDEN,
Chairman, Appropriations Committee,
U.S. Senate,
Washington, D.C.

DEAR CARL: A review of the budget recommendations has just brought to light some rather disturbing news concerning reductions in appropriations for the Bureau of Indian Affairs in Oklahoma.

It appears that the current budget contains no funds whatsoever for extension services for Indians in Oklahoma, and requires reduction of two people in the adult education program in Oklahoma.

The work of these teachers among adult Indians, including the home demonstration agents and county agents working exclusively among Indian people, is tremendously important to a successful war on poverty in our State. I hope I will be able to convince your committee that these funds should be restored.

With kindest personal regards, I am

Sincerely,

MIKE MONRONEY.

DEPARTMENTAL STATEMENT—EUFAULA BOARDING SCHOOL, OKLAHOMA

The $37,000 included in the Bureau's fiscal year 1967 budget estimate now before the Congress is needed to plan, design, construct, and supervise the construction of the facilities needed for the reconstruction of this school.

The needs for this school consist of a 128-pupil dormitory for both boys and girls; a multipurpose building with kitchen, dining, office, and instructional materials center included: three employee houses; demolition of existing old buildings; and utilities and site improvements. In addition to the construction items, the facilities will require equipment and furnishings, and it will also be necessary to provide on-the-job supervision, contingencies that may arise in connection with the construction contracts, and engineering and design.

The total cost of the project is estimated at $1,025,000 as follows:

Building construction	$794,700
Utilities and site improvements	135,000
Equipment	40,000
Fallout shelter	15,000
Engineering plans and surveys	40,300
Total	1,025,000

DEPARTMENTAL STATEMENT—PUBLIC HEALTH SERVICE INDIAN HOSPITAL, CLAREMORE, OKLA.

The present Claremore PHS Indian Hospital serves 16,000 Indians residing in 12 counties of northeastern Oklahoma. The counties include Okfuskee, Okmulgee, Creek, Tulsa, Wagoner, Rogers, Washington, Nowata, Craig, Ottawa, Mages, and Delaware. Cherokee and Creek Tribes are predominant in this service unit but also include members of Quapaw, Miami, Seneca, Wyandotte, Euchee, Delaware, and Cherokee-Shawnee.

The Public Health Service concludes that a substantial deficiency in the health status of the Indians in the Claremore service unit will create extra burdens for the general population, if the concentrated Indian health services are not made available. Health needs, transitional aspects in cultural change, and economic deficiencies create an impact in meeting the acceptable level of health.

The Indian leaders concur with Public Health Service that remarkable improvement of health for Indians is based on the availability of services at the Claremore hospital. Without the present interest by the Public Health Service staff to work with the Indians of one-half degree and more blood quantum, the health status of the Indians would deteriorate due to the lack of economic resources, lack of aggressiveness and knowledge of utilizing health resources, and Indian attitudes toward use of local facilities. Prenatal, deliveries, and postnatal care are more acceptable to Indian women at the Indian hospital than at local facilities.

I. Magnitude of workloads

Expected workloads:	
Admissions	1,758
Births	343
ADPL	44
Outpatient:	
Facilities	15,000
Field	5,000

Maintaining the workloads in the present facility is a strain on the staff and the present hospital is in such a condition that repairs cannot be made.

II. Specialty services

When completed this hospital will provide medical, surgical, and obstetrical services to the Indian beneficiaries in the Claremore service unit. Pediatric and eye, ear, nose and throat services will be provided at the hospital and at the Okemah field clinic by a consulting pediatrician. Dental services will be provided at the hospital on both an inpatient and outpatient basis.

The hospital will serve as a base for a school health and a field health program and will provide the staff for the field clinic at Okemah.

III. Major deficiencies

The Claremore hospital was built in two phases. The west wing of the hospital was opened in June 1928 to serve as a medical unit. The east wing was opened in December 1935 to serve as a surgical unit. The present hospital is a combination of frame and masonry construction and is in a badly deteriorated condition.

The entire hospital is used for inpatient and outpatient services combined. Consequently one finds outpatients waiting for care in corridors throughout the building. The ancillary facilities are scattered throughout the structure in a functionally inoperable manner. Both the operating rooms and the delivery rooms do not meet minimum standards. The central supply area is cramped and unsafe as is the laboratory, X-ray and pharmacy area. Patient units allow little or no privacy and there are no nursing stations for them. Nursing duties are presently carried on from cramped and makeshift nursing units. While

the Joint Commission on Accreditation praised the care given in the hospital under existing conditions, it deplored the structural and functional condition of the building and denied accreditation on these grounds.

IV. Proposed remedies

Recommendations are for a replacement facility for the existing hospital at the present site. The proposed 60-bed facility will provide the necessary ancillary facilities to serve both the inpatients and an extensive outpatient program along with an active field health program.

V. Time schedule for financing

Appropriations of $93,000 will be needed for planning and $1,560,000 for the construction of the new facility.

LETTER FROM BUREAU OF INDIAN AFFAIRS

MARCH 21, 1966.

HON. CARL HAYDEN,
U.S. Senate,
Washington, D.C.

DEAR SENATOR HAYDEN: The following information is offered to enable you to make a meaningful response to Senator Mike Monroney's letter of February 22, 1966, on the reductions in the extension program of the Bureau.

Because of the ceiling limitations set on budget and personnel, the Bureau was compelled to make hard choices among existing programs. In evaluating ongoing programs against immediate needs, a decision was made to give a higher priority to the housing program and to agricultural extension and adult education. The importance of adult education and agricultural extension services to Indian people are deemed highly important, but it was decided we had to support housing because of the immediate and critical need for it and for which a considerable allotment of mutual help housing funds has been made by PHA. The budget allowance for the agricultural extension program for fiscal year 1967 was reduced by $500,100 and the adult education budget by $400,000.

In extension, this means a loss of about 47 professionals who are working in agricultural extension, home economics, and the 4–H Club youth programs. This loss cannot be measured specifically but will undoubtedly be deeply felt across the range of agricultural activities including a reduction in the number of children heretofore assisted in 4–H and other youth organizations.

The decision to reduce the extension budget for Oklahoma was based on the results of the very fine program carried on by the Oklahoma extension service over the past 10 years, where it is believed the Indian people have reached a higher level of acceptance of extension services offered by Oklahoma than Indians in other States living on more underdeveloped and less integrated situations.

The distribution of the cut to the extension program is as follows:

	Funds reduced	Staff reduced
Alaska	$20,000	1
Billings area: Montana and Wyoming	30,000	2
Gallup area: Colorado, Arizona, and New Mexico	100,000	10
Muskogee and Anadarko areas: Oklahoma	150,000	15
Phoenix area: Utah, Nevada, and Arizona	80,000	8
Portland area: Oregon, Washington, and Idaho	30,000	3
Aberdeen area: North Dakota and South Dakota	40,000	4
Central office, Washington, D.C.: Florida, North Carolina, and Department of Agriculture	50,000	5

The specific distribution of the reduced budget to the respective States has been the responsibility of the area directors, since they are the contracting officers representing the Bureau in negotiating the extension contracts with the States.

The budget cut of $500,100 reflects a 28.6-percent reduction in our extension program.

Sincerely yours,

ROBERT L. BENNETT, *Acting Commissioner.*

STATEMENTS BY BUREAU OF INDIAN AFFAIRS

Distribution of reduction of agricultural extension funds by State

States	Reduction of funds	Reduction of positions	
		State contracts	Bureau program
Alaska	$20,000		1
Arizona	84,500		10
Colorado	10,000	1	
Florida	10,000	1	
Idaho	5,700	1	
Mississippi	10,000		1
Montana	23,600	2	
New Mexico	62,500	4	2½
North Dakota	12,000	1	
Oklahoma	140,000	15	
Oregon	5,000	1	
South Dakota	28,000	3	
Utah	23,000	2	
Washington	19,300	2	
Wyoming	6,400	1	
Central office	40,000	4	
Total	500,000	38	14½

The following is a listing of agricultural extension programs by State for the years 1966 and 1967: (The amounts marked with an asterisk indicated that a contract(s) is in effect during that year.)

State	Fiscal year 1966, total	Fiscal year 1967, total
Alaska	$230,000	$210,000
Arizona	354,033	269,533
Colorado	*20,300	*10,300
Florida	*25,000	*15,000
Idaho	*42,500	*36,800
Minnesota	*29,000	*29,000
Mississippi	37,565	27,565
Montana	*117,900	*97,900
Nevada	*58,885	*58,885
New Mexico	*228,312	165,812
North Carolina	*23,000	*23,000
North Dakota	*56,800	*44,800
Oklahoma	*140,000	
Oregon	*26,060	*21,060
South Dakota	*131,145	*103,145
Utah	*23,000	
Washington	*69,500	*50,200
Wyoming	*31,500	*21,500
District of Columbia	[1] 104,500	64,500
Total	1,749,000	1,249,000

[1] Includes amount of $47,000 agreement with Department of Agriculture not included in 1967.

ALASKAN EDUCATION SURVEY

STATEMENT OF SENATOR GRUENING

Mr. Chairman, the Department of the Interior's budget for fiscal year 1967 includes a request of $46,921,576 to be spent in the State of Alaska. The Forest Service budget request for Alaska for the same period is $5,842,300.

These are sums which, if approved, will add substantially to the development of the 49th State. I am pleased to have this opportunity to appear before the Senate Appropriations Subcommittee on Interior Department and Related Agencies to comment specifically on certain items in the budget.

I was very pleased to see that the subcommittee has again included funds for the continuation of cadastral surveys in Alaska. This is a vital program, of

great importance to the State in the selection of Federal lands as provided by the Statehood Act. I commend the subcommittee for its insistence on maintaining this program at a pace commensurate with the State's ability to select lands. I was also pleased to see that we are making further progress in the development of our national parks and that the Bureau of Sport Fisheries and Wildlife and the Bureau of Commercial Fisheries are maintaining their programs, as is the Geological Survey. The increase by over $3 million in the funds allocated to the Forest Service will allow for more rapid development of one of our most important resources. But the remarks I would like to address to the subcommittee this morning concerns an area that has been too long neglected—too long set aside by other considerations—when the Department of the Interior's budget is formulated.

The area of which I speak is the educational programs of the Bureau of Indian Affairs in Alaska. I note that this year, substantial increases have been made in the BIA's budget—and this is as it should be—our Indians, Eskimos, and Aleuts are growing in number each year, and we should make every effort to keep abreast of this population growth. Unfortunately, we are not. The Bureau's program for elementary schools in Alaska is falling short of the mark. In the last few weeks I have received letters from several different villages that recite the need for additional classrooms, additional teachers, new schools and quarters for teachers. I am sure that a greater effort could be made. A greater effort must be made for these children are not closing the "cultural gap." Rather, they are falling further and further behind.

This situation, as distressing as it is, does not compare to an even more tragic aspect of Indian and Eskimo education in Alaska. In this day of technology, when a high school education is a prerequisite for the most menial of jobs, the Bureau fails to furnish any secondary education to 700 or 800 native boys and girls of high school age in Alaska. In this day where much concern is expressed about the high school "dropout," Alaska native youth are being forced out, without recourse, and as such are being doomed to poverty and subsistence living—simply because there is no school for them to attend.

The problems in Alaska are not the same as those faced by other areas with substantial numbers of Indians. Our situation is unique in that the concept of the Indian reservation has not generally been followed in Alaska. Most of our land is owned by the Federal Government and upward of 50,000 natives are spread throughout this vast federally owned rural or "bush" area of Alaska. No roads connect these villages. The only contact is by air or short wave radio. Most villages have an elementary school operated by the BIA or the State. Children desiring a high school education must apply to the Bureau and ask to be accepted. If accepted, these children are then transported by air down to the BIA regional boarding school and Mount Edgecumbe, near Sitka. This facility is being expanded this year, and I wholeheartedly applaud the subcommittee's action in including these funds in this year's budget. But even when this construction is completed, this facility will not begin to accommodate the numbers of native youth eligible for an education.

At the present time, many of the students who cannot be accommodated at Mount Edgecumbe, are flown down to the Chemawa Indian School in Oregon. Last year, the parents of 588 students reluctantly agreed to send their children 2,000 miles away from home so that they could receive the education they need so desperately, and as I have stated before, about 800 children had no place to go.

There has been a growing consensus within Alaska that what is needed is a series of regional boarding schools and dormitories, located in closer proximity to the native villages, to be operated as public schools by the State or the local districts and of course open to all native and nonnative. I note that Mr. Hetzel who preceded me as a witness has also mentioned this need.

This concept of regional boarding schools leads me to another point of equal importance. Under the present structure, the Alaskan Indians, Eskimos, and Aleuts are forced into a school system which is a segregated system—and a segregated school system, whether the segregation is de facto or de jure—has been declared by the Supreme Court of the United States as unconstitutional, as such an education is inherently unequal. The BIA justifies its practices by insisting that it is providing for the "unique needs" of a culturally different child, this is both a paternal and benevolent attitude, and much can be said in favor of such an attitude. But any practice of segregation, no matter how benevolent, cannot be condoned in this country because it is inherently unequal. In fact, paternalism and benevolency were the same arguments advanced by those who

favored segregation of the Negro—how enigmatic that this same argument is now advanced by an executive agency of this Government in contravention of the recently enacted civil rights law. Mr. Chairman, I have one further point on the uniqueness of the Alaska situation and I consider it most important. In Alaska, the Indian, Eskimo, and Aleut has not yet been relegated to the role that he must bear in many of our Western States. In Alaska he is not yet a second-class citizen. When I was first appointed Governor, there were signs that discrimination was the pattern. There were business places with signs posted saying "no natives." But this was eliminated at my insistance by an act of the territorial legislature, and I am happy to report to you that while Alaska may not be wholly free of prejudice—I consider it one of the States with the least prejudice, which is a tribute to all Alaskans. This is the way we want to make Alaska, wholly free from race prejudice, but we will surely fail in this as we continue to grow in population, if we do not make some real effort soon to close the culture gap and associate with our native brothers.

Prejudice is only a matter of fear and lack of understanding, which can be largely eliminated by association. What better place to begin than in the public schools. In Alaska, because of the distances involved, because of the concentration of native population in villages distant from the cities, the earliest practical place for integration of our society is the secondary schools. Mr. Chairman, I feel strongly about the problems we are confronting in this regard in Alaska. The State Legislature of Alaska is now considering a proposal for regional high schools and dormitories. It believes the situation so desperate that it may be willing to assume a portion of the responsibility for the education of our native youth. I think this most commendable, but I do not feel that the State can afford it. Practically all of our natives reside on Federal property and because of this and their conditions of poverty, they contribute little to the State tax base. Providing additional classroom facilities and dormitories is clearly a Federal responsibility. Funds are needed to now to study the population patterns and to make surveys as to the number of students affected, location of the regional facilities and costs of such projects. An appropriation of $50,000 for such studies would be a fine initial step in opening the door of opportunity to these children, and I urge the committee to add this amount to the Department's appropriation.

Thank you, Mr. Chairman, for the privilege of appearing before the committee.

DEPARTMENTAL STATEMENT—MADDOCK, N. DAK., PUBLIC SCHOOL FACILITIES

The Maddock Public School District No. 9 operated only an elementary school prior to the year 1966. In February of 1966, it became a high school district through the purchase from Benson County, N. Dak., of the property of the Benson County Agricultural and Training School consisting of a high school building, a dormitory, and teacherage.

At the present time 41 of the 199 high school students enrolled at Maddock are Indians from Fort Totten. This comprises about 20 percent of the total high school enrollment.

The school district desires to construct both a high school and elementary building. By bonding to capacity and utilizing all available potential local and State funds, the Maddock School District can raise $867,700. This sum would provide $322,000 for constructing the grade school and $545,700 available for the high school building which has been estimated to cost $1,013,000. This leaves $467,300 which is needed to complete the construction program at Maddock.

The Bureau of Indian Affairs does not currently have either funds or legislative authority for this purpose. However, if the Congress provides the necessary funds and authority the Bureau will cooperate with the Maddock Public School District.

RECREATION

LETTER FROM SENATOR MCGOVERN

MARCH 7, 1966.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: The Senate Interior Committee on January 20 adopted a resolution asking the Bureau of Outdoor Recreation to make a survey of recrea-

tional opportunities and recommend the best potential development of the Missouri River and environs from Yankton, S. Dak., to the river's source in Montana.

Senators Metcalf and Burdick joined me in requesting passage of the resolution because they, too, are receiving many local, uncoordinated suggestions for campgrounds, parks, national recreation areas, roads, etc., at the big new reservoirs and along the river.

The Bureau of Outdoor Recreation advises me they will need $50,000 added to their 1967 fiscal year appropriation to do the work expeditiously.

On behalf of myself and the cosponsors of the study, I therefore request and urge your committee to include these funds in the Bureau of Outdoor Recreation appropriation.

With every good wish,

Sincerely yours,

GEORGE MCGOVERN.

RESOLUTION

Resolved by the Committee on Interior and Insular Affairs of the U.S. Senate, That the Secretary of the Interior be, and is hereby, requested to direct the Bureau of Outdoor Recreation to conduct a study of the Missouri Rivers from Yankton, S. Dak., to Fort Benton, Mont., with a view to enhancing the recreation resources of this area by its possible designation as a national recreation area. The Bureau of Outdoor Recreation should cooperate, as appropriate, with other Federal and State agencies.

(Signed) HENRY M. JACKSON,
Chairman, Committee on Interior and Insular Affairs.

Attest:

JERRY T. VERKLER, *Staff Director.*

Adopted this 17th day of February 1966.

LETTER FROM SENATOR CLARK

MARCH 18, 1966.

Hon. CARL HAYDEN,
Chairman, Subcommittee on the Department of Interior and Related Agencies, Senate Appropriations Committee, Washington, D.C.

DEAR SENATOR HAYDEN: In reading the testimony submitted to the Appropriations Subcommittee on the Department of the Interior by Director of the Bureau of Outdoor Recreation, Mr. Edward C. Crafts, I see he indicates that only $28,316,000 will be available from the land and water conservation fund in fiscal year 1967 to purchase land for national parks and recreation areas. Of this amount, $4 million is scheduled to be spent for land acquisition at the Delaware Water Gap National Recreation Area. This is far short of the amount needed. Land speculation within the area to be acquired for this park is rife, and the allocation of $4 million from the fund will not be sufficient to stop it.

Congress authorized the Delaware Water Gap National Recreation Area last year. It will lie in the midst of the Pocono Mountains and surround the 37-mile-long lake to be created by the Tocks Island Dam. When completed, the reservoir and recreation area will cover 72,000 acres. Nearly 30 million people live within 100 miles of the project. The Pocono Mountains already comprise a major vacation land for the east coast. However, every year more than 10 million people are expected to visit the new recreation area when it is completed.

The authorization bill for the Delaware Water Gap National Recreation Area (89–158) provides for appropriations of up to $37,412,000 to acquire nearly 48,000 acres. In the House hearings on the bill last year, the Department of the Interior scheduled these land acquisitions over a 5-year period. Ten million dollars worth of land was to be acquired in the first year. Then, roughly $7 million was to be acquired in each of the next 3 years. In the final year of acquisition, $5,512,000 worth of land would be acquired.

The original survey of the 48,000-acre site, made in 1959 by the Corps of Engineers, fixed the acquisition costs at $17,300,000. By the time the site was resurveyed in 1964, the cost had risen to $37,412,000. Land speculation in the area has been a major problem from the beginning.

But the pace of the speculation and inconsistent land development has increased since the authorization bill was passed. There are a number of second-

home developments cropping up within the park area. I attach, for the committee's study, a letter sent to Mr. Frank W. Dressler by the project manager for the Army Corps of Engineers and an advertisement for the land within the park area. These two documents (withdrawn for the committee file) illustrate the land-speculation problem. The Lake Success development is entirely within the boundaries of the Delaware Water Gap National Recreation Area. The advertisement quotes the price of the land at $1,495 to $2,495 for a quarter acre. If the minimum price prevailed throughout the recreation area, less than 6,000 acres could be purchased under the existing authorization.

The Department of the Interior is concerned about this land speculation, but it is hampered in doing anything about it because of the limited funds at its disposal through the land and water conservation fund. After the authorization bill passed, the Department reprogramed some of its funds for fiscal 1966 to get the $250,000 it needed to do the work preliminary to land acquisition, so that land acquisition could begin as soon as funds were available.

The six Senators for the States of New Jersey, New York, and Pennsylvania all asked the Secretary of the Interior to request a supplemental appropriation of $3 million for this fiscal year to permit immediate land acquisition. A copy of our letter is attached. The Department declined to seek the supplemental appropriation, saying there were not sufficient revenues in the land and water conservation fund to permit it. The Department did acknowledge the problem of land speculation, and said that $4 million would be allocated from the funds available for the 1967 fiscal year to acquire the highest priority and most pressing lands. This is not enough to stop the land speculation.

The President, too, is concerned about land speculation on Federal projects. In his message on natural beauty he said that he had asked the Director of the Bureau of the Budget, the Attorney General, and the Secretary of the Interior and other agency heads concerned to look for ways to protect the Federal Government from artificial cost spirals. I strongly support this effort. It is time that we put a stop to speculation on public works.

In the meantime, however, we have only one way to control spiraling land costs. That is to provide the agencies involved with the money needed to buy the land quickly, before speculation drives the price up.

To do this in the case of the Delaware Water Gap National Recreation Area will require, in the 1967 fiscal year, the full $10 million appropriation contemplated at the time of the hearings on the authorization bill. For this reason, I urge the Subcommittee on the Department of the Interior and Related Agencies to provide an additional $6 million appropriation for the Delaware Water Gap National Recreation Area.

The taxpaying public of the United States has a right to be protected from land speculation at Federal projects. To fail to provide additional funds to purchase land where costs are increasing at such alarming rates does not save any money. It costs money. Only affirmative action by the Committee on Appropriations can protect the taxpayer in this case and other cases like it.

Sincerely yours,

JOSEPH S. CLARK.

Hon. STEWART L. UDALL,
Secretary of the Interior,
Washington, D.C.

DEAR SECRETARY UDALL: For the people of the eastern seaboard, the authorization of the Delaware Water Gap National Recreation Area was one of the most important pieces of conservation legislation passed in the 1st session of the 89th Congress. It is now most important to begin land acquisition for the park within the next few months. Land speculation and land development inconsistent with the future land-use patterns of the recreation area have always been a problem. But the pace of these activities has increased considerably since the authorization for the recreation area became law.

Several large second-home projects are already under development within the area set aside for the reservoir and recreation area. Although a contingency for increasing land costs was included in the authorization for acquisition of $37,412,000, this contingency will soon be exceeded. Only an immediate land acquisition program can limit speculation and prevent the harmful developments.

We, therefore, wish to express our support for a supplemental appropriation of $3 million to permit the Department of the Interior to begin land acquisition for the Delaware Water Gap National Recreation Area by April 1, 1966.

Sincerely yours,

CLIFFORD P. CASE.
JOSEPH S. CLARK.
HUGH SCOTT.
JACOB K. JAVITS.
HARRISON A. WILLIAMS.
ROBERT F. KENNEDY.

STATEMENT OF NATIONAL RECREATION AND PARK ASSOCIATION

Hon. Chairman and members of the subcommittee, my name is Joseph Prendergast, and I am executive vice president of the National Recreation and Park Association. This organization came into being on January 1, 1966, after six national recreation and park organizations merged into a single organization to serve the people of the United States in their pursuit of better park and recreation facilities and programs and to help provide more wholesome and meaningful leisure time activities for the American people. The organizations that now comprise the National Recreation and Park Association formerly were the National Recreation Association, American Institute of Park Executives, American Recreation Society, National Conference on State Parks, National Association of State Park Directors, and the American Association for Zoological Parks and Aquariums.

Laurence S. Rockefeller is president of this organization and its board of trustees is made up of distinguished lay and professional leaders from all parts of the Nation. Over 600 outstanding parks and recreation leaders serve on its various national and district advisory committees. Some 2,500 national, State and local parks and recreation agencies, both public and private, and service affiliates of the association and over 7,000 professional recreation leaders are members of its professional division.

The association, which strongly endorsed and supported the provisions of the congressional acts creating the Bureau of Outdoor Recreation and the Land and Water Conservation Fund, fully realizes that the successful continuance of this important and highly effective program is dependent upon annual budgetary appropriations authorized by the Congress. Although we agree that the projects and purposes outlined in the administration's 1967 Land and Water Conservation Fund budget request of $110 million are of vital import, the association is very concerned that this amount would reduce the total fund appropriation by nearly $15 million and the share for the States and local governments by nearly $20 million ($19,937,000) as compared to the 1966 allotment. While we understand the necessity of reducing the overall amount requested for 1967 due to the requirement of the Land and Water Conservation Fund Act, we believe that this reduction in funds will dishearten those States and local governments who have already participated in this program and discourage those who have been anticipating joining the program.

The disappointing sale of Land and Water Conservation Fund stickers has been cited as the primary factor in decreasing the fund from $124,996,000 in 1966 to a 1967 budget request for $110 million (the estimated income for 1967). We believe it is apparent that the fund is not adequately financed to provide moneys needed for both Federal projects and the overwhelming number of State and local applications that will be forthcoming in 1967 and thereafter.

In consideration of these financial inadequacies, we respectfully recommend that a study for determining methods of obtaining additional revenues for the fund be authorized by the Congress.

The association urges approval of the total appropriation for 1967 requested by the administration for the Bureau of Outdoor Recreation.

On behalf of the association, may I take this opportunity to compliment Dr. Edward C. Crafts, Director of the Bureau of Outdoor Recreation, for the excellent guidance and competent leadership he has and is providing to the various programs administered by the Bureau.

STATEMENT OF SHASTA COUNTY, CALIF.

The Shasta County Board of Supervisors was extremely active in obtaining passage of Public Law 89-336 establishing the Whiskeytown-Shasta-Trinity National Recreation Area. Not only was the county in support of this area, but also worked long and hard with representatives of the Department of the Interior and Department of Agriculture during the planning period when this project was being formulated, and appeared at the congressional hearings in its support.

Now that the national recreation area is a reality it is of the utmost importance that funds be made available in sufficient amount to carry out the program that was presented to Congress at the time the area was authorized. For this reason, we appreciate the opportunity to present this statement in support of appropriations so that the appropriate program may develop.

When the national recreation area proposal was submitted to Congress for authorization last year the Forest Service and Park Service presented an estimate of the project costs and this estimate was included in the committee report. The Forest Service stated that $2,097,000 would be required for the units under its supervision and the Park Service estimate for the area under its supervision was $6,009,000. We wish to go on record as supporting appropriations of these amounts so that the development and acquisition program for the national recreation area can be carried out substantially as outlined at the time the area was authorized.

During 1965 there were over 1.5 million days use in the area—far more than earlier estimates had indicated. Estimates of future use indicate that by 1976, just 10 short years from now there will be approximately 4 million visitor-days. Facilities must be developed to meet this tremendous increase in use. In addition, a substantial land acquisition program, totaling approximately $18 million is required for the Whiskeytown unit. If this is to be carried out it must be done in an expeditious manner. Otherwise development will take place on the lands involved and this coupled with other escalations in the price of land, will tremendously increase the cost of the land acquisition program.

For these reasons we respectfully request that appropriations for the Whiskeytown-Shasta-Trinity National Recreation Area be approved in the amounts of $2,097,000 for the Forest Service and $6,009,000 for the National Park Serivce so that the program for this area may proceed substantially as it was originally presented to Congress.

DEPARTMENTAL STATEMENT CONCERNING THE MEETING OF THE NATIONAL RECREATION & PARK ASSOCIATION

In 1965 the American Institute of Park Executives, the National Recreation Association, the American Recreation Society, and the National Conference on State Parks formed a new combined organization under the name of the National Recreation & Park Association. This new group is composed of Federal, State, county, and city park officials representing the park systems throughout the United States and Canada. Essentially, the association will be the voice of park and recreation people at all levels of government. Mr. Laurance Rockefeller is the president of the association whose governing board voted to hold its first conference in the National Capital October 9-13, 1966.

The National Park Service and other Washington metropolitan area park and recreation authorities have the responsibility for arranging for this conference, which is to be called the "Congress for Recreation and Parks."

It is customary for the host city to assume responsibility for certain aspects of the conference which require significant expenditures of funds. In many municipal areas where conferences of the former organizations, above-named, have been held, special public funds have been made available for the local park administration for this purpose. While a portion of the cost will be met through registration fees of the members, the Maryland-National Capital Park and Planning Commission, the Fairfax County Park Authority, and from other outside sources, some financial assistance from the Federal Government will be required.

No provision has yet been made for financing one item of expense that is of utmost importance to the success of the conference. This item consists of transportation of the entire group in the metropolian area for the period of the conference principally to areas and points comprising the National Capital parks system. The amount of approximately $25,000 will be required for this purpose.

It is essential that the participants have an opportunity to see the many park features and related facilities in the National Capital area. Through observation

of such park operations and developments and the review of long-range plans for future developments by the conference participants, benefits to the Federal Government far in excess of the estimated transportation costs in the way of expert opinions and advice in park matters can be expected to accrue. Such observations on the other hand will be mutually beneficial to park systems throughout this country and in Canada which are represented by the participants. It is essential that provision be made for the transportation.

It is believed that the attendance at the Washington conference may be about 3,000 people. It is felt that the success of this conference will have many lasting effects upon the many park officials throughout the country and will reflect admirably upon the efforts not only of the Department of the Interior and the National Park Service but the Federal Government as a whole. The full support and backing of the Members of Congress in this joint undertaking can demonstrate the awareness of the Congress of the United States of the importance of parks and recreational facilities for the enjoyment and well-being of the American people.

Authority for National Park Service participation in the conference is contained in the Park, Parkway, and Recreation Area Study Act of June 23, 1936 (16 U.S.C. 17k).

GEOLOGICAL SURVEY

LETTER FROM SENATOR PROXMIRE

MARCH 17, 1966.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee, New Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: As you know, the Geological Survey of the Department of the Interior requested $12,850,000 in the President's fiscal 1967 budget for cooperative water resources investigations. This is an increase of more than $1 million over the amount budgeted for this vital program in fiscal 1966. However, the sum is not adequate to meet projected needs.

My State of Wisconsin has indicated the ability to match $150,000 in additional Federal funds for water resources investigations in fiscal 1967. Yet Wisconsin will receive only $109,350 at the most, unless other States find that their matching ability has been overestimated. I am enclosing a letter from our State geologist giving additional information on the Wisconsin situation.

Although I am inclined to ask that additional funds be earmarked for Wisconsin, I am aware that this could set a dangerous precedent. The earmarking of funds under the program on a State-by-State basis could substantially destroy present program flexibility. This flexibility enables the Geological Survey to transfer funds at the present from a State not needing them to one where they can be matched.

Consequently, I urge the Interior Subcommittee to increase the overall requested appropriation for water resources investigations by $40,650 from $12,850,000 to $12,890,650. This $40,650 represents the additional amount that Wisconsin could utilize over and above the estimate for my State. Every dollar of this additional amount would have to be matched by a State dollar before it could be spent. Every dollar not spent would revert to the Treasury.

I have received informal assurances from representatives of the Geological Survey that they would do everything in their power to see that Wisconsin would have priority over the use of these additional funds if they are appropriated.

I appreciate your attention to this matter.

Sincerely,

WILLIAM PROXMIRE.

THE UNIVERSITY OF WISCONSIN,
GEOLOGICAL AND NATURAL HISTORY SURVEY,
Madison, Wis., March 11, 1966.

Senator WILLIAM PROXMIRE,
U.S. Senate,
Washington, D.C.

DEAR SENATOR PROXMIRE: Thank you for your letter of March 9 however the enclosure mentioned was apparently omitted.

My telegram was to request your favorable consideration of the total budget

increase requested by the U.S. Geological Survey for water resources. I had assumed that they had included adequate funds to meet Wisconsin's proposed increase and am somewhat astounded that they had only requested $109,350. It has been obvious for several months, ever since the passage of chapter 502 Wisconsin laws, that such a figure would be inadequate.

The States must, of course, advise the Geological Survey of the amount of increased funds that they expect to have for matching long before they actually have the funds appropriated. Inasmuch as all requested funds do not materialize I imagine that the Geological Survey must make some adjustment, downward, based on probability. In our case however, the State funds have been appropriated and it would be a sorry state of affairs if they were permitted to lapse due to failure of the Geological Survey to request, much less obtain, the necessary Federal matching funds.

I am enclosing a copy of chapter 502 and you will note that it includes a biennial increase of $200,000 to the conservation department and $230,000 to the State geological survey for water data collection and research. It was the intent of the sponsors of the legislation that this would be a continuing appropriation to accelerate the programs at an annual rate of $100,000 and $115,000 respectively. It was not intended to be a "one-shot deal". Unfortunately the bill was signed too late to permit the program to get underway during the current fiscal year. Next year however I shall have at least $115,000 available for increased cooperative matching. The conservation department had originally estimated that they would increase their offering by $21,000 but they are now talking about $40,000. My estimate of $150,000 for the State is therefore conservative.

I can assure you that your efforts in seeing that the Geological Survey requests these funds and your help in obtaining them is greatly appreciated.

Very truly yours,

G. F. HANSON,
State Geologist.

STATE OF WISCONSIN SENATE BILL 6

CHAPTER 502, LAWS OF 1965

An act to create 20.280(5), 20.410(7), 20.705(4), 20.870(2) and 36.245 of the statutes, relating to an accelerated water resources research and data collection program by five State agencies; and making appropriations.

The people of the State of Wisconsin, represented in senate and assembly, do enact as follows:

Section 1. 20.280(5) of the statutes is created to read:

20.280(5) Water research. There is appropriated from the general fund to the conservation commission on July 1, 1965, for the 1965–67 biennium, $200,000 for a joint accelerated water resources research and data collection program.

Section 2. 20.410(7) of the statutes is created to read:

20.410(7) Water research. On July 1, 1965, for the 1965–67 biennium, $152,000 for a joint accelerated water resources research and data collection program.

Section 3. 20.705(4) of the statutes is created to read:

20.705(4) Water research. On July 1, 1965, for the 1965–67 biennium, there is appropriated $12,000 from the general fund for a joint accelerated water resources research and data collection program.

Section 4. 20.870(2) of the statutes is created to read:

20.870(2) Water research. On July 1, 1965, for the 1965–67 biennium, $87,000 for a joint accelerated water resources research and data collection program.

Section 5. 36.245 of the statutes is created to read:

36.245 Water resources programs coordinator. Funds made available to the conservation commission, board of health, water pollution committee, department of resource development and geological and natural history survey of the University of Wisconsin, respectively, by ss. 20.280(5), 20.410(7), 20.705(4), 20.830(1) and 20.870(2) shall be administered and coordinated by the director of the water resources center of the University of Wisconsin. No funds appropriated by said sections shall be made available to any of the agencies specified until, on application from the State agency concerned, such director finds that such funds will be used for water resource investigations needed for the solution of existing or emerging water resource problems and that these investigations will wherever practical be coordinated with such investigations by other State or Federal agencies and with research in progress or proposed under the

sponsorship of the water resources center of the University of Wisconsin. The director shall make biennial reports thereon to the legislature at the convening thereof. In connection with his review of applications hereunder, the director of the water resources center shall seek the advice of the water subcommittee of the natural resources committee of State agencies.

Section 6. The appropriation made by section 20.830(1) of the statutes for 1965–67, as affected by the laws of 1965, is increased by $230,000 to provide for the geological and natural history survey of the University of Wisconsin.

STATEMENT OF LEGISLATIVE COUNCIL OF PHOTOGRAMMETRY

It is a pleasure to appear here before you again as the representative of the private photogrammetric mapping firms. These firms compose the Legislative Council for Photogrammetry and are working together in an effort to eliminate further expansion and encroachment of Federal map producing agencies that directly compete with the private sector of our economy.

Today we are specifically concerned with the Topographic Division of the Geological Survey—that agency of the Department of Interior which in 1879 was charged with the responsibility of providing what is now called the national topographic map series. Completion of this map series will make a great contribution to the orderly growth and development of the United States, particularly the underdeveloped areas. All of the energies of the Geological Survey should be directed to early completion of this goal within the limits of the present appropriations.

At present, about 70 percent of the United States has adequate map coverage. About 50 percent of this has been performed within the last 20 years. This significant increase in map production can be directly related to the new techniques and equipment developed and first used by private firms. In light of this progress and the completion goal of 1981, as stated by the Geological Survey, we are concerned that adequate progress is not being made and that no significant effort is being made to complete the program sooner.

Some of the most apparent reasons for this are:

1. The Geological Survey has adopted and arbitrarily continues a policy of not contracting work required for map compilation. Consequently, they are failing to take advantage of the knowledge, capability, initiative, and management ability found in private mapping firms.

2. The proposed 1967 fiscal budget contains reimbursable programs totaling $6,271,000. A portion of the reimbursable work, such as the cooperative programs with State governments, is directly related toward completion of the national topographic mapping program. However, we fail to see how a $303,000 program with the kingdom of Saudi Arabia, a $425,000 program with the National Science Foundation, and a $125,000 program with NASA make any contribution toward the Geological Survey's fundamental responsibility of providing adequate map coverage of the United States. The work for these programs can readily be produced by private firms and should not be undertaken by the Geological Survey, thus diverting their equipment and talents to uses other than the Nation's most immediate mapping needs. Also included in their reimbursable program is a cooperative project with the county of Fairfax, Va., for providing maps of stream channels throughout the county. This project is in no way related to the national topographic mapping program and funds appropriated to the Geological Survey for their 50-percent contribution should be used to further their fundamental responsibility.

3. As recently reported in the Washington Star, the Geological Survey has just mapped American Samoa which nearly completes the topographic mapping series of the U.S. territories. The article went on to describe the challenge of working on volcanic islands reaching elevations of more than 3,000 feet. It is true that the 3,000-foot hills of West Virginia do not have the glamour of Samoa but we feel that the economic redevelopment areas should be mapped first.

4. The latest topographic maps of the Washington, D.C., area were published in 1956. In 1963 the Geological Survey began revising these maps and obtained photography for the basis of that revision in April of that year. Now, 3 years later, the revised map is still not available and there is little doubt that it will be outdated when they are finally completed. This might be considered an isolated case, but a recent check of nine maps published in February of this year

by the Atlantic regional office shows that the photography was performed 4 years before the maps were made available.

These few points illustrate our concern that the Geological Survey is not making a maximum effort to complete its fundamental responsibility of mapping the United States.

Assuming the Geological Survey does finally complete its assigned responsibility, what plans have been made to consume the vast organization and equipment? Some personnel and equipment will be required to maintain and update the maps. However, the revision work will be a small effort when compared to the present mapping program demands. Unless steps are taken to contain their activities, they will unquestionably begin to compete in other areas with private firms in an effort to justify their continued existence after completion of the topographic mapping program.

To insure that maximum effort is being made to provide adequate map coverage of the United States, we recommend that the Geological Survey be directed, by this committee, to cease all of its mapping activities which are not directly related to the rapid completion of the national topographic mapping program or are not needed to insure the security of the Nation. Secondly, we recommend that the Geological Survey develop programs that will consume the surplus personnel and equipment now being utilized, after the program's conclusion in the late 1970's. Consistent with this completion schedule, we respectfully suggest that this committee recommend that the Survey investigate what economies would result to the Government by gradually supplanting their capacity to produce new topographic maps through greater utilization of private firms and consultants.

In our testimony before this committee last year, we suggested that the Survey develop procedures which would take advantage of the experience and capabilities of the private mapping profession. To our knowledge, this recommendation, which was shared by members of this committee, has not been acted upon in any way. It is our hope that the committee continues to see the possible advantage of this suggestion and will transmit its interest to the proper officials.

FISH AND WILDLIFE SERVICE

BUREAU OF COMMERCIAL FISHERIES

LETTER FROM SENATOR MAGNUSON

MARCH 18, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
Subcommittee on Interior and Related Agencies,
U.S. Senate, Washington, D.C.

DEAR CARL: Although there are many areas in the Bureau of Commercial Fisheries' section of the Department of Interior budget which I feel merit consideration and funding, there are two specific items which I feel to be of great and particular importance. I discussed these matters and justification in a speech on the Senate floor March 15, 1966.

The following two programs are of crucial concern:

Pacific hake development.—The relatively new ocean engineering program by the Bureau of Commercial Fisheries has had excellent success, and we already have some positive return from the investment with two vessels in full production of hake within the Puget Sound area. Two more are now experimenting with different gear, and a number of others are also expressing interest. Production to date, since the fishery began in November, is now well over 3 million pounds.

The major potential of the hake resource, however, is in the offshore area, and estimates of hake population indicate that the maximum sustainable harvest off the Washington coast alone would be well in excess of 750,000 tons. A beginning at quantifying populations through egg examinations in the California undercurrent by scientists at the La Jolla laboratory of the Bureau of Commercial Fisheries have placed the standing crop at an estimated 3 million tons.

At any rate, the resource is tremendous, and we are making rapid progress toward harvest. A fishmeal processing plant is now under construction at Grays Harbor, Wash., and our most recent reports indicate that a fleet of 12 vessels will be operating on the coastal population by late spring.

A new threat to our intended harvest of this resource is word received in early February that an expeditionary flotilla of the Soviet Far Eastern fish industry has become aware of this hake resource and plans to send vessels into the fishery very soon. It is absolutely essential, therefore, that the American fleet proceed with the utmost haste in developing our hake fishery. In addition to Pacific hake there are also large populations of anchovy and proper gear must be developed to harvest this resource as well.

The $100,000 item which I am proposing to assist in this trawl gear development program can be instrumental in the continued success of this important beginning on Pacific hake.

Willamette Falls fishway.—The Congress recognized the importance of this project when it appropriated $600,000 for construction of phase A of the Willamette Falls fishway project. The Bureau of Commercial Fisheries was able to divert $90,000 from other projects and with industry contributions, a contract was awarded February 4, 1966. Phase A includes construction of an 800-foot section of ladder leading from the cul-de-sac on the west side of the falls to the forebay of the dam adjacent to the Crown Zellerbach Corp. plant.

Phase B includes construction of a two-entrance section which will lead from the main portion of the falls to join a common exit to the forebay with the cul-de-sac leg, replacing the present inefficient ladder. It is interesting to note that the initial facility was built in 1904.

Based upon the cost of phase A, it is now estimated that the total cost of the Willamette Falls fishway project will be $3,200,000. In accordance with Federal Power Commission findings, industry should make available about $510,000 for those items for which it has been established that industry has partial responsibility.

The most logical and least costly method of completing phase B is to obtain the entire $2 million needed so that the contract for construction of all of phase B could be awarded in a single contract this summer. If this is not possible, the alternatives will be more costly.

I am informed that 75 percent of the benefits of the entire project are contingent in the construction of phase B and I urge that the $2 million item be provided so that this work can commence as soon as possible.

There are other numerous areas in which curtailment of funding at this time would appear unwise. The Fisheries Research and Development Act of 1964 authorized the apportionment of $5 million, and I find that 41 States are prepared to actively participate in this program. The slash to $2.6 million would largely destroy some programs for which personnel and facilities have already been acquired by the States. The important anadromous fish bill has been enacted for 5 months now, and is still without funding, though the program is authorized for $5 million annually to be divided between the Bureaus of Commercial Fisheries and Sports Fisheries and Wildlife. We are endeavoring to upgrade our fishing fleets to compete with subsidized foreign vessels, but I find that the vessel construction subsidy funds have been cut by more than one-half.

In closing, may I note that these are critical times in fisheries, and unwise economy today can well destroy our long-range ability to return the American fishing industry to its rightful place in the world fishery community.

Sincerely,

WARREN G. MAGNUSON, *Chairman.*

DEPARTMENTAL STATEMENT—PACIFIC HAKE PROGRAM

Exploratory fishing efforts by Bureau vessels during the past several years have indicated that Pacific hake represent one of the most abundant fishery resources off the Pacific coast. With Bureau developed midwater trawl gear and telemetry equipment, catches of as much as 60,000 pounds per one-half hour tow were made. Typical catches ranged from 20,000 to 30,000 pounds per hour and typical schools were from 15 to 20 miles long and 2 to 4 miles wide. This has resulted in the development of a promising in-shore fishery presently utilizing only a small number of vessels.

In the hearings before the Senate Appropriations Subcommittee on March 2, 1965, the chairman asked the Bureau's view on the feasibility of a program leading to the development of a commercial fishery for hake and other unutilized fishery resources submitted by representatives of the west coast fishing industry and an estimate of the annual cost. A discussion of the program is included on page 1172 of the Senate hearings. One phase of this program, with recommended funding

of $100,000 annually, relates specifically to a technical assistance project which would provide aid to Pacific coast fishermen contemplating the development of an offshore fishery for this species. This would require demonstration of new techniques using the midwater trawl. The recommended funds were not appropriated in the fiscal year 1966 budget.

This work is critical at the present time because of the imminent threat of Russian and other foreign fleets entering the Pacific hake fishery before our fishermen can establish a foothold. Unless this foothold is established, the impetus necessary for our fishermen to develop the cast untapped marine resources off our Pacific coast would not be forthcoming.

The adoption of the new fishing techniques, methods and gear devised by the Buerau require that fishermen be trained in their use through an adequate technical assistance program. Particular emphasis should be placed on the use of the complex acoustical devices and telemetry systems which are necessary for efficient use of midwater trawls for havesting Pacific hake. The technical assistance program is necessary for the development of an extensive commercial fishery.

The fiscal year 1966 level of funding for programs concerned primarily with resource assessment and development of efficient harvesting gear and techniques for Pacific hake and other underutilized species is $226,000. The fiscal year 1967 budget provides for continuation of the programs at the same level. An additional $100,000 would be required to finance the technical assistance project discussed above.

COMMERCIAL FISHERIES RESEARCH AND DEVELOPMENT

LETTER FROM SENATORS HOLLAND AND SMATHERS

MARCH 9, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

MY DEAR SENATOR: The Commercial Fisheries Research and Development Act of 1964, Public Law 88-309, authorized a 5-year program which called for an appropriation of $5 million for fiscal year 1967.

The budget request as submitted to the Congress contains a request for $2,600,000 or about one-half the funds required to carry out the program.

Under the authorization, the State of Florida would receive as its proportionate share some $300,000 as the State legislature has passed legislation to provide the State's share of the costs. In addition, the fishing industry, which is a multimillion dollar industry in the State of Florida, adopted a self-taxing program to further support requirements.

The Congress, in enacting Public Law 88-309, believed the program of sufficient importance to provide adequate funds to carry out a successful program. The State and industry have supported it as indicated above. To arbitrarily reduce the appropriation at this time would result in the program being deferred, as well as causing the State and industry to lose confidence in the program.

Enclosed herewith is a copy of a resolution adopted by the Board of Conservation of the State of Florida, which is composed of the Governor and the cabinet officers, urging the restoration of the funds, and a statement by the board on this subject which we ask to be included in the record of the hearings of the Appropriations Subcommittee on Interior and Related Agencies. We respectfully urge the committee to favorably consider the appropriation of the $5 million required to adequately carry out the program.

With highest regards, we are

Yours faithfully,

SPESSARD L. HOLLAND.
GEORGE SMATHERS.

STATEMENT OF FLORIDA STATE BOARD OF CONSERVATION

Gentlemen, may I first express the sincere appreciation of the Governor of Florida and the cabinet members for allowing my appearance before you to discuss Florida's interest in the Commercial Fisheries Research and Development Act of 1964, Public Law 88-309. We are thankful that the U.S. Congress in its wisdom to support commercial fisheries of this Nation enacted this program.

We wish to gratefully acknowledge the support that has been given by the President, the administrative agencies, and by Congress in furthering national efforts in consonance with this program.

Responsibility for developing, promoting, controlling and coordinating efforts of local interests relating to marine fisheries and seafoods in Florida is a responsibility of the Florida Board of Conservation, as delegated by the State legislature. Not only does Florida benefit from this program but it particularly supports the commercial fisheries of all Southeastern States and benefits the Nation as a whole by encouraging development of our domestic fishing industry rather than continuing primary dependence on foreign imports of seafood products.

Promptly upon enactment of Public Law 88-309, the State of Florida joined with other Southeastern States in a coordinated effort through thhe Southeastern Fisheries Association, the Atlantic States Marine Fisheries Commission, and the Gulf States Marine Fisheries Commission to develop a program to meet the requirements of local interests in the participating program. The State Legislature of Florida raised State maching funds through general appropriations and the fishing industry adopted a self-taxing program to further support requirements. With only a year of coordinated effort, we are able to report significant progress. In Florida we are already enjoying a marked increase in seafood consumption.

Under the terms of the Federal program, we have organized our efforts with appropriately trained and selected personnel. We have developed four important research projects in biological fisheries and are prepared to begin work on these research projects which we believe will be of great benefit to production of southern seafoods. We have employed and organized a staff of marketing specialists whose primary mission is to promote the sale of seafood, nationwide, working closely with producing and processing segments of industry to assist in developing new products and new packaging techniques, assisting brokers, distributors, and food merchandisers in promotional programs to create a desire and market for southern seafoods. Our home economists work closely with restaurant operators, school lunch officials, hospital dietitians, and other professionals in the field to affect greater use of southern seafoods in these important market areas. We make liberal use of television and other news media to promote the market, nationwide, for southern seafoods.

A most important responsibility in our program entails coordination with producers and processors to improve old products and develop new products not previously marketed. Of primary importance in the program is the seafood processing, including frozen, canned, and ready-prepared portions. Close coordination with producers and processors to obtain quality and quantity preparation of seafood products is a most essential element. We have several new seafood processing plants constructed in the Southeast during the past year and we are presently negotiating with private industry to construct additional facilities costing several million dollars. The director of our department is today meeting with a nationally experienced food processor with hopes of obtaining agreement to establish a $2-million plant in Florida.

There must be a popular image for southern seafoods with a desire by the people of this Nation for these products in order to market the quantities necessary to justify the cost of the newly established food processing plants. We must keep faith with those who have invested their capital in these plants and equipment. This is a fully integrated program which includes all phases from research and development, methods of catching the fish, processing and packaging, and marketing. If any one area lags, the entire program is upset and desired results cannot be achieved.

With continued progress in this program, we can soon achieve success that will be of great benefit to the economy of the Nation by establishing a market for domestic seafood products and increasing the use of abundantly available foods which have heretofore been practically untouched through lack of a domestic market. All the fishing industry needs is a fair break to get started, with some reasonable degree of treatment as has been accorded for many years by Congress for agriculture.

Cutback in this program will do untold damage with the progress achieved to date. Private capital is now going into this program in far greater amounts than the Government subsidy. A reduction in Federal appropriation for this program at this time would result in loss of confidence by both industry and State government as to the intent of developing the domestic fisheries. After such a catastrophe, it would be difficult to again reestablish the State taxing program. And

the confidence and support now being given by private capital, industry, and the marine fisheries would be difficult to ever reclaim. The loser would be the Nation because it would place us completely dependent upon foreign fisheries and seafood imports.

All people in the fisheries industry are hopeful that your committee will recommend to Congress a continuation of the program as it was authorized.

Thank you.

RESOLUTION OF FLORIDA BOARD OF CONSERVATION

Whereas the State of Florida is blessed by coastline, both on the Atlantic Ocean and the Gulf of Mexico; and

Whereas these waters contain an abundance of heretofore untapped natural resources in seafood products; and

Whereas this abundance of natural resources has been heretofore unavailable due to the lack of financing for proper research and development; and

Whereas the Federal Government provided a ray of hope toward research and development of this great natural resource by passing the Federal Aid for Commercial Fisheries Research and Development Act (Public Law 88-309); and

Whereas the State of Florida immediately recognized the merits of this measure and seized upon the opportunity to enter into this great cooperative effort toward the benefit of this State, her sister States, and the Nation at large toward increasing and maintaining forever a fishery resource capable of yielding the maximum annual product; and

Whereas the State of Florida has wholeheartedly and in good faith already taken many steps in this initial program by passing legislation for financing its share of costs, seeking and securing eager and qualified personnel, exerted every effort toward achievement, quality, and economy toward reaching this goal; and

Whereas the State has geared its research and development program to the initial policy, program, and financing as provided by the Commercial Fisheries Research and Development Act of 1964 (Public Law 88-309); and

Whereas response to the marketing activities under this program is already exceeding the highest expectations on State, regional and national levels; and

Whereas the program would be defeated by a reduction in financing by any authority in this cooperative undertaking: Now, therefore, be it

Resolved, That the Florida Board of Conservation does hereby recommend to the House Appropriations Subcommittee on Interior that the full amount of funds as requested by the Bureau of Commercial Fisheries for financing the Federal Aid for Commercial Fisheries Research and Development Act (Public Law 88-309) for the fiscal year 1967 be restored and appropriated; and be it further

Resolved, That this resolution be sent to the Honorable Winfred K. Denton, Member of Congress, chairman, House Appropriations Subcommittee on Interior, at room 1217 House Office Building, Washington, D.C.

Passed and adopted this 15th day of February 1966.

HAYDON BURNS,
Governor.
TOM ADAMS,
Secretary of State.
EARL FAIRCLOTH,
Attorney General.
FRED O. DICKINSON, JR.,
Comptroller.
BROWARD WILLIAMS,
Treasurer.
FLOYD T. CHRISTIAN,
Superintendent of Public Instruction.
DOYLE CONNER,
Commissioner of Agriculture, as and composing State Board of Conservation.

Attest:

BETTY H. SCANLAN, *Secretary.*

STATEMENT OF REPRESENTATIVE SPRINGER RE FISH PROTEIN CONCENTRATE

Mr. Chairman, when the Bureau of Commercial Fisheries recently announced the development of a new process for making a fish protein concentrate for use in supplementing the diets of undernourished people throughout the world I'm sure that the general reaction was favorable.

What those who read the nationally circulated publicity about the Government process did not know, however, was that the VioBin Corp. of Monticello, Ill., long ago developed a better and cheaper process with private capital and has been producing fish protein concentrate for 10 years at its plant in New Bedford, Mass.

By the end of the current fiscal year the Bureau of Commercial Fisheries will have spent $1,740,000 and President Johnson's budget requests $465,000 to carry the program through the fiscal year beginning next July 1. The Bureau has established a model plant for work on fish protein concentrate at a cost of $276,000 plus an annual building rental of $36,000. The plant is located at College Park, Md.

The question is: Why should the Government continue to finance research for developing new processes in a field in which private enterprise has already spent several million dollars with excellent results?

Mr. Ezra Levin, president of the VioBin Corp., informs me that its product has been tested satisfactorily in 41 countries. A VioBin plant is now being built in Peru and the company is studying the feasibility of building more plants in the States of Washington and Louisiana and in Mexico. The VioBin Corp., as I am sure many of my colleagues know, is no stranger to this field. It has been a financially successful concern for many years and its food and pharmaceutical preparations enjoy a favorable reputation throughout the world.

Largely as a result of Mr. Levin's research, fish protein concentrate—or fish flour as it is popularly called—is highly regarded in scientific circles looking toward a solution for the nutrition problem in the underdeveloped countries of Asia, Africa, and South America. The great need in the diets of most of the countries is for protein. Meat is far too costly and supplies are too meager to be considered a practical source of protein for the hungry masses. Fish, on the other hand, is readily accessible. Mr. Levin, as his friends in our area all know, did not undertake his research from a profit motive but rather from the desire to find a cheap way for feeding the world's famished peoples from the sea.

Mr. Levin succeeded in developing such a process to make an 80-percent protein flour from whole fish at a cost of 10 cents a pound. VioBin's fish concentrate is practically odorless and has the appearance of light-gray flour. The difficulties Mr. Levin has encountered in gaining acceptance of his product for distribution through our foreign aid programs are a classic example of bureaucracy at its worst. Despite the acceptability of VioBin's fish flour to scientists associated with such organizations as the nutrition section of the National Institutes of Health and the Food and Nutrition Board of the National Academy of Sciences, large-scale distribution has been held up by the Food and Drug Administration's opinion that it is "esthetically objectionable" for sale in the United States. FDA conceded that Mr. Levin's product is pure and there is nothing to prevent its sale overseas. International political considerations however have blocked its widespread distribution with foreign aid financing. This stems from a fear that the Communists would propagandize that we were shipping food considered unfit for Americans to eat.

I have long felt that the Food and Drug Administration was too finicky in its appraisal of the VioBin concentrate. There is no question about its purity and nutritional content. As for VioBin's fish flour being "esthetically objectionable," it has been served at demonstration meals in this Capitol to many Members of both Houses of the Congress. None of the distinguished guests at these affairs over the past several years ever complained of the fare.

The simple fact is that more than a million dollars in tax funds already have been spent on developing a process to meet the FDA's "esthetic" objections. The Bureau of Commercial Fisheries now claims this has been achieved. But the Bureau's product will cost 20 to 30 cents a pound, two to three times the cost of VioBin's fish flour. And while VioBin uses all kinds of fish the Bureau's process requires red hake, a variety available only 3 or 4 months out of the year.

Research into new ways for using the fishery resources of this country is an activity deserving of Federal support. But further expenditure of tax funds

for research that substantially duplicates what already has been done successfully by private industry is unjustified. I respectfully urge this committee to reject the budget request and put an end to this program.

DEPARTMENTAL STATEMENT—DISCREPANCY IN SALMON AND STEELHEAD COUNTS BETWEEN COLUMBIA BASIN DAMS

Substantial unaccountable losses of adult salmon and steelhead between counting stations in the Columbia River Basin have become an increasing source of concern as more water development projects reach completion. Although the major portion of the spring and summer Chinook salmon, and steelhead runs passing the lower Columbia River counting stations are destined for Snake River spawning areas, in 1965 the discrepancy between counts at the lower Columbia River dams and counts at Ice Harbor Dam in the lower Snake River were reported as follows:

	Lower Columbia counts	Ice Harbor Dam counts
Steelhead	154,000	52,000
Spring Chinook	65,000	11,000
Summer Chinook	80,000	13,000

Possible causes for the salmon and steelhead count discrepancies at various points in the Columbia Basin include:

1. Fallback over dams.
2. Indian gill-net dropout mortality.
3. Unreported Indian catch.
4. Selective mortality on certain fish stocks.
5. Nitrogen supersaturation.
6. Interdam tributary turnoff.
7. Navigation lock passage.
8. Other dam-caused mortality.

In 1965 the concern over the disappearance of migrating fish in the upper reaches of the Columbia Basin was so great among the fishery agencies of Oregon, Washington, and Idaho that salmon fishing was prohibited in Idaho for the first time in history, and all summer Chinook fisheries were closed for the season throughout the Columbia River system. In September the Pacific Salmon Interagency Council, representing the fishery conservation agencies of Oregon, Washington, and Idaho, as well as the Federal Bureau of Commercial Fisheries, Bureau of Sport Fisheries and Wildlife, and Corps of Engineers, recommended a crash program to further evaluate apparent fish losses in the river and the causative factors. This action was stimulated by the low numbers of fish passing into the Snake River, as evidenced by losses between projects on the lower Columbia River and those on the Snake River.

Attached is a summary of the 4-year program recommended by the Pacific Salmon Interagency Council. The program projects studies and cost estimates in the total amount of $362,000 for fiscal 1967. Of this total the Bureau of Commercial Fisheries proposes to fund $63,000 in fiscal 1967 in conjunction with its fish passage research program in the Columbia Basin. If the studies recommended by the Interagency Council are to be funded as recommended for fiscal 1967, additional provision must be made for the purpose in the amount of $299,000. It is understood that the Corps of Engineers is prepared to fund a portion of the studies.

The discrepancy in fish counts at various points in the Columbia Basin and the current lack of knowledge of specific patterns of upstream migration of salmon and steelhead adults cannot be fully resolved until the studies recommended by the Pacific Salmon Interagency Council are carried out.

COLUMBIA RIVER

Summary of proposed research budget: Pacific Salmon Interagency Council

Proposed investigation	Fiscal year—				Total
	1966	1967	1968	1969	
1. Fall back at dams, navigation lock passage, tributary turnoff and other mortality sources:					
(a) Sonic phase Bonneville-Dalles	$34,000	$207,000	$16,000	----------	$257,000
(b) Nonsonic phase Bonneville-Dalles	----------	30,000	20,000	----------	50,000
(c) Sonic phase McNary-Priest Rapids-Ice Harbor	----------	----------	147,000	$47,000	194,000
(d) Nonsonic phase McNary-Priest Rapids-Ice Harbor	----------	----------	30,000	20,000	50,000
Subtotal	[1] 34,000	[2] 237,000	[2] 213,000	[2] 67,000	[3] 551,000
2. Nitrogen supersaturation:					
(a) Threshold toxicity determination	----------	50,000	----------	----------	50,000
(b) Columbia Basin monitoring	----------	10,000	10,000	----------	20,000
Subtotal	----------	60,000	10,000	----------	70,000
3. Indian gill net dropout mortality	----------	30,000	----------	----------	30,000
4. Unreported Indian catch	[4] 15,000	35,000	20,000	----------	70,000
Grand total	49,000	362,000	243,000	67,000	721,000

[1] Funded by fish passage program, BCF.
[2] $63,000 to be funded by fish passage program.
[3] Total funding by fish passage, $223,000.
[4] Funded for 1966 by the Bureau of Indian Affairs on reimbursable basis.

LETTER FROM SHIPBUILDERS COUNCIL OF AMERICA

MARCH 8, 1966.

Re Polish construction of fishing trawler

Hon. CARL HAYDEN,
Chairman, Subcommittee on Department of the Interior and Related Agencies, Committee on Appropriations, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Private shipyards throughout the United States—members of our organization—earnestly hope that your subcommittee will refuse the budgetary authority requested by the Department of the Interior in the fiscal 1967 budget to obtain a stern ramp fishing trawler from Communist Poland.

It cannot be successfully argued that there is an expertise gap favoring Polish shipyards over U.S. shipyards. There are available in this country, design, shipyard, and manpower capabilities to construct fishing trawlers of exceptional performance. All that is lacking is a program under Interior Department auspices. Coincidentally, there is pending before the Bureau of Commercial Fisheries an application for a stern ramp fishing trawler in the name of American Stern Trawlers, Inc., and there may be others.

Turning to Iron Curtain shipyards, while there is idle capacity here, would only give credence to a practice of expediency to avoid the responsibilities involved in developing a workable and long overdue program with expanding goals. Moreover, the question as to the legality of foreign-built vessels, purchased under the proposed circumstances, operating in U.S. coastal waters, has not been conclusively answered.

Rejuvenation of the U.S. fishing fleet, and all that goes with it, cannot longer be delayed without serious damage to our overall national interests, and we respectfully urge that in rejecting the requesting authority, the Department of the Interior be directed to submit to the Congress promptly, reasonable proposals for the establishment of a nucleus fleet of U.S.-built fishing trawlers to accomplish the same purposes envisioned with Polish-built vessels.

We hope these views can be made a part of your hearing record.

Cordially,

EDWIN M. HOOD, *President.*

BUREAU OF SPORT FISHERIES AND WILDLIFE

MANAGEMENT AND INVESTIGATION OF RESOURCES

TECHNICAL ASSISTANCE, BELCOURT INDIAN RESERVATION

LETTER FROM SENATOR YOUNG (NORTH DAKOTA)

MARCH 18, 1966.

HON. CARL HAYDEN,
Chairman, Subcommittee on Interior Appropriations,
U.S. Senate,
Washington, D.C.

DEAR SENATOR HAYDEN: Enclosed is a letter I have received from Mr. Reginald J. Brien, tribal chairman of the Turtle Mountain Band of Chippewa Indians located on the Belcourt Reservation in North Dakota. Also enclosed is a copy of the resolution adopted by the tribal council.

Both Chairman Brien's letter and the resolution urge that the Bureau of Sport Fisheries and Wildlife provide two additional men for their area to make intensive studies of the potentials of both sport fishing and commercial fishing in the various lakes located in and around the reservation from which the Turtle Mountain Chippewas feel they could realize substantial profits.

You will note from Chairman Brien's leter that the Bureau of Sport Fisheries and Wildlife has one man assigned to this area now. However, he is assigned to cover five Indian reservations as well as three wildlife refuges. They make no complaint as to the quality of the work this one individual is doing, but point out that one position is wholly inadequate to do the work desired and necessary.

Unfortunately, this problem was not called to my attention at the time the Bureau of Sport Fisheries and Wildlife appeared before the Subcommittee on Interior and Related Agencies Appropriations. I sincerely hope it will be possible to take care of this problem in the Interior appropriations bill. I will be offering an amendment to increase the appropriation of the Bureau of Sport Fisheries and Wildlife by an amount sufficient to enable them to provide these badly needed services.

With warmest personal regards,
Sincerely,

MILTON R. YOUNG.

LETTER FROM TURTLE MOUNTAIN TRIBAL OFFICE

MARCH 7, 1966.

HON. MILTON R. YOUNG,
U.S. Senate,
Washington, D.C.

DEAR MR. YOUNG: Enclosed is a resolution passed by the tribal council on March 2, 1966, regarding the fisheries resources development on the Turtle Mountain Reservation.

We have presently, under cooperative agreement with the Bureau of Sport Fisheries and Wildlife, seven lakes containing 2,000 surface acres of water. Five of these lakes, with 1,500 surface acres, have long histories of sport fishing, going back to the beginning of this century. Prior to 1964 only one of these lakes had any sport fishing. The other four lakes had winter-killed several years previously, as does occasionally happen in any lake. Normally, these lakes would restock themselves from natural spawning when fish come upstream in spring from the Souris River. However, with the various structures on the river in this country and Canada, this process has been virtually eliminated as a source for restocking. Also, investigation should be made of many other lakes and ponds on the reservation, which appear to have potential for development.

Under the Accelerated Public Works Act of 1963, $236,000 was spent on this reservation to provide employment and develop badly needed recreation facilities along our lakes. Considerable more development, for visitor use, is needed, but before much more expenditures are made for this type of program, a complete investigation, study, and development of sport fishery potential must be made.

We realize the importance of recreation development in attracting industry and tourists to the area, also our Indian people like to fish, both for recreation and as a source of good protein food supply.

We have been looking into the possibility of obtaining a fish processing plant on the reservation to utilize the bullheads that flourish in Belcourt Lake. This may have potential, however, we need some intensive study of this possibility. Other commercial potential, that appears feasible, is that of storing additional water in our smaller lakes and ponds and stocking with northern pike and other fast-growing fish, and harvesting commercially on an annual basis.

At present one full-time employee from the Bureau of Sport Fisheries and Wildlife is assigned to service five Indian reservations and three wildlife refuges, covering some 90,000 acres of water. His budget of $14,000 is wholly inadequate to service all of this area. While some of the lakes on this reservation have been stocked in the 2 years of our agreement, we feel a much more accelerated program of development and management is necessary to meet the needs on this reservation. An increase in budget to between $30,000 and $40,000 and two additional men, are necessary. Just to meet the needs of this reservation would require one man, almost full time.

I would appreciate very much your checking this matter for us and providing any assistance you can to obtain the necessary funds for the development of the fishery potential on the Turtle Mountain Indian Reservation.

Sincerely yours,

REGINALD J. BRIEN, *Tribal Chairman.*

RESOLUTION 252-3-66

Whereas the Turtle Mountain Band of Chippewa Indians, hereinafter referred to as the tribe, is an unincorporated band of Indians acting under a revised constitution and bylaws approved by the Secretary of Interior on June 16, 1959; and

Whereas, according to article IV, section II, under (c), the tribe has the right to engage in any business that will further the economic well-being of the members of the tribe or to undertake any program designed for the economic advancement of the people; and

Whereas the Bureau of Sport Fisheries and Wildlife through laws and agreement is responsible for providing assistance in the management of fisheries in areas of Federal interest including Indian reservations as set forth in the memorandum of understanding between the Fish and Wildlife Service and the Office of Indian Affairs dated August 7, 1941; and

Whereas the tribe entered into an agreement with the Bureau of Sport Fisheries and Wildlife on October 7, 1964, whereby this Bureau would provide technical assistance in management of reservation fishery resources, fish for stocking reservation waters specifically Belcourt, Gordon, Jarvis, Wheaton, Martin, Cane, and Long Lakes; and

Whereas reports for 1964 and 1965 indicate work has been done at Belcourt, Gordon, and Wheaton to restock with fish and only very limited work has been done with Cane Lake and basically no work with Jarvis, Martin, and Long Lakes; and

Whereas much of the economic development depends on recreation provided in an area; and

Whereas development of sport fisheries provides food, employment, business development such as bait shops, supply stores, and other services: Therefore be it

Resolved, That the tribe while not ungrateful for work done to date is hereby requesting a highly accelerated program of development of the lakes named above and investigation of others of the many bodies of water on the Turtle Mountain Reservation to determine their potential for both sport fisheries and commercial fisheries development; be it further

Resolved, That the tribe recognizes limitation in budget and staff has to date limited intensive development of fisheries potential on the reservation one of the few natural resources on the Turtle Mountain Reservation, the tribe hereby requests that funds allotted to the cooperative effort for development of fisheries on Indian reservations be increased to provide the necessary personnel and operation funds for investigation and development of the various lakes on the Turtle Mountain Reservation; and be it further

Resolved, That the tribe also requests technical assistance for selected members of the tribe in operation of bait shops and other facilities in relationship to sport fishing by the public.

CERTIFICATION

I, the undersigned as secretary-treasurer of the Turtle Mountain Band of Chippewa Indians, hereby certify that the tribal council is composed of eight members of whom, five constituting a quorum were present at a regularly called meeting, noticed, convened, and held the 2d day of March 1966 that the foregoing resolution was adopted by the affirmative vote of five members, chairman not voting.

EDWARD J. LAFOUNTAINE,
Secretary-Treasurer.
REGINALD J. BRIEN,
Acting Chairman.

DEPARTMENTAL STATEMENT

Extensive Federal and Indian lands in North Dakota are receiving attention in our fishery management program. At the present time, nine separate management areas are assigned to a fishery services field station at Bismarck, N. Dak.: Fort Berthold Standing Rock, and Turtle Mountain Reservations; Upper Souris, Lower Souris, Arrowwood, Lake Ilo, Snake Creek, and Tewaukon National Wildlife Refuges.

The three North Dakota Indian reservations all contain fishing waters, but winter kill of fishes is a limiting factor on many waters. This and other problems need increased attention by trained fishery biologists to help in providing food and recreational fishing for the Indian people and for sport fishing by the non-Indians.

Surveys and work carried out at the Turtle Mountain Reservation indicate that the waters have considerable potential for further development. Several large lakes await study and preparation of management plans.

The North Dakota areas are now served by one fishery management biologist located at Bismarck. The addition of a second full-time biologist to work in North Dakota is warranted. By intensifying the management program at the existing project, the sport fishing opportunities at the Turtle Mountain Reservation and other reservations in the State could be substantially increased. An additional amount of not less than $16,000 annually is required to meet the most pressing needs for fishery services at Federal areas and Indian lands served by the Bismarck office. The additional help has been requested by the Turtle Mountain Band of the Chippewa Indians in a resolution dated March 2, 1966.

The work on the national wildlife refuges is performed in cooperation with the North Dakota Fishery Division and involves the management of large refuge pools to provide as much of a sport fishery as primary use will permit.

The proposed expansion would help materially in improving the economic status of the several Indian Tribes. This would be realized through expenditures of fishermen during their visits to the reservations and through the purchase of fishing permits. The increase would provide the salary of an additional fishery biologist, seasonal aids, equipment, travel costs, and other expenses and services related to project operations.

LETTER FROM SENATOR INOUYE RE RAT CONTROL

Hon. CARL HAYDEN,
Chairman, Appropriations Committee,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is to petition that the deleted $250,000 in the Department of the Interior's allocation for rat control research in Hawaii for fiscal 1967 be reconsidered.

This program and its funding was recommended by the Department of the Interior for fiscal 1967 but it was deleted before the budget was sent to Congress. I would like to stress that the $250,000 is for research only and not for the implementation of rat controls. I am writing to you because this is a worthwhile project which is important to Hawaii and to a number of Asian nations as well.

If I may, I would like to review for you the basis on which I ask that you again give careful consideration to this proposal.

1. There is ample precedent for this project. Mr. Weldon B. Robinson, senior staff member of the Department of the Interior's Wildlife Research Laboratory in Denver reported in July 1965 that wildlife control projects for other types of pests are now in existence.

Mr. Robinson reports that:

"The problem of rats in Hawaii is similar to several other damage situations currently being studied by the control methods section of the Denver Wildlife Research Center (DWRC). These other programs include jackrabbits in Idaho and other Western States, nutria in Louisiana and Texas, pocket gophers in Colorado and elsewhere, forest rodents in the Northwest, coyotes and other predatory animals throughout the West, and starlings and blackbirds nationwide. Rats are as much of a pest in Hawaii as are the above-mentioned animals in the areas they are affecting."

2. There is extensive rat damage in Hawaii at the present time. It has been shown through sampling studies that damage to sugar yields may range from 0.5 to 0.75 tons of sugarcane to the acre or an accumulated 25,000 to 50,000 tons annually. This is an annual loss of from $3 to $6 million. In addition to sugarcane, there is extensive damage to papaya, macadamia nuts, coffee, avocado, banana, and corn crops.

3. There is a great need for a rat research program to learn about rodent controls for Hawaii. Conventional rat control methods found effective against other rat species are not effective with the *rattus exulans* or the indigenous rat species found in Hawaii, the Philippines, and throughout the South Pacific basin.

Unlike other species, this rat does not live in association with human habitation, but is a true field rodent. Apparently it ranges for only limited distances from its burrow and lives entirely on sugarcane stalks. Hence it is not controlled by conventional practices of baiting the borders of a field with warfarin or with baits treated by barium carbonate or thallous sulfate.

4. No new administering agent is required. An experiment could be established by the Department of Interior's Wildlife Research Center.

5. Research in this project would have beneficial effects far beyond those to local agriculture. We know of no single rodenticide which has been registered by the Department of Agriculture which can be effective with growing crops.

Peace Corps volunteers and AID teams, training in Hawaii for service in southeast Asia, would benefit from this experimentation and resulting information. Specialists in food production who come to Hawaii, particularly those connected with the East-West Center for training, could also take the results back to their own countries.

6. Hawaii is, I feel, deserving of this assistance inasmuch as it has already demonstrated a high degree of concern by its own dollar involvement in solving this problem. Over a period of 45 years, the Hawaii Sugar Planters Association alone has spent an estimated $650,000 on research in rat control. Currently the sugarcane growers are spending $300,000 in rat control measures. However, as I have indicated, the efforts represented by these expenditures are not adapted to the ecology of the pest species found in Hawaii and Asia.

We face a serious dollar loss problem in Hawaii, as evidenced by the $3 to $6 million damage to the sugarcane industry alone. The large dollar outlays by the industry itself indicates a continued conscientious effort to control this pest without outside assistance, but the problem is unique and defies conventional control methods.

Once solved, the contributions would extend far beyond the confines of Hawaii. The proposal asks only for research not for implementation. This we can do ourselves. In terms of the seriousness of the problem and the dollar returns for this solution, I feel the request is both modest and appropriate.

Sincerely,

DANIEL K. INOUYE,
U.S. Senator.

STATEMENT OF SENATORS ANDERSON AND MONTOYA

Mr. Chairman, we are presenting this joint statement in support of funds for the Fish and Wildlife Service, and especially requesting sufficient funds to support the rodent and predatory animal control programs, and for funds to properly maintain the fish hatcheries at Santa Rosa, N. Mex., and Dexter, N. Mex. We request that this statement be made a part of the record of hearings.

Mr. Chairman, we support the budget requests of the Department for the Bureau of Sport Fisheries and Wildlife; however, we direct your special attention to the following programs and urge your serious consideration of these additional requests.

RODENT AND PREDATORY ANIMAL CONTROL

In 1965 Western New Mexico experienced five human cases of bubonic plague. In addition, animal epizootics were taking place throughout Western New Mexico and in the course of this epidemic thousands of prairie dogs died of the disease. Some areas as large as 60 sections were decimated. We believe that a lack of rodent control over the past years has resulted in a tremendous build-up of prairie dogs and other rodents throughout the State.

There was a time when the U.S. Fish and Wildlife Service Predator Control Division routinely controlled these animals on a sustained basis, but with the deemphasis of the program the populations continued to build up to their present status.

We have long known that plague is present in the wild animals of New Mexico and whenever populations of susceptible animals build up to a certain point, it is very possible to have an outbreak, providing the organism is present. If a continuous program of rodent control is not carried out to reduce animal populations, we could very well experience other serious outbreaks which might not only result in loss of life but might be extremely detrimental to the State economically.

In 1965, State and local governments in New Mexico spent approximately $20,000 to suppress plaque. The U.S. Public Health Service expended an additonal $21,000. In addition, hospital costs for patients or suspected patients plus the time of full-time professional personnel accounted for additional thousands. The New Mexico Department of Public Health anticipates carrying on a program of rodent and ectoparasite control in 1966. However, we would like to point out that a great deal of the area to be treated is actually federally owned and controlled; therefore, participation by the U.S. Fish and Wildlife Service is desirable.

At a meeting held in Albuquerque in the winter of 1965, officials from the U.S. Public Health Service, the New Mexico Department of Public Health, U.S. Fish and Wildlife Service, the Arizona Department of Public Health and the Division of Indian Health unanimously agreed that high level rodent and ectoparasite control should be maintained throughout western New Mexico and in some other parts of the States for at least the next 5 years.

Both the New Mexico Department of Public Health and the Indian Health area officer predict plague epizootic will be critical in endemic areas from April through November 1966. The New Mexico State Legislature appropriated $50,000 in emergency funds for plague suppression. The Federal budget estimates for fiscal year 1967 for prairie dog control in this area during April-November are $9,000 for equipment, materials and supervision.

So much of the area to be treated is federally owned and controlled that we believe the Federal Government should contribute more to the support of this program. We believe the $9,000 requested in the budget should be raised to at least $15,000. The possibility that an epidemic or plague could be started in an area like the Southwest is of national interest and the Federal Government should not hesitate to lend assistance to the State of New Mexico in trying to remove the possibility of further outbreaks.

In regard to the control of predators, we must take into consideration the great economic loss sustained by farmers and ranchers in the Southwest from having their lambs and calves slaughtered by the coyote, bobcat and other predators. In addition to destruction of domestic livestock these predators destroy thousands of small deer, antelope, and other small game and game birds.

Because the efforts of the Wildlife Service have been somewhat curtailed this last year by budget cuts, the New Mexico wool growers have voluntarily assessed themselves so much money per head of sheep per month to support the control program. They have also entered into a cooperative agreement with the U.S. Wildlife Service in order to maintain more trappers in the field.

In New Mexico, predator control has developed into a cooperative working arrangement between the livestock people, Federal and State agencies. This is good and was brought about by necessity, but even with this cooperation we do not feel that the Federal Government is contributing its share.

Last year $350,000 was cut from the predator control program. We are urging that this be restored in the 1967 budget, and that consideration be given to adding

sufficient funds, estimated to be about $500,000 to carry our effective program of predator control at the field level.

DEXTER FISH HATCHERY

Thirty-five years ago in 1931 a fish hatchery was constructed in Dexter, N. Mex., to provide small warm water fish for farm ponds in New Mexico and parts of Arizona and Texas. Today, management trends have changed considerably resulting in changing requirements in sizes and species of fish.

Almost 95 percent of the total production at the Dexter National Fish Hatchery is comprised of bass and channel catfish. The fish are utilized to fill the requirements of ponds and lakes on Indian reservations, other Federal lands as well as State managed reservoirs and farm ponds under Soil Conservation Service program.

It has been brought to our attention that for the past 15 years maintenance funds have been inadequate and no development funds have been provided. This 15-year neglect has resulted in the present need for extensive replacement and modernization of existing facilities. The fish holding house is in poor repair and is totally inadequate. Sufficient fish cannot be held in this facility to meet current needs. From our own observation of this facility, it has deteriorated to the point where replacement would be more economical than attempting to repair it.

We have been informed that the garage shop building is also in extremely poor condition and will not accommodate equipment of the size necessary to carry out the work of the hatchery. Consequently, much of this costly equipment must remain outside completely exposed to the elements. This should certainly be remedied.

The insulation on Government-owned powerlines has deteriorated to the point where a serious hazardous condition exists for both visitors and personnel. These should be replaced at the earliest possible date.

The improvement program planned for the Dexter Fish Hatchery is estimated to cost $131,000. When the Department closed the Elephant Butte Hatchery we were told that the Dexter Hatchery would be improved and expanded. This was to assure the supply of warm water fish for this Southwest area which would be sufficient to continue to stock our streams and lakes. This improvement has not taken place. We, therefore, support the proposed improvement program and urge this be made available for fiscal year 1966.

SANTA ROSA FISH HATCHERY

During the early 1930's when there was a great surplus of labor but a limited amount of funds available, the Santa Rosa National Fish Hatchery in New Mexico was constructed under the Works Progress Administration.

That was 36 years ago and the pipelines laid down at that time are, today, wholly inadequate for supplying and draining holding facilities. An urgent requirement exists for new pipelines and control structures as well as pond modernization.

There are 20 rearing ponds at this station which are supplied with water by means of an antiquated system which presents many problems, including that of contamination. The program that has been developed by the U.S. Fish and Wildlife Service is designed to eliminate the existing undesirable and costly features.

In New Mexico, the requirements for pond fish from this hatchery are rapidly increasing. Fishing has become very important to the urban dweller who likes to get away on weekends to enjoy the beauties of nature and the relaxation of fishing. It is also an important tourist attraction. Plentifully stocked ponds and lakes attract tourists from other areas of our country, thus, adding to the economic growth and stability of the local area. We would like to point out again that the Santa Rosa National Fish Hatchery not only services New Mexico, but the Texas Panhandle as well.

In 1965, 5½ million pond fish were requested for public reservoirs. Most of these reservoirs were built by the Federal Government.

The Fish Hatchery at Santa Rosa will be called upon to furnish more and more fish to meet Federal Government and State requirements. Santa Rosa must also contribute and bear part of the responsibility for furnishing fish to stock farm and ranch ponds in New Mexico and the Texas Panhandle under the SCS program.

No funds were provided for this fish hatchery in the fiscal year 1967 budget. The Bureau of Sport Fisheries and Wildlife estimates that an appropriation of $99,000 would provide the construction and equipment necessary to meet the growing needs of the area.

We urge your committee approve the requested $99,000 for fiscal year 1967.

We appreciate the opportunity to make this presentation and are hopeful that funds requested will be made available.

SANDY HOOK MARINE LABORATORY

LETTER FROM SENATOR CASE

MARCH 22, 1966.

HON. CARL HAYDEN,

Chairman, Subcommittee on the Department of the Interior and Related Agencies, Senate Appropriations Committee, Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: The Bureau of Sports Fisheries and Wildlife, Department of the Interior, has requested $464,000 for fiscal year 1967 for the Sandy Hook Marine Laboratory located at Highlands, N.J. This is a minimal increase over last year's appropriation and the entire amount will go to pay the salary increases authorized by Congress last year.

As I have previously pointed out to your committee, when Congress authorized the laboratory in 1960, it stipulated that the annual budget was not to exceed $2.7 million a year. In each of the years since then the laboratory has received, however, only a small percentage of that amount. While, despite very limited funds, much has been accomplished, additional funds are necessary to enable the laboratory to function at full effectiveness.

At my request Dr. Lionel A. Walford, Director of the Laboratory, has prepared the enclosed memorandum outlining some of the research accomplishments of the Laboratory to date. Also enclosed is a second statement prepared at my request, explaining the reasons why additional funds of $850,000 are needed to carry out the purposes for which the Laboratory was established.

Mr. Chairman, I strongly urge approval of these additional funds for the Laboratory. This sum, coupled with the $464,000, is still less than one-half the limit set by Congress in 1960.

Sincerely,

CLIFFORD P. CASE,
U.S. Senator.

RESEARCH ACCOMPLISHMENTS—FISCAL YEAR 1966 TO DATE

Fluke mystery clarified.—With augmented funds, the *Dolphin* went back into operation this fiscal year and November marked the start of full-scale, continuous field operations. The *Dolphin's* priority assignment is to locate breeding areas for coastal migratory fishes and to discover patterns of movement of their young into shallow water sanctuaries.

An important discovery made in our initial work concerns the mystery of breeding of the fluke or summer flounder, prime sport and commercial species. From our *Dolphin* expeditions we have learned that this fish breeds in deep water off the New York and New Jersey coast each autumn but the young are swept far away to the south by strong ocean currents. To survive, the young when one-third- to one-half-inch long must swim out of the currents and into the shallow bays to find sanctuary by the time they have reached North Carolina. A year later, when they are 6 to 8 inches long, they begin the long northward movement back to New Jersey, New York, and New England. North Carolina bays are the nursery grounds for fish that populate northern waters in later years.

As more such discoveries are made by the *Dolphin*, a basis will be provided for effective joint conservation programs by the coastal States.

Results with the new sea tank.—For our new sea tank facility, we flew a school of eight bluefish alive from Palm Beach to Sandy Hook last spring. Working with these fish our first goal is to learn how the sun controls their daily activity patterns and their feeding habits.

Continuous 24-hour observation of bluefish showed their activity to be directly related to light. As light intensity increases from sunrise to noon, activity of the

fish increases also. As light decreases toward sunset, swimming speed decreases too, finally assuming a slow-moving or "sleep" phase during night hours. During observations over many months, the fish have never completely stopped moving, although their speed sometimes slows to only 2 or 3 feet per minute.

Under constant, low intensity light corresponding to a continuous twilight the rhythm persists. If the artificial day is shifted to start either 7 hours earlier or later, the swimming speed rhythm changes to correspond to the new day period. The sea tank staff is now using movies in slow motion to analyze the method of detection, selection, approach, and capture of bait by the bluefish.

These results will enable us to understand in detail how bluefish are able to navigate on spring and fall migrations of hundreds of miles along the coast, and what causes them to bite at certain times during the day and not at others.

Progress on pollution.—In a stepped-up program of studies on pesticides, we have found the levels of dangerous insecticides which kill or permanently injure fishes and other marine organisms; the levels which produce temporary damage to internal systems; and the effects of the external environment such as temperature, salinity, and dissolved oxygen on the toxicity of these compounds. Our experiments demonstrated considerable variability among chemical pollutants. For example, less than 50 parts per trillion of endrin, an organochloride insecticide in common use, seriously disrupted the production of liver cholesterol in game fishes but snails and clams were apparently unaffected by concentration 100,000 times higher.

Marine fishes are hard hit by pollution and much more work lies ahead if they are to be protected. Priority work is an "inventory of chemical pollution" of tidal streams and bays and mapping of this information for the Atlantic coast.

Building fish reefs from solid wastes.—Growing piles of junk cars are a blight upon the country. So are other solid wastes such as building rubble, obsolete barges, ships, subway and railroad cars. Ironically, these solid wastes could be made to have a constructive, rather than a destructive effect, by systematically dumping them into the sea in appropriate places to create new habitats for fishes and hence artificial fishing reefs. New habitat is desperately needed to improve fishing because large sections of the shallow water environment are being destroyed—partly to make dumping grounds for solid wastes.

However, the idea of using this material for fishing reefs has not been adequately tested on the Atlantic coast. Realizing that year-round underwater studies of bottom life are necessary to establish a scientific basis for artificial reef construction, we have begun some preliminary work. Our goal is to learn what kinds of bottom structures will attract particular kinds of fish. Working toward this goal, we have assembled a team of divers who have experimented in methods of prolonged underwater studies. Our team has advanced from simple free diving with scuba, to use of a shark-resistant cage, to operation of a towed submersible which was loaned to the Laboratory. This has made it possible to survey parts of the sea floor on the grounds designated by the Corps of Engineers for our artificial reef experiments.

It is clear from all this experience that (1) diving tells us many things about reef life which we could not learn by any other method; (2) we must now procure a manned undersea station if we are to carry these studies further in artificial reef studies—a submarine laboratory in which divers can live for several days and use as a base from which to carry on their underwater field work. To reach a fully effective level in this program to improve fishing and provide a solution to the solid waste disposal problem, we will need more personnel, equipment, and operational funds. No funds have been provided specifically for this research program in the past.

Bluefish migration patterns.—Tagging of 3,000 bluefish this summer, aboard our motor launch *Bluefish*, revealed a massive migration of the species from New Jersey to North Carolina starting in late summer. From taggings of thousands more bluefish, along the coast, we have found them migrating from Florida to both Maryland and New Jersey and from North Carolina to both Virginia and Florida. Further taggings will round out knowledge of their extensive migratory patterns and provide a basis for action by the States to conserve bluefish—a most important Atlantic coast species and one whose life patterns until now have been a mystery.

Striped bass spawning and migrations.—Clear patterns of striped bass migration resulted from a cooperative program in which volunteer sport fishermen tagged 7,500 bass: Our analysis this year showed New York and New Jersey striped bass to migrate south in the autumn and to winter in southern New Jersey bays, in Delaware Bay, and in Chesapeake Bay. They begin their return

north in the spring. Some of them pause to spawn in Delaware Bay, others in southern New Jersey, but most of them in the Hudson River. Again for the striper, it is clear that we are dealing with very migratory fish and their conservation is an interstate problem.

Shark research continued.—Experimental fishing aboard the *Challenger* from Long Island to Delaware Bay has documented the presence each summer of populations of large sharks. Many of the sharks common in the area are not only a hazard to bathers but prey on other fishes. With the help of hundreds of volunteer anglers, this summer, we reached a total of over 1,000 sharks tagged and found that they migrate south along the coast in late fall and return northward in spring and summer. Migration routes appear to be different for each species.

We have also fostered expansion of sport fishing to help lower the abundance of sharks. Through these efforts, big game fishing for sharks has grown in popularity, as indicated by the increased number of shark fishing tournaments along the Atlantic coast this year and of the number of sportsmen who ask to participate in our shark tagging program.

Sea temperature and currents.—Studies of controlling environmental factors—water temperature and coastal currents—were expanded to cover the coastal area from Massachusetts to North Carolina as a supplement to our expanded vessel program. Temperature measurements are made remotely with infrared detectors by Laboratory personnel in monthly flights in Coast Guard aircraft. Patterns of current flow are shown by drift indicators, dropped from the plane every 10 miles (5,600 dropped since July). Our monthly sea temperature maps are in use not only by fishermen, but also the Navy, the Weather Bureau, oceanographers, and other marine scientists.

Temperature patterns and currents prove to affect the migration of many fishes; e.g., mackerel, bluefish, striped bass, tuna, fluke. For example (1), virtual disappearance of striped bass from New Jersey and New York waters this autumn is associated with exceptionally cold ocean water, 8° below average in November; (2) this cold water favored mackerel and large catches were made from New Jersey south; (3) fluke were concentrated against the beach by very cold offshore water this summer and large catches were taken; (4) massive upwelling of this cold water occurred along 40 miles offshore from Manasquan to Little Egg Harbor and, fortunately, kept bathers out of the water, for large numbers of sharks were attracted by the upwelled water.

SANDY HOOK MARINE LABORATORY,
L. A. WALFORD, *Director.*

DEPARTMENTAL STATEMENT

Additional funds are needed if critical salt-water conservation problems are to be attacked by the U.S. Bureau of Sport Fisheries and Wildlife through it marine research group at the Sandy Hook Marine Laboratory. Accelerating industrial progress and our burgeoning coastal population are together threatening the very existence of coastal fish stocks and the $1 billion annual sport fishing industry they support. A new conservation strategy based on scientific fact must be implemented to provide fishing opportunity for the future.

Two high priority needs—studies on artificial fishing reefs and pollution—if funded will provide solutions to current national problems of great importance. Each year that this work is put off, the dangers mount. Without the vital scientific knowledge from this work, conservation officials are at a loss to reconcile national progress with protection of natural resources.

Advance work has already been done by the Sandy Hook Marine Laboratory on these two projects and they are now ready to begin effective work. In addition to the research projects, rehabilitation of the Laboratory's docks begun this year should be completed.

Artificial fishing reefs

An ingenous solution to several civic problems, advanced by the Sandy Hook Laboratory, is to use junk cars and other waste materials to build up coastal fishing reefs. This plan should be tested in scientific experiments along the Atlantic coast.

On most of the flat, sandy bottom off the Atlantic coast there are no gathering, feeding, and spawning places for fish. The sea bottom is, in effect, a submarine desert.

Trial studies in the Pacific Ocean have shown that if solid materials are placed on this type of sterile bottom, fish will be attracted in large numbers. These artificial fishing reefs can be placed strategically to attract fish to just the right places for convenient fishing.

Solid wastes, particularly junk cars, now littering our countryside and fouling our coastal lowlands can possibly be used to build these reefs. Thus the land can be beautified and the ocean enriched when the technology of reef building is developed.

The basic plan of attack proposed by the Bureau of Sport Fisheries and Wildlife is:

(1) Establish a test plot on the northern New Jersey coast acceptable to the Army Corps of Engineers and completely survey it by sonar and by diving.

(2) Study all aspects of behavior and habits of the fish species in the area to learn the very best approach to attracting each one to artificial reefs. This work can best be done from a small submarine laboratory.

(3) In cooperation with local civic authorities make a survey of the quantity of junk cars and other wastes in coastal towns that are available for the reef building test program.

(4) With assistance of poverty program field units, clean car bodies and other wastes of all oil, gasoline, grease, etc., and remove all floatable materials; transport and strategically place them in the sea according to the experimentation plan.

(5) Conduct continuous underwater surveillance of all test reefs to determine the effects of various placements and combinations of materials in attracting prime fish species and to check the stability of the reefs on the bottom in relation to storm, damage, etc.

(6) Report results and evaluations currently to all State and Federal agencies interested in and affected by the results and provide technical assistance to all groups planning to build fishing reefs.

A total of $400,000 in annual appropriations is required for a period of at least 5 years to insure an effective experimental program and valid results. The annual funds would be apportioned as follows:

Research personnel	$90,000
Instruments and equipment	25,000
Vessel operating costs	90,000
Research operating costs	60,000
Costs for materials and engineering	70,000
General and indirect costs	65,000

Chemical pollution

Of all the suspected causes of depletion of coastal fish, pollution stands out as the major culprit. Pollution is upon us everywhere. It is a deadly byproduct of our advanced civilization. It occurs in a wide variety of forms from domestic and industrial sources. Its effects are sometimes insidious but often apparent. It is known that pollution entering coastal waters in high concentration kills fish in quantity.

But it is not known what the total effect of pollution on salt water fish stocks is. Some basic work has been done at Sandy Hook from temporary funds available through the Bureau's national pesticides research program. The effect of varied concentrations of DDT, endrin, eldrin, detergent, and other materials has been measured in the Laboratory. The results so far provide the necessary basis for future field and laboratory studies. What the Laboratory now needs is support for these future studies, particularly a survey of pollution along the whole coast and for detection of pollution in all of our tidal rivers, marshes, and bays. We really have no knowledge as to the total effect of pollution.

The pollution study planned by the Sandy Hook Laboratory would be carried out in the following strategic phases:

(1) A complete inventory of all existing and potential sources of chemical pollution along the Atlantic coast of danger to salt water fish life.

(2) Measurement of the concentrations of pollutants in all badly polluted waters where salt water fishes live, spawn, feed, or have their nursery grounds.

(3) Laboratory tests of the actual concentrations of the observed polluting agents under simulated natural conditions.

(4) Further studies based on the results of above in protected waters to determine the actual effects of fishes of various chemical pollutants.

(5) Preparation of complete reports and recommendations based on the results of the studies. The work would be closely coordinated with all other State and Federal agencies involved with pollution problems.

This program would require an annual appropriation of $250,000 for a minimum of 5 years. Funds would be apportioned as follows:

Research personnel	$105,000
Instruments and equipment	30,000
Laboratory operating costs	20,000
Field operating costs	50,000
Other costs	45,000

Dock restoration

By action of Congress, funds of $50,000 were provided for fiscal year 1966 for planning the rebuilding of the Sandy Hook Marine Laboratory's dock facilities and for emergency repairs. The Laboratory is using an abandoned Army dock which is now so rundown as to be a hazard to safety of personnel and to the ships berthed there, the *Challenger* and the *Dolphin*, together valued at nearly $1 million.

The Army Corps of Engineers, working on this project for the Laboratory recommends restoration of the present dock, rather than rebuilding, and estimates a total contract sum of $200,000 for the project. Complete plans and specifications for bidding will be completed by May 1. Emergency repairs already underway will be integrated into the whole rebuilding program.

STATEMENT OF REPRESENTATIVE CONTE RE COOPERATIVE WILDLIFE AND FISHERIES UNITS, UNIVERSITY OF MASSACHUSETTS

Mr. Chairman, members of the subcommittee, I welcome the opportunity you have afforded me to discuss the appropriations for the cooperative wildlife and fisheries units at the University of Massachusetts at Amherst, and to point out where I feel an increase is justified and vitally necessary.

Under an agreement signed January 1, 1964, the University of Massachusetts, in cooperation with the Bureau of Sport Fisheries and Wildlife (U.S. Fish and Wildlife Service), the Massachusetts Division of Fisheries and Game and the Massachusetts Division of Marine Fisheries, became the headquarters of the Massachusetts Cooperative Fishery Unit. This was 1 of 13 original units established throughout the country; since then 7 others have been established. The objectives of the cooperative fisheries units are to educate professional fisheries biologists, and to undertake much-needed research in the fisheries field.

The general enabling legislation for the units is Public Law 86-686 of September 2, 1960. Twelve of the original units were funded from Federal sources at $30,000 per year starting in 1961. The 13th, the University of Arizona, was funded at $40,000 a year. This money was to provide research funds and the salaries and expenses of the unit leader and assistant leader, both of whom were to have Ph. D.'s (GS 12 and 13) and be acceptable to the parent universities as faculty members abel to direct research and to teach fisheries courses.

As of amendment 33 to the Interior Department Appropriations Act for fiscal year 1966 (Public Law 89-52), funding levels for 2 more of the 13 original units were raised to $40,000 (University of Georgia and North Carolina State College), and funds were made available, at $40,000 each, to establish 4 new units at Virginia Polytechnic Institute, Oregon State University, Iowa State University, and the University of Hawaii. Three other units at South Dakota State University, Oklahoma State University, and Ohio State University were also established and funded prior to fiscal year 1966 at $40,000, making a total of 20 units now in operation. As just indicated, 10 of these are funded at $40,000 and 10 at $30,000.

The policy has therefore been one of raising supports for established units to $40,000 and starting new ones at that level as well. This is doubtless related to the fact that $30,000 barely covers the salaries of unit personnel and provides no additional moneys from Federal sources to support the research program. As an example, our unit personnel at the University of Massachusetts will have about $101 of unencumbered Federal funds next year after salaries and regional office overhead are removed. This estimated unencumbered balance of the Federal account is clearly not enough to allow for small item purchases and emergency expenditures.

Also, it is frequently difficult to plan student research to the close levels hereby required. In addition, the recent Federal pay increases for the unit leader, Dr. James McCann, and the assistant unit leader, Dr. Roger Reed, were unsupported and therefore were taken from the original $30,000 Federal appropriation. In fact, the present appropriation is not adequate to cover even future routine salary increments. This has completely removed the Federal Government from the role of supporting student research under the current funding levels. Consequently, the unit research is being supported entirely by State contributions.

In Massachusetts, each of the two cooperating State divisions (division of fisheries and game and division of marine fisheries) contributes $10,000 to the unit for support. Additionally the university contribution in office and laboratory space and secretarial help and other services approaches this level.

These figures are broken down for fiscal year 1967 as follows:

I. Federal budget:	
Total Federal appropriation	$30,000
Expenditures:	
Salary, permanent employees (1 GS–13, 1 GS–12, includes benefits)	26,899
Bureau ovrhead for administration (10 percent, taken out prior to transfer of funds to unit)	3,000
Balance remaining from Federal appropriation for travel, vehicle fuel and maintenance, equipment, and all other expenses	101
II. State budget:	
2 appropriations:	
Division of fisheries and game	10,000
Division of marine fisheries	10,000
Total	20,000
Expenditures:	
Support of 7 graduate students ($2,500 to $2,700 per year)	17,640
Travel expenses (vehicle maintenance) (estimated)	1,987
Equipment and supplies (estimated)	373
Total	20,000
III. University of Massachusetts: Services and facilities (approximate worth)	10,000

The Massachusetts cooperative fisheries unit is the only unit among the 20 in the country which receives double support (Massachusetts Division of Fisheries and Game, $10,000; and Massachusetts Division of Marine Fisheries, $10,000); all others get something on the order of $10,000 from a single State department.

The situation appears more inequitable when it is realized that of the 20 fisheries units in the United States, the Massachusetts unit supports the largest number of graduate students and is the only unit which provides a curriculum and research opportunities for both fresh water and marine fisheries. With the increased expenditures incurred through the operation of the comprehensive programs outlined above, an increased appropriation for the Massachusetts cooperative fisheries unit has become essential.

While the need of the Massachusetts cooperative fisheries unit is great the needs of the cooperative wildlife unit at the University of Massachusetts are even more severe. The Massachusetts wildlife unit's current Federal budget appropriation is only $15,500, mostly for the unit leader's salary. Unlike the fishery unit, there is no assistant leader.

By the way of background, the Massachusetts wildlife unit was established at the university in September 1948. Since that time the unit has become an integral part of the university. Nearly 50 graduate students have been trained in the field of wildlife biology and have assumed responsible positions in this field in the State and Nation. Currently, the university is expanding its graduate program to include Ph. D. students. State support for graduate student assistantships at the cooperative wildlife unit is about $10,000. As with the fishery unit, the university provides space, research facilities, clerical services, and the like.

Funding for the Massachusetts cooperative wildlife unit is broken down as follows for fiscal year 1967:

I. Federal budget:	
Total Federal appropriation	$15,500
Expenditures:	
Salary (unit leader)	14,000
Supplies and equipment	1,500
II. State budget:	
Total State appropriation	10,000
Expenditures—student assistantships, supplies, and equipment	10,000
III. University of Massachusetts: Services and facilities (approximate worth)	10,000
IV. Private assistance: Wildlife Management Institute (used mostly for out-of-State travel to conferences by unit personnel)	1,000

It should be noted that the budget of the Bureau of Sport Fisheries and Wildlife is misleading in one instance. The cooperative wildlife unit is listed as having an appropriation of $15,500 at one place. However, at anothr place in the budget the total appropriation for the cooperative wildlife research unit is listed at $68,500. This is due to the fact that the university also supports a bird depredations "control methods" station for the Bureau of Sport Fisheries and Wildlife and the two appropriations have been lumped together.

While the "control methods" station is staffed with Federal personnel they are confined to investigations of methods of controlling wild birds. Further, the bird depredations program is of a temporary nature and the cooperative unit leader may not use the "control methods" station funds or personnel in the operation of his unit. It is therefore important that, even though the two funds are listed together in the Bureau's budget, it be realized that the programs are entirely separate and that the moneys are not interchangeable.

The need for an assistant leader is very great at the wildlife unit. Because of the absence of an assistant leader there is no time available for the unit leader to participate in the university teaching program or in field projects which would require his occasional absence from the University to supervise graduate students.

In addition, under the present funding, the unit leader, Dr. Sheldon, does not have enough money left after salary and a few supplies to support his travel to necessary meetings. In fact if it were not for the contribution of an outside agency, the Wildlife Management Institute, Dr. Sheldon would not even have sufficient funds to travel to his own annual unit leaders conference. This is a deplorable situation for the Federal administrator of an important program who also has the responsibility of teaching our future scientists.

Last year, in recognition of the necessity for increasing the appropriations of the cooperative wildlife units the appropriation of the wildlife unit at Ohio State University was raised to $40,000 per year. While this is a beginning, both the Bureau of Sport Fsheries and Wildlife and the University of Massachusetts recognize the need to continue in this favorable direction.

I would like, at this time, to read a letter which I have received on the situation ta the University of Massachusetts from the Bureau of Sport Fisheries and Wildlife which effectively states their position:

Hon. SILVIO O. CONTE,
House of Representatives,
Washington, D.C.

DEAR MR. CONTE: W eare pleased to respond to a request from your office on the need to raise the level of Federal support at the cooperative fishery unit and th cooperative wildlife research unit located at the University of Masachusetts. Both of these units have been successful in providing training to fishery and wildlife biologists in the conduct of research, and have enjoyed the full support of the university and the State conservation agencies.

The wildlife research unit, established in 1948, has had a long and illustrious history. Its current level of financing, $15,000 in Federal funds, is inadequate to meet the needs for training and research which have been placed upon the unit. Research effort designed to meet expanding needs for basic data in the wildlife field must be increased. It is also important that an assistant unit leader be provided to permit better supervision to graduate students and a more equitable distribution of the workload. Present funds are inadequate to

meet the costs of necessary equipment, travel and expenses of the research program. An annual appropriation of $40,000 is now considerd the minimum level of Federal support required.

The cooprative fishery unit was established in January 1964 under an appropriation of $30,000 in Federal funds. The unit receives the full support of the Massachusetts Division of Fisheries and Game and the Division of Marine Fisheries. The fishery unit has emphasized the training of biologists for employment by State and Federal agences. It now has the largest number of graduate students attached to any of the fishery units and is helping meet a long-felt need. Important field studies are underway and these should be continued and expandd in scope. The present level of financing is inadequate to meet the salaries of the Federal personnel, the costs of travel, equipment and other necessary expenses related to the program. As for the fisheries unit, an annual appropriation of $40,000 is the desired level of Federal support. This amount is now available to those fishery units started in fiscal years 1965 and 1966.

The Bureau has considered this matter carefully, and has indicated a future budget of $40,000 annually for each of the cooperative fishery and wildlife units. We would expect to seek this level of financing as soon as the fiscal policies of the Government would permit. The budget, as submitted by the President for fiscal year 1967, shows financing for the wildlife unit at $15,500 and the fishery unit at $30,000.

We appreciate your interest in helping us realize our goals for this important program.

Sincerely yours,

(Signed) A. V. TUNISON,
Acting Director.

It appears obvious from the preceding statements that the appropriations for the Massachusetts cooperative wildlife and fisheries units should be increased as soon as possible. I therefore respectfully suggest that this subcommittee give favorable consideration to increasing the annual appropriations of each of these units to $40,000 in fiscal year 1967.

DEPARTMENTAL STATEMENT RE STUDY OF STRIPED MARLIN AND THE PACIFIC SAILFISH

The striped marlin and Pacific sailfish are the most important marine big game angling species off the coast of southern California and Mexico. These species not only support an active fishery by U.S. anglers off southern California in the late summer and fall and off Mexico in the winter, spring, and early summer, but the presence of these fish contributes substantially to the economy of Baja California by providing a world renowned big game fishing area.

Recently the stocks of striped marlin have experienced heavy fishing by foreign commerical fishing vessels in areas reported to be centers of striped marlin spawning. Since knowledge of billfishes and their habits in the eastern Pacific is virtually unknown, it is of importance to the preservation of the resource to develop studies that will give the necessary facts on which to base sound conservation judgment.

The proposed project's objectives will be to determine the population distribution, abundance, and general life history of the striped marlin and Pacific sailfish, including age, growth rate, fecundity, spawning areas, and to determine the effects of fishing on the abundance of stripped marlin for a period of 6 years.

Research studies will be conducted at the centers of marine game fishing off southern California and Mexico. High seas research will be conducted to determine ocean conditions related to occurrence, the spawning areas for striped marlin and for Pacific sailfish, and the characteristics of the spawning populations. Detailed examination of biological material and analysis of research data will be conducted at the Tiburon Marine Laboratory, Tiburon, Calif.

Additional staffing required to initiate this comprehensive research program includes one GS–11 fishery research biologist; two GS–9 fishery research biologists; two GS–7 fishery research biologists; two GS–4 technical aids; and two GS–3 technical aids. In addition, funds are needed for the rehabilitation and operation of Tiburon's 65-foot research vessel, the charter of a second boat for 120 days per year, the charter of aircraft to spot fish, tagging fish, specialized equipment, travel, and administrative support. The estimated cost of this study is $250,000 in the first full year, and $500,000 each year thereafter.

STATEMENT OF NATIONAL AUDUBON SOCIETY

The National Audubon Society, founded in 1905 and with more than 41,000 members plus 200 local, affiliated organizations whose members are not counted in the 41,000, is one of this Nation's oldest and largest conservation organizations. Our purpose is to advance public understanding of the values of soil, water, plant, wildlife, scenic and wilderness resources and the wise use of these several resources in relation to human progress.

In this brief statement, we wish to register our support for several of the budgeted items for Department of the Interior programs and in some instances urge, respectfully, that larger sums should be provided than those listed in the President's budget.

BUREAU OF SPORT FISHERIES AND WILDLIFE

We support the full $3,359,000 proposed for fishery research, and particularly the $100,000 included therein for initial staffing and operation of the Fish-Pesticide Research Laboratory at Columbia, Mo.

In the wildlife research item, we urge the full amount plus an increase of more than the $315,000 proposed for acceleration of pesticide-wildlife studies. The continued contamination of the environment with toxic pesticide chemicals is creating problems that demand solution at the earliest possible time. Therefore we urge the increase for pesticide research, over the current fiscal year, be at least $500,000.

We also fully support the $350,000 that is included in this item for research into the biology and ecology of rare and endangered species and into conservation and propagation techniques applicable to such species.

The sum budgeted for construction on national wildlife refuges is totally inadequate. It is important to get the newer areas in the refuge system into full and efficient operation as soon as possible through the building of the necessary dikes and control structures for marsh development and marsh management. We recommend that the $1,785,000 proposed for development on the refuges, and the $200,000 listed for advance planning, both be doubled.

Finally we urge, with respect to Bureau of Sport Fisheries and Wildlife programs, that the fiscal 1967 appropriation under the 7-year program for wetlands acquisition be increased at least to the level of 1966 appropriations.

The Bureau has demonstrated a capacity to efficiently use $12,500,000 or more per year, and it is essential that vital waterfowl habitat be acquired while it is still available and before rising land prices make some of it unattainable. Strangely, the budget makers proposed cutting this program by $1,500,000. We respectfully request, Mr. Chairman and members of the subcommittee, that this cut be restored.

BUREAU OF OUTDOOR RECREATION

We support the full budgeted program for the Bureau of Outdoor Recreation, including the needed increase for salaries and expenses. We particularly endorse and support the $1,514,000 proposed within the land and water conservation fund for allocation to the Bureau of Sport Fisheries and Wildlife for the purpose of acquiring refuge lands to conserve endangered migratory game species.

We also endorse the full sums proposed to be transferred to the National Park Service and U.S. Forest Service for land acquisitions, and for the same urgent reasons. It is in the interest of economy to complete the authorized acquisitions as quickly as possible, because none of the lands are getting any cheaper.

Thank you for this opportunity to present our views.

CHAS. H. CALLISON.

CONTROL OF PREDATORY ANIMALS

STATEMENT OF SENATOR SIMPSON

I appreciate the opportunity of presenting this statement to your subcommittee on a matter of extreme importance to the State of Wyoming—the need for adequate funds for a responsible predator control program under the U.S. Bureau of Sport Fisheries and Wildlife for fiscal year 1967.

Like other States benefiting from the program, Wyoming requires restoration of the $350,000 that was cut from the budget last year if we are to obtain our

needed share of the overall predator control money. Funds are particularly vital at the trapper level.

With an annual production of approximately 22 million pounds of wool, Wyoming is the second largest wool and lamb producing State in the Nation. Its sheep industry contributes 20 percent of Wyoming's total agricultural income. When the $31 million income from this industry is used to purchase goods and services, the total impact on the State's economy is $73 million. An additional $6 million annually comes from sheep revenues to support county, State, and Federal Governments.

Because of its significant economic contribution to the overall economy of Wyoming, the sheep industry must be maintained in a strong position. Such a position can only be attained if the products, wool and lamb, are produced and sold.

One of the major factors governing the quantity of wool and lamb products to be sold is the sufficient control of predators—specifically, coyotes. A recent survey by the Wyoming Wool Growers Association indicates a 2.3-percent loss of sheep to predators (a reduction of 38,265 head), valued at $765,000. Many long-experienced sheepmen estimate that before an effective control program was implemented, predator losses ranged up to 10 percent. With the cost-price squeeze the sheep industry is now undergoing, no sheep outfit could survive that large a loss.

Without requisite funds and personnel to carry out a competent predator control program, the wildlife population of Wyoming is decreasing. Many deer, antelope, and birds are killed each year by coyotes.

The Predator Animal and Rodent Control Branch of the U.S. Bureau of Sport Fisheries and Wildlife in Wyoming and the woolgrowers of Wyoming have worked hard to provide adequate control of sheep killing by coyotes. Funds for this cooperative program have been derived from Federal appropriations, from the Wyoming Game and Fish Commission, from county commissioners, and from the sheepmen of Wyoming. For the fiscal year ending June 1964, these funds totaled $344,984, of which over one-half were supplied by the sheepmen.

However, the total funds available are definitely not enough to adequately protect the domestic livestock and wildlife from the menacing and destructive predators. I, therefore, respectfully request that this subcommittee furnish sufficient funds to provide for an effective predator control program for Wyoming under the Bureau of Sport Fisheries and Wildlife.

TELEGRAM FROM NEVADA WOOL GROWERS ASSOCIATION

ELKO, NEV., *March 14, 1966.*

Hon. Senator ALAN BIBLE,
Senate Office Building,
Washington, D.C.:

Michele and I enjoyed very much our brief visit with you 2 years ago and surely wish that we could come back to Washington, D.C., to make a presentation for increased support for predatory animal control.

However, we have had terrible sheep losses to coyotes, eagles, and bobcats and cannot afford to go to Washington, D.C., at this time.

As you know the market has improved on lamb and we should have been able to pay off some of our loan. From May until October we lost over 1,750 lambs to predators out of a total lamb crop of about 4,000 healthy lambs.

Lawrence Holland and Johnny Espil have had about the same number of losses as we have had. Lawrence said that during the 40 years that he had been in the sheep business that he had never seen it so bad and recently sold all his sheep and quit the sheep business completely.

If any of the sheep ranchers are to survive in this area of over 90-percent Federal landownership, we would like to see the Federal Government provide at least 50 percent of the funds toward the control of predators.

In answer to the coyote defenders and rattlesnake protectors or whatever:

The coyotes have increased to the highest numbers ever experienced in the West and it is imperative that there be positive control if the livestock people are to harvest the forage on the Federal range.

We have appreciated your strenuous efforts on our behalf in the past and hope that you will help us now.

Sincerely,

STANLEY L. VAN VLECK, *President.*

STATEMENT OF NEW MEXICO WOOL GROWERS ASSOCIATION

I am W. E. Overton, sheep and cattle rancher from New Mexico. I am appearing today in behalf of the New Mexico Wool Growers Association. I am past president of this organization, and presently I am member of the board of directors and the executive committee. I am also vice president of the National Wool Growers Association. My family has been in the sheep business all of my life, and I have grown up with the predator problem. I have seen it increase from a nuisance level in the early days to one of major proportions at present.

In 1930, we realized that we were going to have to make some changes in our way of handling sheep because it was becoming increasingly harder to obtain sheepherders, so we started fencing our ranches with woven-wire fence. We then turned our sheep loose in these enclosures unattended. These fenced pastures, as we call them, are several miles in circumference and contain several sections or square miles of land.

We found that the sheep did very well under these conditions, but so did the predators. And it was at this time, that the predator problem became one of major proportions.

Coyotes, bobcats, and eagles, began predation.

There is no question but that the No. 1 production problem in New Mexico, in the sheep business, at this time is the control of predators.

Sheep and predators just cannot coexist in these pastures. A sheepman simply cannot stay in business, if he does not keep these predators out of his herd. As I stated above, I have grown up with this problem, and I am forced to consider every coyote and every bobcat that gets into the pasture with my sheep a potential killer. I can't remember a time when a coyote has stayed in these pastures for any length of time that the coyote didn't cause damage. So without adequate assistance from a qualified trapper, the sheepman has no alternative but to try to control the predator by any means at his disposal.

We believe that a well financed, coordinated program run by people who are knowledgeable in this area is a necessity. I would like at this point, to commend the people in the Fish and Wildlife Service in New Mexico for the wonderful effort that they have made in helping us with this predator control program. In late years, however, with the increased pressure from more and more predation they just haven't had the personnel or the funds to adequately cope with the situation.

To supplement the efforts of the Fish and Wildlife Service the rancher himself found it necessary to organize an association in given areas. The members of the association would assess themselves so much money per head of sheep per month. The association would then enter into an agreement with the Fish and Wildlife Service. This resulted in a cooperative effort and by this means we were able to maintain many more trappers in the field.

At present the rancher is contributing 60 percent of the predator control program in New Mexico.

To give you an idea of how inadequate the present funds and staff of the Fish and Wildlife Service are:

In the State of New Mexico, at present, we actually have 30 predator control men in the field. New Mexico is a large State in area. It is approximately 400 miles square. Now when you spread 30 men over a State the size of New Mexico, with a little simple arithmetic, you find that this is one man for an area 70 miles square. It is absolutely impossible for one trapper to give adequate attention to this much area. When the cut of $350,000 was made last year, we lost four fieldmen. Other States were similarly affected. Please keep in mind, that the 30 men mentioned above, are made possible by the 60 percent of funds contributed by the rancher himself. If it were not for these funds contributed by the rancher, we would have less than half the amount of trappers we have today.

The coyote is the No. 1 predator. He is the smartest animal that I have ever had to deal with. He can adapt himself to any environment. In recent years, the coyote has spread all over the North American Continent. You will find him living in thickly settled urban areas. He has migrated to the far North, and into the deep South. We in the West, have great respect for this cunning little killer. At present he has won every round in the endless battle to control him. Even with the great advancement in control technique, he continues to increase in number. The idea that many groups have that a coyote will become extinct, is a myth. I wouldn't be at all surprised that when we finally land a man on the moon, we will already find the coyote there.

Earlier in this statement I pointed out that the predators and sheep just can't coexist. One or the other has to go. Francisco Coronado brought sheep to New Mexico in the year 1540 when he led a party north into New Mexico in that year. Sheep thrive on the semiarid regions of the West. Many large areas are suitable only for the grazing of sheep and if the sheep were pushed off these areas because of inadequate control of predators, many of these areas would be lost and become wasteland.

In these days of jets and supersonic missiles, moon shotc, etc., we are prone to overlook our basic economy. The livestock industry developed New Mexico. When we have mined out all the uranium, and other minerals, pumped out all the oil, we will have to turn again to our natural resources, the recurring resources, such as timber, grass, weeds, and browse. There is nothing that will harvest these recurring resources and turn them into feed and fiber as well as domestic animals. So we must provide a habitat where these animals can survive.

There are many places in the West where the aforementioned predators can live, should live, and be preserved. There are large areas where their presence will be beneficial in preserving a balance of nature, but it is unthinkable to me, to permit a predator to be the ruination of a business as old and important to our State and national economy as the sheep and wool industry.

Wool is a strategic commodity. Germany lost the war on the doorstep of Leningrad because she ran out of wool to keep her troops warm. Congress recognized the need 12 years ago for a healthy sheep industry when it passed the National Wool Act, which was to encourage and promote the production and expansion of the domestic sheep industry.

We know of many sheep ranchers whose families have been in the sheep business for three and four generations who have recently had to quit because of predation by coyotes, bobcats, and eagles.

As an example a friend of mine by the name of Carl Hyner, at Corona, N. Mex., runs a small band of sheep of around 800 head. In ordinary years he raises around 700 lambs. Last year he sold 75 head of lambs. Predators got the rest of them. There are two courses of action—control the predators or get out of the business.

Sheep numbers are now the lowest of record. One of the principal reasons for this serious situation is our inability to control coyotes and other predators.

In summing up, we feel that in the public interest, the $350,000 that was cut from the predator control budget last year should be restored and further, we respectfully request that an additional half million dollars be added for an adequate and effective program at the field level.

LETTER FROM IDAHO WOOL GROWERS ASSOCIATION

MARCH 14, 1966.

SENATE SUBCOMMITTEE ON INTERIOR APPROPRIATIONS,
Senate Office Building,
Washington, D.C.:

We respectfully urge and request that your committee favorably approve restoring appropriations in full for predator and rodent control replacing the full $350,000 removed from their budget a year ago.

Our request is because more than 65 percent of our State's area is federally owned. It is on these areas that predators propagate and from them they move onto private lands killing lambs, chickens, small pigs, and calves. It is conservatively estimated predator losses to the sheep industry alone in our State would well exceed a half million dollars a year. Naturally loss of income effects the basic economy in the ownership of private lands and livestock.

Small flock owners and farmers are incurring heavy losses from predators that move in from federally owned lands onto their own privately owned lands killing not only lambs but chickens, small pigs, and calves. In some areas of our State predators are responsible for having destroyed a considerable amount of upland game birds and even small game animals.

Presently sheepmen in Idaho on the farms and ranges are paying from 85 to as high as 95 percent of the total actual cost of fieldwork in the control of predators. It is not unreasonable therefore we ask a fair amount be paid by the Federal Government.

Sincerely,

R. K. SIDDOWAY, *President.*

STATEMENT OF MONTANA WOOL GROWERS ASSOCIATION

My name is Everett E. Shuey of Helena, Mont. I am executive secretary of the Montana Wool Growers Association. I have held this position for 18 years. Our association represents 91 percent of the sheepowners in our State and has been in existence for over 80 years.

The association and our membership are vitally interested in maintaining an adequate predator control program as the very existence of our industry and the livelihood of our members is dependent upon protecting their flocks from the ravages of coyotes, golden eagles, and to a lesser degree, bears.

Prior to 1947 we attempted to control the coyote population by the bounty system which was expensive and unsuccessful. The coyotes continued to take a large toll of calves, lambs, game animals, and game birds. Deer and antelope were unknown in many areas of the State. There were no open seasons on antelope and only a few areas were open to the hunting of deer.

In 1947 the Montana Legislature passed a law creating the Governor's Advisory Committee on Predatory Animal Control. The committee is composed of five members representing the Montana Wool Growers Association, the Montana Stockgrowers Association, the Montana Association of County Commissioners, the Montana Fish and Game Department, and the Montana Federation of Wildlife Clubs. The secretary of the committee is the executive officer of the Montana Livestock Commission, the State agency charged with the protection of livestock from predators.

Adequate financing of an expanded, workable program was the big problem. The constitution of Montana limits the amount of money which can be raised by taxes on livestock to 4½ mills on the taxable valuation. It was necessary to pass legislation permitting sheepmen within the various counties to tax themselves on a county level to raise funds for predator control. The first bill passed for this purpose limited this tax to 5 cents per head. It has subsequently been raised to a limit of 15 cents per head.

Today our program is financed as follows: Approximately $40,000 is contributed annually by the Montana Fish and Game Department; $50,000 from the Montana Livestock Commission from the tax levy on all livestock, including cattle; approximately $100,000 from the county levy on sheep; and $88,000 from the Bureau of Sport Fisheries and Wildlife; a total of $278,000 for 1966.

The reduction in funds by the Congress last year meant a loss to Montana of $20,000 and a reduction of our trapper force from 28 to 25 men. Montana is a big State. It was the straw that broke the sheepman's back. The force was already reduced to the point of diminishing returns, and now it is worse. This reduction means that each trapper is expected to cover an area of over 4 million acres—an area larger than some Eastern States. Forty percent of the land area in Montana is federally owned. These lands include many national forests, wilderness areas, Indian reservations, etc., which are interspersed with privately owned lands. Predator control is not practiced in many of these areas, and as a result they serve as reservoirs or breeding grounds for predators of all kinds, particularly coyotes.

Coyotes have increased drastically in the last 3 years and as a result many sheepmen have been driven out of business. The Bureau's own figures report losses of 4,997 head of sheep and I would estimate the total loss to be 10 times this number.

If I may digress for a moment, earlier I stated that the deer and antelope population were at an alltime low prior to 1947, the advent of compound 1080, and a well-organized, well-financed predator control program. In 1948 the population of these animals started to increase, and finally increased to the point that it was necessary to pass special legislation to allow the taking of more than one animal to bring numbers into balance with forage available. We have had wonderful hunting, but the increase in coyotes the last 3 years has had its effect on the population of these animals, too. The game animal kill is down and I fully expect the Montana Fish and Game Commission to limit hunters to only one animal this year.

Montana has long been a rabies-free State, but no longer. During the past 2 years we have been invaded. Rabies has been diagnosed in skunks, foxes, and as of last week in one cow. So far we have not had any human losses but we can expect it any time. This is a direct result of inadequate predator control.

Golden eagles are not legally classified by law as predators since they are now protected by Federal law, but I can assure you, they are one of the worst enemies of young lambs and antelope that exist in some areas of Montana. The

ridiculous regulation, imposed by the Secretary of the Interior, prohibiting the use of airplanes and the help of Federal trappers in taking eagles destroying lambs is costing some individuals hundreds, and in some instances thousands of dollars annually. Golden eagles are on the increase. I saw six last week in one stretch of 50 miles. The golden eagle problem is recognized by our Montana Fish and Game Department.

With your permission I would like to insert into the record copies of letters from the director of the Montana Fish and Game Department to the Secretary of the Interior and to the Portland Office of the Regional Director of the Bureau of Sport Fisheries and Wildlife supporting our position and contention that sheepowners and their agents, including employees of the Fish and Wildlife Service be allowed to use airplanes to take golden eagles destroying livestock.

I would also like your permission to insert into the record copies of Resolutions No. 9, 10, and 11 passed at the annual convention of the Montana Wool Growers on December 9, 1965.

RESOLUTION No. 9

Whereas golden eagles are a serious menace in some areas of Montana causing great economic loss to sheep producers; and

Whereas the Secretary of the Interior is not following the intent of the law in allowing the taking of golden eagles to protect domesetic livestock; and

Whereas employees of the Fish and Wildlife Service are equipped and trained for this type of work: Therefore be it

Resolved, That we ask the Governor of Montana to request the Secretary of Interior to open the entire State of Montana for the taking of golden eagles during the periods when they prey on livestock; and be it further

Resolved, That we request the Secretary of Interior to allow sheepowners and their agents to use airplanes to take golden eagles and that employees of the U.S. Fish and Wildlife Service be permitted to assist sheepowners in taking golden eagles to protect their livestock.

RESOLUTION No. 10

Whereas the statewide predator control program has been of great value to the entire livestock industry, and to many types of wildlife; and

Whereas the drastic increase in the coyote and fox population during the past 2 years has created a definite hardship on the sheep industry and has forced some operators to liquidate their flocks; and

Whereas protection of all game animals and game birds is dependent on predator control: Therefore be it

Resolved, That we urge the U.S. Fish and Wildlife Service to redouble its efforts to give livestock and wildlife the protection to which they are entitled; and be it further

Resolved, That we request all cooperating agencies, such as the Montana Fish and Game Department, and livestock owners to continue, and if possible increase, their financial support of the program.

RESOLUTION No. 11

Whereas the sheep industry is spending thousands of dollars annually to protect their livestock from the depredation of predators such as coyotes and fox: Therefore be it

Resolved, That we request the U.S. Fish and Wildlife Service to immediately review their methods of control and operation to the end that their service can give sheepmen proper protection with funds now available.

In summary, Mr. Chairman, we feel that the Government is not carrying its full share of the financial responsibility for predator control in the Western States. Perhaps new guidelines for financing should be studied. As far as Montana is concerned we feel that since the State is 40 percent federally owned that the Government should pay at least 40 percent of the cost of our predator control program.

Thank you, for the opportunity of presenting our views.

STATEMENT OF WYOMING WOOL GROWERS ASSOCIATION

This statement is on behalf of the Wyoming Wool Growers Association which serves as spokesman for the 3,000 sheepmen in the State of Wyoming.

Wyoming ranks second among the States as a producer of wool and lamb.

The 2 million head of sheep that graze Wyoming's terrain, from the fertile farm valleys to the bleak desert winter ranges, are responsible for 20 percent of Wyoming's total agricultural income.

The receipts from the sale of wool, lamb and its products total approximately $31 million annually, which in turn generates another $42 million worth of business for a total contribution of $73 million.

An additional $6 million annually comes from Wyoming's sheep industry to support county, State, and Federal Government.

We mention these statistics concerning Wyoming's sheep industry in order for you to be more cognizant of the economic contribution the sheep industry makes to the overall economy of the State, and of the need for a continued strong sheep industry in Wyoming.

The No. 1 problem now facing the sheep industry in Wyoming is the lack of adequate control of predators.

SHEEP LOSSES IN WYOMING

A recent survey in Wyoming indicates the value of sheep lost to predators amounts to slightly more than three-quarters of a million dollars annually.

Wool growers in Wyoming repeatedly report that the coyote population is increasing and consequently, sheep losses are increasing.

The following statements are only a few samples of the statements which have been received by the Wyoming Wool Growers Association office from sheepmen expressing a concern and need for an adequate animal control program:

Richard Redland, Manderson, Wyo.: "In 1964, I lost 29 head of sheep to coyotes, and 36 head in 1965. In my area the coyote population has doubled every year for the last 5 years. I feel that a large part of this number is coming from the national forest and other areas where we are not allowed to trap or use poison. In spite of our efforts, coyote numbers have continued to increase. This fall is the worst I have seen since the late thirties and early forties. I bought sheep in Washakie County, trailed them from that county to my range in Big Horn County and then on to Park County. I saw coyotes and coyote signs on the entire route. I suffered losses on three different places, many miles apart. These sheep could never be left alone or bedded more than 50 yards from the camp. If any strayed from the main herd, which happened on five occasions, the animals were lost. Only twice was I able to recover any. I feel the problem is rapidly getting out of control."

J. W. Nuckolls, Hulett, Wyo.: "During a 16-day period from August 20 to the 5th of September, I lost 33 head of lambs to predators. We were unable to slow the killing and the ewes and lambs were so spooked they were not grazing properly so we were forced to ship a month early to salvage what we had. These lambs sold for $17.10 per head so coyote loss represented a conservative loss of $564 in revenue. Incidentally, we have not eliminated either of the two coyotes as to date."

Ernest Todd, Upton, Wyo.: "Coyotes are increasing at a rapid rate and are scattering all over the country from their breeding grounds. We have been getting a few with getters and airplanes, but not enough to even begin to take care of the increase. The new breed of coyotes we have with us now are too wise to take getters and poisons. Coyotes have been killing for me for the past 3 years. In 1963, I lost 40 lambs. They killed, to the best of my knowledge, about 75 lambs and 20 ewes in 1964. The past year of 1965, we were short 140 lambs from docking to shipping time. It is impossible to say how many were killed during lambing. During 1965, they killed 40 yearlings and quite a number of older ewes. They are still getting a ewe every night or two. I have a good sheep range and like to raise sheep and next fall will be my 40th year in the sheep business. I don't intend to go back to the herders and lambing hands for any length of time, so unless my sheep can be turned loose without such terrific loss from coyotes, I believe the wisest course for me would be to dispose of my herd."

Charles Julian, Kemmerer, Wyo.: "My sheep losses from coyotes the last 2 years have been much greater than in previous years. Losses in actual market value in the last year alone would be at least $1,800."

Dean Tolman, Worland, Wyo.: "The sheepmen are alarmed because during the past 3 years the coyotes are definitely on the increase in spite of all we can do to control them. Don't worry about them becoming extinct. At our last predator control meeting, a number of sheepmen were unhappy because they had suffered increased losses during the past 2 years. One sheepman said he would have to go out of business if we couldn't kill some of the coyotes on his range. He had lost one-third of his lambs to coyotes."

Glenn Pace, Hillsdale, Wyo.: "I lost 35 lambs and about 10 ewes to coyotes this year. I run about 350 to 400 ewes and can't hire a herder for a band this size."

J. E. Dereemer, Horse Creek, Wyo.: "In 1965 we lost at least 10 percent of our lambs, killed by coyotes, also 25 ewes and 3 bucks. We had eight half-grown lambs killed one morning when we were moving sheep to our mountain range in July 1965, something that had never happened before. I tried to sell my sheep last year, but very few wanted any part of the sheep business. I killed 25 coyotes during 1965, a neighbor killed 28 north of our place about 15 miles, and another neighbor killed 25 coyotes, and the county trapper brought the total coyote kill for this county to over 300."

In Big Horn County, 31 sheepmen replied to a questionnaire sent out by the county agricultural agent indicating they lost a total of 868 head of ewes and lambs to predators in 1965. The market value of the sheep lost totaled $15,291.

Nine sheepmen in Sheridan County reported the loss of 1,323 head of sheep to coyotes, valued at $26,000.

There is nothing more sickening and discouraging than for a sheepman to check his flock and find several big fat lambs torn to shreds by coyotes, not to mention those lambs that have their sides ripped open, legs half eaten off and yet are still alive.

Many sheepmen in Wyoming have found that in order to cut down on labor costs, manage their range for more production to get a higher lambing percentage, heavier lamb weaning weights and more clean wool per ewe, it is necessary to run their sheep flocks under fence.

It is virtually impossible to secure competent qualified herders. The older men are fast fading from the picture, and younger men are not interested in becoming sheepherders.

Cost of production in the sheep business has increased tremendously during recent years, and in order for the sheepman to survive he must attempt to cut costs of production and at the same time increase the production per unit.

Fencing of range has been one of the tools of management which has proven beneficial in cutting costs of production and at the same time increasing the production.

A study made by the University of Wyoming reveals that when sheep are run under a fenced operation, the grazing capacity of the range is improved by at least 20 percent, as opposed to a herded operation. To quote from the University of Wyoming publication, "Fencing vs. Herding of Range Sheep," by W. P. Roberts, Jr., June 1961—"When sheep cease to be herded they are allowed to shift for themselves, finding their own bedgrounds and coming to water when they desire. They will spread out and cover a pasture thoroughly, getting into and grazing spots that a herded sheep will never find. This, and the reduction in grass breakage from not having a band of sheep travel over it, account for a considerable increase in available forage."

However, if the coyotes and other predators continue to increase and consequently the increased number of sheep lost, as has been the case in recent years, because of the lack of an adequate control program, then the fenced sheep operation cannot survive.

Wildlife Populations Also Affected

Without adequate funds and personnel to carry out an adequate predator control program, the wildlife population in Wyoming is decreasing.

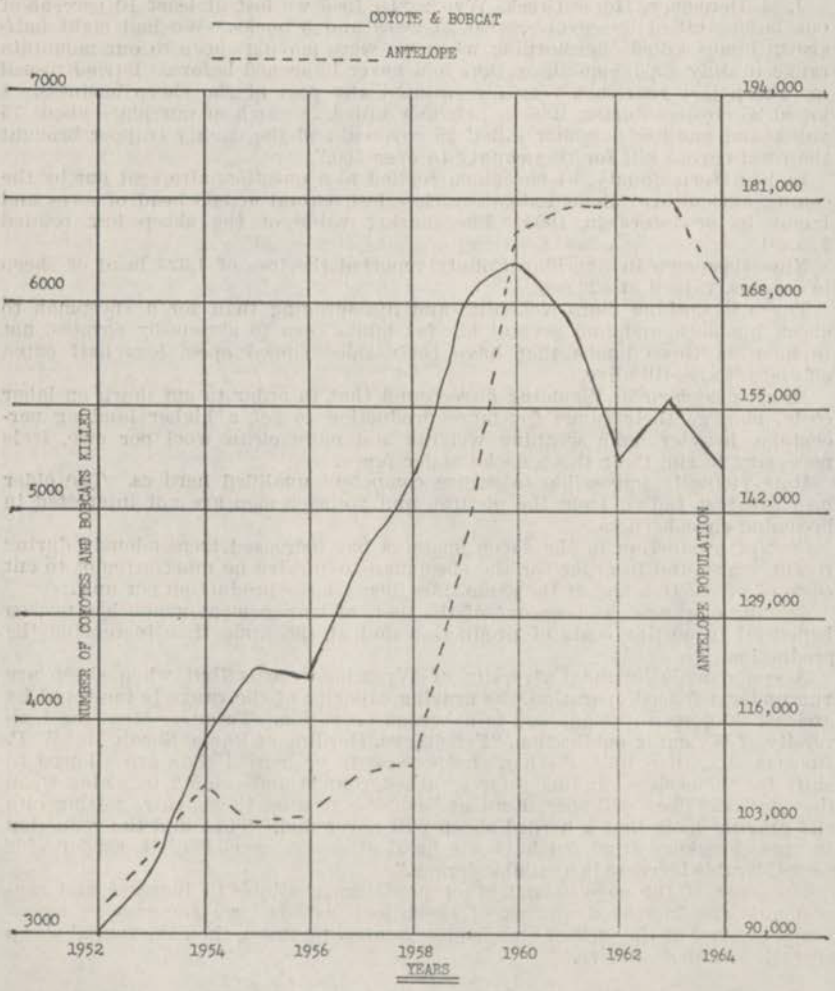
Coyotes, eagles, bobcats, and bear certainly are not choosy of their diet, in fact, a choice deer or antelope, along with the sheep they kill and eat, makes for a little variety.

Along with the young deer and antelope coyotes kill in the spring, they also kill many game birds. This is very evident by remains found near dens and on pup feedgrounds.

In 1964, Wyoming sheepmen taxed themselves $171,298 in an attempt to protect their sheep from coyotes and bobcats, which also helped to protect antelope and deer. In fact, over one-half of the total funds available for predator control work in Wyoming is supplied by sheepmen.

However, the total funds available are simply not enough to adequately protect the domestic livestock and wildlife from the menacing and destructive predators.

The following graph points out very vividly that when the confirmed coyote and bobcat kills increased in Wyoming the antelope population also increased, and likewise decreased when less bobcats any coyotes were taken.



SOURCE: WYO. GAME & FISH - U.S. FISH & WILDLIFE

Ranchers, the individuals who see not only their domestic livestock daily, but also the wildlife on their ranches, have attested to the fact that coyotes and bobcats are severely depredating Wyoming's deer and antelope population.

Typical statements from ranchers point out the need for more protection of Wyoming's wildlife from the cagey and cunning coyote.

Ernest Todd, Upton, Wyo.: "It seems that it would be wise for the Wyoming Game and Fish to check on the number of adult deer and antelope our present-day coyotes are killing. We find numerous kills on the range. Rabbits and mice are almost nonexistent and the coyotes are not going to starve."

Dean Tolman, Worland, Wyo.: "Coyotes keep the deer and the elk population down by killing the newborn calves and fawns. They wouldn't give the young antelope a chance. The same is true of pheasants. Stockmen, especially sheepmen, put up funds for predator control in order to stay in business. Sheepmen still assess themselves and pay most of the wages and expense of the Government trapper in our county for predator control. I can't see how conservation-minded people can think of limiting and decreasing the predator control program. They will sacrifice birds, antelope, deer, as well as domestic livestock for the coyotes and bobcats."

Richard Redland, Manderson, Wyo.: "Increased number of coyotes are affecting our deer and antelope population. In one area where I lost 48 ewes there was lots of coyote signs and while hunting these sheep, I saw 15 deer and only one fawn. There are about 40 head of antelope that run on my range at one time. Last spring I counted 17 young ones; however, this fall only 3 were left. Coyotes had gotten to them."

Accept Responsibility

It is indeed most unfortunate that the very existence of the sheep industry in Wyoming is in jeopardy—in jeopardy because of a lack of concern and willingness upon the part of the Secretary of Interior charged with the administration of an adequate predator animal control program.

During the 62d annual convention of the Wyoming Wool Growers Association which was held in Gillette, Wyo., November 5–6, 1965, the following resolution was adopted:

"We deplore the overall cut in the budget for predatory animal control. We request the Department of Interior to assume its full responsibility for predatory control and request Congress, in conjunction with the wool-growing industry, to seek sufficient appropriations for an effective program."

In summary, three items must be accomplished now if the sheep industry is to survive.

1. Congress must appropriate adequate funds for the work of the predator control program for the Bureau of Sports Fisheries and Wildlife.

2. The Bureau of Sports Fisheries and Wildlife must immediately initiate a concentrated campaign and effort to control predators. The efforts must be made at the trapper level, out in the field where the damage is being done. Each and every predator is a destroyer of domestic and wildlife animals. They all must be controlled.

3. A dire effort must be put forth to control coyotes in their breeding areas, especially national forests and on Indian lands. Actually, the effort to control coyotes is futile, unless it is also done at their breeding areas, or the source of supply, so to speak.

Gentlemen, the future of the sheep industry rests with you. We urge that you appropriate funds for a predator animal control program and direct that these funds be used at the trapper level in order for the sheep industry to survive.

Thank you very much for your kind attention.

CONSTRUCTION

Statement of Texas Sheep & Goat Raisers' Association

I am G. C. Magruder, Jr., president of the Texas Sheep & Goat Raisers' Association. The association speaks for the sheep and Angora goat producers in Texas, who produce 5 million sheep and 4 million goats.

We as producers work very close to nature. I can think of no greater personal satisfaction than seeing a newborn baby lamb or kid goat grow into a fine

healthy mature animal, which in turn produces food and fiber necessary to the economy of the people of these United States. However, it hurts me sorely to see any defenseless baby animal mutilated and left to slowly die in pain.

To be in the livestock business an individual must have a great and abiding love for all animals and birds; however, by the laws of nature some animals prey on others, which are defenseless. It is not our wish to see any animal species eliminated; however, to insure the survival of the sheep, goat, wool, and mohair industry in Texas we must have effective control measures on predatory animals which will keep their numbers down to levels we can live with, but which will also insure the survival of the species.

Our industry accounts for $100 million in the economy of Texas each year. A qualified member of the Fish and Wildlife Service, Bureau of Sport Fisheries and Wildlife, stated an average of 2 percent of all sheep and goats in the West and Southwest were killed each year by predatory animals and birds. This represents $2 million of the sheep and goat producers' income in Texas. On behalf of the 23,000 sheep and goat producers in Texas I sincerely request this committee to restore the $350,000 appropriation for predatory control in the United States at the field or control level. Further, for this program to be effective we strongly recommend that an additional $500,000 be provided for this work at the field level.

On one ranch, the Caldwell ranch near San Angelo, Tex., 2 coyotes killed 50 grown sheep within a few days' period of time. Without control of the bobcat, which is as prolific as the Texas jackrabbit, a rancher has been known to lose up to 50 percent of his lamb and kid crop. In central Texas the red fox and the timber wolf have put many sheep and goat producers completely out of business. In the Davis Mountains, in far west Texas, sheep and goat numbers have dropped to a fraction of what they were 15 years ago, primarily because of a great influx of predatory animals and birds.

According to statistics from the McGregor Experiment Station, predatory animals have increased in Texas between 10 and 11 percent in the past year. As a matter of fact, predatory animals have become so bad that this State experiment station had to abandon many of its pasture experiments with sheep and goats. Predators were killing so many that the experiments were inconclusive. By nature these predatory animals are migratory and have been known to go from county to county. Increased numbers have brought on increased boldness among the predators. They have recently been seen in major urban areas in central and west Texas.

The migratory Mexican eagle can and has been known to kill or mutilate as much as 50 percent of a rancher's lamb and kid crop. This bird has inflicted severe damage on deer, antelope, wild turkey, and other defenseless wildlife throughout the livestock producing areas of the State of Texas. Their period of destructive activity coincides with the time when the domestic and wild animals are producing their offspring and thus are at their most vulnerable stage.

Now is no time for cuts in predatory animal control. Protection from predatory animals is even more important today than it was 50 years ago. With ever-rising production costs and less profit margin, any animal loss due to predators means a greater loss than ever before. The 23,000 producers of sheep and goats in Texas urgently request the restoration of the $350,000 appropriation for predatory animal control and an additional allocation of $500,000. Thank you, gentlemen, for your attention.

LOSSES OF VALUABLE LIVESTOCK AND GAME TO PREDATORY ANIMALS IN THE IMMEDIATE AREA OF SAN ANGELO, TEX.

Some specific losses—Rancher Robert Herring of northern Tom Green County lost 125 yearling sheep to 1 small female coyote within about a 2-month period. A Government hunter stopped this killing shortly after starting to work after this coyote. At a later date red foxes killed and/or mangled an estimated 20 sheep on the Robert Herring Ranch. The hunter was also successful in stopping these losses quite promptly.

Two coyotes killed fifty grown sheep on the Johnny Caldwell Ranch within a relatively short while. The hunter who successfully stopped the above-described depredations has been assigned to Tom Green County steadily since stopping the depredations on the Herring and Caldwell ranches. Predators are now kept under adequate control with the result that very few livestock, fawns, or wild turkey are lost to predators. Also, by keeping populations of gray foxes, rac-

coons, and skunks from reaching excessive numbers, lamb and kid crops are benefited and this affords insurance against rabies outbreaks.

These examples are fairly typical of what happens when predators are not adequately controlled in sheep, goat, and game country. Bobcats, unless controlled, also do too much damage to be tolerated by livestock raisers. Before the hunter commenced satisfactorily controlling bobcats here, the DeWolf and West Ranch lost lambs quite heavily to bobcats.

We have found that without predator control ranchers often raise only about 50 percent or less lamb and kid crops, but where predators are kept under control, it isn't at all unusual to raise 100 percent lamb and kid crops. Even fairly light populations of predators along with a few raccoons and gray foxes generally inflict at least 20 percent annual losses on kids and lambs. Control of predators is actually vital in protection of these most predator-susceptible livestock.

Golden eagles can and do inflict costly depredations on kids, lambs, fawns, and wild turkey, unless these predatory birds are kept under control in areas most subject to their depredations. Two golden eagles killed approximately 25 lambs in the twin buttes area, just southwest of San Angelo a few years ago (1963). The eagles killed an average of two to three lambs a day, until they were stopped.

Noted King Ranch wildlife manager, Dr. Valgene Lehmann, states as follows, concerning the effect of depredations by predators on game (deer, turkey, and quail): "Predation is the single most important containing factor on game populations, commensurate with the limitations of habitat and rainfall."

Actual confirmed depredations during 1965

Prey	Predator						
	Coyote	Bobcat	Dog	Fox	Raccoon	Skunk	Eagle
Sheep	1,029	129	199	97	11		1
Goats	869	151	590	108	5	2	11
Calves	145		19				
Turkeys	258	8	105	4			
Chickens	707	210	50	84	44	50	
Pigs	205	13					
Deer	7	10					
Geese	53	45	57	15	1		
Total	3,273	566	1,020	308	61	52	12

Note on confirmed depredations.—These were depredations that were actually observed and reported by predator control people in the field. These confirmed cases are actually only a very small percentage of the total depredations which were inflicted by predators during this time.

HINTON E. BRIDGWATER,
Head of Predatory Animal Control in San Angelo area.

LETTER FROM WASHINGTON WOOL GROWERS ASSOCIATION

MARCH 9, 1966.

SENATE APPROPRIATIONS COMMITTEE,
Washington, D.C.

GENTLEMEN: Being as we cannot have a representative of this State association at your hearing on Appropriations for Predator Control, we wish you would make this statement a part of the record.

We must have predatory animal control at all times in order to survive as an industry. The only manner in which we are able to maintain any kind of control is through the Fish and Wildlife Service trappers.

A loss from predators is not limited to sheep alone or to large operators. We have members with less than 200 ewes who lost more than one-fourth of their total lamb crop to predators. Needless to say this loss was devastating to them. We had one member who lost more than 200 lambs during the period from March 15 to May 15 creating havoc with his financial position.

The loss of domestic livestock isn't only financial. We wouldn't be in the business if we didn't take great pride in our livestock, and if we didn't have years of breed improvement behind each animal.

We know of over 2,000 head of sheep, cattle, geese killed by predators this past year. This is domestic stock. We don't know how many deer, elk calves, and other wildlife were killed during the year. This loss was suffered with competent trappers in the field. Without the trappers, the loss would be unbearable.

We urge you to restore the appropriations for adequate protection from predators.

Thank you.

Sincerely,

WASHINGTON WOOL GROWERS ASSOCIATION,
PHIL KERN, *Secretary.*

STATEMENT OF CALIFORNIA WOOL GROWERS ASSOCIATION

My name is Gerry O. Stewart, address, Fort Seward, Humboldt County, Calif. I am the president of the California Wool Growers Association, headquarters, San Francisco, Calif.

As a longtime lamb and wool producer in California, I think that I am well qualified to furnish factual data regarding the threat to the sheep industry of the coyote population buildup—as is presently happening in all parts of California.

Frankly, we sheepmen are worried about our $45 million industry in California. In talking with sheepmen from other States I know that similar statements of uneasiness will be forthcoming. This buildup in coyote numbers is happening in spite of the generally fine control program being carried on by the Division of Wildlife Services in cooperation with State departments of agriculture and county agencies. This program, fine as it is, is too limited to do the job required.

In fact, I am fearful that right now there is a pair of coyotes playing havoc on my lambing range. They have been killing lambs for the past 6 weeks. This, in spite of the fact that our Division of Wildlife trapper, whom I consider one of the best, has been trapping for them constantly. Given time, he will catch them, but not in time to prevent serious losses. From my standpoint these killer coyotes should have been eliminated on their breeding grounds when younger. This is merely an illustration of the situation confronting most of my neighbors and sheep and cattle ranchers—and some poultry producers in general. Even San Diego County, which you would least suspect of having coyotes, has as many or more coyotes than any other county in the State, as revealed by official reports of numbers killed.

Six of the last seven coyotes taken on my ranch last winter were females. Since coyote litters are similar to those of dogs, you can readily see the implications for growth in numbers had these females not been destroyed in time. I have personally been lucky enough to shoot two killer coyotes on my ranch in the last 2 months. One had been killing large lambs, just prior to shipping—and the other was following about 50 feet behind a small flock of grown sheep.

In general, the trappers in my local area are taking two to three times the numbers of coyotes that they did a few years ago. California seems to be having not only a "people population explosion," but a "coyote explosion," as well.

Some examples of these coyote explosions are the 164 coyotes recently shot—from an airplane, at his own expense—by one of our sheep producers, Joe Mendiburu, of Bakersfield. These were killed adjacent to his irrigated pastures in western Fresno County, after eight times in the air. Another producer, Lee Crane, in Shasta County, northern California, killed 50 coyotes around his ranch last winter. Still another California producer, John Espil, president of the Modoc-Lassen Wool Growers Association, narrowly escaped death a few days ago in a light plane crash in western Nevada, while trying to protect his sheep before lambing time. The pilot of the plane was killed in the crash.

Unfortunately, these are not isolated incidents. Producers are forced to increase their efforts to control coyotes in many areas. There must be some logical reason why coyotes are on the general increase. One is that the poison, which was so effectively used by Government trappers in the past, is not generally allowed to be used in the back countries and on breeding grounds for coyotes. This means that control work has become largely confined to traps. We know from experience that trapping is a good and necessary method, but rather slow. It is the most costly method of control. It is proving somewhat inadequate in view of present coyote numbers and the current number of trappers in the field.

It is important to note that our greatest foreign competitor, Australia, is stepping up its program of poison bait to control the dingo dog, which is the cousin to the coyote as far as depredation to sheep is concerned.

If control of coyotes is to be limited only to trapping, and with the force of trappers already spread too thin, it is obvious that a further cut of $350,000 primarily at the trapper level is a definite step in the elimination of sheep from many of our western ranges, where there is little alternative use of land for tax purposes.

Many important counties in California, as well as other Western States, rely on sheep utilizing the range areas as a tax base. If sheep can no longer compete in these areas, as a result of increasing losses, a sizable tax revenue, which is so badly needed today, will be lost.

If more such lands go into public ownership or other uses, the tax revenue therefrom is likely to be tremendously reduced and a heavier tax burden will be placed on the remaining land resources. Present national parks and other protected public lands are already breeding grounds for many predators which prey upon livestock grazing on nearby privately owned lands. This situation becomes intolerable when the source of the infection cannot be wiped out. It is only human nature that any rancher will try to protect his own livestock from losses by predators. In the past he has always found it helpful to turn to a Government trapper to assist him in his problem of predator control.

This trapper program, which is financed with county and State funds, with additional aid and supervision from Federal authorities, has worked very well. It would be unfortunate indeed if this joint program should fail to reach its purpose because of short sightedness on the part of the Federal Government..

If the program is inadequately supported so that the coyote population is not contained or reduced, the only other alternative open to the rancher is to develop his own effective control program—which may include poison bait, which proved so effective before. Ranchers will likely put poison bait at strategic points around their own property on a yearround basis to halt the depredations of the coyote. And he cannot be blamed for protecting his own property.

The western rancher wonders why the conservationist is so concerned about preserving the mangy coyote. What kind of an animal is he, anyway? Mark Twain describes him best in his book, "Roughing It," pages 48 to 53, edition 1872:

" * * * The coyote is a long, slim, slick, and sorry looking skeleton with a grey wolfskin stretched over it. A bushy tail that forever sags down with a dispairing expression of forsakedness and misery. He has a furtive and evil eye, and a long, sharp face, with slightly lifted lip and exposed teeth. He has a general slinking expression all over. The coyote is a living, breathing allegory of want. He is always hungry. Always out of luck and friendless. The meanest creatures despise him, and even the fleas would desert him for a velocipede.

"* * * It is considered that the coyote and the obscene bird of the desert (vulture) testify their blood kinship with each other in that they live together in the waste places of the earth in terms of perfect confidence and friendship, while hating all other creatures and yearning to assist at their funerals."

What is the real esthetic value of a coyote as described above? Do conservationists hold such an animal in any high esteem? If the conservationists want to multiply this kind of an animal they should import the dingo dog from Australia and jackals from Africa—because they are both "cousins" of the coyote and earn their living the same way.

On behalf of all the sheepmen in California, which is the third largest sheep producing State, I respectfully urge this committee to restore the funds to the budget to assure an effective predator control program, so vital to the sheep industry of the West.

STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION

We appreciate the opportunity to place in the record Farm Bureau's views regarding appropriations for research and control of blackbirds, starlings, and similar pests.

Farm Bureau policies include the following statement regarding wildlife pests:

"Blackbirds, starlings, and similar pests are causing serious damage to crops and property in many areas. They are a hazard to aviation and a carrier of diseases to humans as well as livestock.

"This problem is increasing over a wide geographic area. Intensive research

efforts at State and Federal levels and prompt use of all practical recommendations and methods to eradicate these pests are fully justified.

"We recommend an action program under authorized personnel to control wildlife pests. Adequate funds should be made available to the Department of the Interior for this purpose."

The policy statement adopted by the voting delegates in December 1965 reflects policy recommendations submitted by 14 different State Farm Bureaus, spread geographically from Oregon to Delaware. State Farm Bureaus submitting policy recommendations concerning this matter include the following: Alabama, Arizona, Arkansas, Delaware, Indiana, Kentucky, Maryland, Michigan, Missouri, New York, Ohio, Oregon, Texas, and Virginia. Additional State Farm Bureaus have reported substantial interest in response to an inquiry conducted by the AFBF.

ECONOMIC DAMAGE

Damages resulting from bird pests might fall into several categories. These include, but are not limited to losses to crops and feed lots, potential spreading of disease, despoiling of urban property, and safety hazards to aircraft. The Farm Bureau policy statement reflects concern in each of these areas and we deem them all important. Our most direct concern, quite naturally, is in the area of loss to crops and agricultural products.

The Bureau of Sport Fisheries and Wildlife has rated blackbirds and starlings as by far the most important problem species with respect to crop and feed lot damages.

Specific dollar and cent losses appear to be difficult to document on a broad national basis. However, figures are available on a more limited scale which gives an indication of the extent of damages incurred.

A story appearing in the September 28, 1964, issue of the National Observer reported losses to a 15,000 head feed lot running about $40,000 a year. This loss resulted from an estimated 3 million bird flock of starlings which destroyed 12 tons of cull potatoes daily. This same article reported the spread of enteritis among hogs by bird carriers as well as the loss of entire rice crops to farmers in the South.

In 1964, during a meeting attended by Representative E. C. Gathings, of Arkansas, and the Bureau of Sport Fisheries and Wildlife representatives, reports were presented indicating over $6 million in losses by bird depravation in Arkansas alone.

Dobney Taylor, writing in the November 1963, Western Livestock Journal, reported losses to Idaho cattle growers of over $1.85 million. This article further stated that a starling can eat his average weight (2½ ounces) in a day.

We have been unable at this time to obtain agency figures on overall losses due to the lack of availability of this information.

The most comprehensive data compiled by the AFBF was developed in 1962. Questionnaires were sent to each of our 48 contiguous State Farm Bureaus and Hawaii with the following results.

Forty-four of the State Farm Bureaus reported. Five did not.

Of the 44 reporting—35 reported damage in varying degrees—from light to very heavy while 9 reported no damage or no problem.

Of the 35 States reporting damage—33 reported damage to crops—15 reported damage to livestock.

Thirteen of the reports gave estimates, based on studies, of annual losses from the ravages of these birds. They are listed below. The other 22 States reporting damage gave no estimate of annual loss.

The States reporting estimated loss are as follows:

Arizona	$2,885,000
Arkansas	5,677,409
California	703,410
Delaware	150,000
Florida	2,000,000
Idaho	1,850,000
Illinois	500,000
Louisiana	1,835,000
Maryland	400,000
New Jersey	5,000,000
Ohio (includes $750,000 in cities)	4,150,000
South Carolina	55,000
Texas	2,971,157
Total by States	28,176,976

The estimated losses reproted by commodities are as follows:

Rice	$8,312,778
Grain sorghums	2,962,539
Livestock	2,967,826
Other (includes fruits, vegetables, holly, etc.)	9,452,560
Corn	3,731,273
Damage reported in cities	750,000
Total by commodities	28,176,976

On the basis of these figures, projected to 1966, it has been estimated that total annual loss due to bird depredations is somewhere between $30 to $50 million.

Bird Numbers

An estimated half billion blackbirds and starlings are found in continental United States. This estimate is based on a nationwide cooperative winter roost survey conducted by the Patuxent and Denver Wildlife Research Centers of the U.S. Fish and Wildlife Service during the last 5 years. Species whose numbers comprise four-fifths of the grand total are the red-winged blackbird (*Agelaius phoeniceus*), starling (*Sturnus vulgaris*), common grackle (*Quiscalus quiscula*), and brown-headed cowbird (*Molothrus ater*). Other species, together contributing and remaining fifth of the total, include the rusty blackbird (*Euphagus carolinus*), Brewer's blackbird (*Euphagus cyanocephalus*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), boat-tailed grackle (*Cassidix mexicanus*), tricolored blackbird (*Agelaius tricolor*), and bronzed cowbird (*Tangavius aenus*).

Three-fourths of the total U.S. blackbird population is found in the relatively humid East; the comparatively arid West lacks the food, cover, and water to support a larger proportion of the population. The winter concentration of blackbirds and starlings in the lower Mississippi Valley is the largest found in any section of the United State at any season. An estimated 200 million blackbirds and starlings winter in that region, based on the estimated number of birds occupying roosts located in Arkansas, Louisiana, Mississippi, and Tennessee. The magnitude of that winter population is due to the incursion in late fall of hordes of northern birds and their progeny from the North-Central States and Prairie Provinces, together with the resident population. Rice production, concentrated near the southern terminus of the Mississippi Flyway, is an attraction to these birds.

The Atlantic Coastal Plain from the Chesapeake Bay southward, the Southern Piedmont, the Texas coastal rice belt, and the Great Valley of California are other important winter concentration areas. Many multimillion-bird roosts have been located in each of these regions. North Carolina, with 15 major winter roosts and an estimated 50 million birds, has the largest wintering blackbird-starling population along the Atlantic coast. The largest roost known is located in the Dismal Swamp on the Virginia-North Carolina line about 20 miles south of Norfolk. This roost, containing some 25 million blackbirds and starlings, adjoins the leading peanut producing area of the nation.

Control Efforts

The control of bird depredations is a complex if not a new problem. Intense scientific study has been carried on for a relatively few years. State agricultural experiment stations, State conservation departments, the Bureau of Sport Fisheries and Wildlife, USDA Public Health Service, FAA and universities as well as private groups have joined into the research and control effort. Congressional appropriations of approximately $650,000 were allocated to bird control research in fiscal years 1965 and 1966 for the Bureau of Sport Fisheries and Wildlife, U.S. Department of Interior. A similar amount is recommended in the 1967 budget submitted by the President.

The burden of research responsibility has fallen to the Bureau of Sport Fisheries and Wildlife, and it is here that other interested agencies seek technical information.

Several methods of control have been used in basic research and field testings. Traps, sound devices, decoys, sparklers, shotgun experiments have not yielded a completely satisfactory control method to date, although some reduc-

tion in losses have been achieved. In 1964 an avicide DRC 1339 was developed in Denver which, according to the U.S. Department of Interior Circular 220, constituted "one of the major developments in bird damage control during recent years."

RECOMMENDED ACTION

In light of increasing losses resulting from bird pests, it is imperative that effective control programs be developed. The lack of positive control measure indicates that immediate emphasis needs to be applied in the area of basic research and practical field testing. We suggest increased cooperative efforts be encouraged among appropriate State, Federal, and local agencies in research and control efforts. We further recommend that the budget allocations for research and control in the Department of Interior, Bureau of Sport Fisheries and Wildlife be increased to $1 million.

Farmers and ranchers share a deep interest in wildlife management of those species of wildlife that are of value to agriculture, sportsmen and the public at large. We are in the business of producing food for people; and feeding blackbirds, starlings, and their like is truly "for the birds."

TELEGRAM FROM AUDUBON SOCIETY

SALT LAKE CITY, UTAH,
March 18, 1966.

CHAIRMAN, SENATE APPROPRIATIONS SUBCOMMITTEE,
Washington, D.C.:

Local paper reports request for $850,000 increase in Federal predator control budget. Utah Audubon Society vigorously opposes increase in such funds indiscriminate poisoning and trapping predators have upset ecological balance of nature; rodents are main diet of coyotes. Mountain lions are on verge of extinction. Strictly limited local predator control with safeguard possible with less money.

NORMAN WEISSMAN, Ph.D.,
President, UWH Audubon Society.

ROAD TO TEWAUKON NATIONAL WILDLIFE REFUGE

LETTER FROM SENATOR YOUNG (NORTH DAKOTA)

March 18, 1966.

Hon. CARL HAYDEN,
Chairman, Subcommittee on Interior Appropriations,
U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: Since the appearance of officials of the Bureau of Sport Fisheries and Wildlife before the Senate Subcommittee on Interior and Related Agencies Appropriations, I have received a request for funds for improving and blacktopping approximately 2.6 miles of road through the Tewaukon National Wildlife Refuge in Sargent County, N. Dak. The Sargent County Board of County Commissioners is planning on blacktopping county road D from the community of Cayuga south to the refuge boundary. This road extends through the refuge. They would like to also blacktop that portion of the road in the refuge and estimate that the cost would be $45,000.

It is my understanding that this road goes right by the Tewaukon National Wildlife Refuge headquarters as well as connecting with a public recreation area on the west side of Lake Tewaukon. The blacktopping of this road, in my opinion, would make the refuge headquarters more accessible to personnel of the refuge, as well as making the recreation area more accessible to the general public.

I sincerely hope that it will be possible to take care of this problem in the Interior Appropriations bill. I will be offering an amendment to increase the

appropriation of the Bureau of Sport Fisheries and Wildlife by the amount it is estimated by the county commissioners that it will cost to blacktop this portion of the road. My intent is that the Bureau of Sport Fisheries and Wildlife be permitted to enter into a contract with the Sargent County Board of County Commissioners and that the work be done by the county road construction division. I understand they have entered into contracts with the county in the past.

With warmest personal regards,

Sincerely,

MILTON R. YOUNG.

DEPARTMENTAL STATEMENT

The Tewaukon National Wildlife Refuge is located in Sargent County, 3¼ miles south of Cayuga, N. Dak. The refuge contains 7,757 acres acquired under the Migratory Bird Conservation Act with funds appropriated under the provision of the Migratory Bird Hunting Staff Act.

Public access to the refuge is over a county road from Cayuga that extends for an additional 2.6 miles through the refuge, servicing also the refuge headquarters. All of the road both within and outside the refuge is in poor condition and is in need of rehabilitation.

The rebuilding and surfacing will require a 30-foot graded roadbed, a 2-inch base of aggregate 28 feet wide, a 4-inch surface of road mix bituminous 26 feet wide, and seal coat material 26 feet in width estimated at $63,000 for the 3¼ miles from the town to the refuge and an additional $50,000[1] within the refuge. These costs are based on Sargent County estimates. Their cooperation is assured in the improvement of the road. Sargent County officials have had difficulty in maintaining this public road, largely due to the existence of the refuge. The National Park Service estimates that a visitor load of about 40,000 people can be expected to use the recreational facilities to be provided on the refuge and to visit the refuge headquarters. The road is one of the most heavily traveled in Sargent County with a daily average of 150 cars.

MARCH 7, 1966.

LETTER FROM SENATORS MCCARTHY AND MONDALE RE NEW LONDON, MINN., NATIONAL FISH HATCHERY

HON. CARL HAYDEN,
Chairman, Senate Committee on Appropriations,
Washington, D.C.

DEAR SENATOR HAYDEN: The Department of Interior has developed plans to enlarge and improve the New London, Minn., National Fish Hatchery.

The New London program is coordinated with the State of Minnesota to assure that production from the hatchery is effectively utilized.

The need for the expansion continues to grow, and we would appreciate your consideration and that of the committee for appropriating funds to provide the additional facilities. We are enclosing a copy of the report we requested from Mr. Abram V. Tunison, Acting Director of the Bureau of Sport Fisheries and Wildlife. In his report Mr. Tunison outlines the Department's expansion place for the New London facility.

Sincerly yours,

EUGENE J. MCCARTHY.
WALTER F. MONDALE.

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[1] This is a current estimate based upon Sargent County specifications. The Bureau's previous estimate of $30,000 for the part of the road within the refuge was based upon Bureau engineering estimates 4 years ago.

DEPARTMENTAL LETTER

MARCH 4, 1966.

Hon. EUGENE J. MCCARTHY,
U.S. Senate,
Washington, D.C.

DEAR SENATOR MCCARTHY: By a telephone call on March 2 we are providing the following report on the New London National Fish Hatchery, Minnesota. The material requested includes a statement of justification specifying the need for the program along with an itemization of development requirements and cost estimates.

The New London hatchery, established in 1939, produces northern pike, walleye, largemouth bass, and bluegill for distribution to waters throughout Minnesota. A large portion of the northern pike and walleye production is used to restock freezeout lakes.

Our programs are coordinated with the State to assure that production from the hatchery is stocked to provide optimum utilization and maximum benefit to sport fishermen. Biologists have stated the production capabilities of existing State and National fish hatcheries are not adequate to meet the current requirements of management programs.

The development program outlined below is designed to improve the production capabilities of the New London hatchery.

Funds needed for the program

Subdivide ponds	$54,000
Holding house	44,000
Wells and pumps	8,000
Mainline pumps	7,500
Pumphouse	2,000
Equipment	5,600
Total estimated cost	121,100

We are pleased to supply this information and appreciate your support of our programs to help manage the important sport fishery resources of the Nation.

Sincerely yours,

ABRAM V. TUNISON, *Acting Director.*

LETTER FROM SENATOR SPARKMAN RE EUFAULA NATIONAL WILDLIFE REFUGE, ALABAMA

MARCH 3, 1966.

Hon. CARL HAYDEN,
Chairman, Appropriations Committee,
U.S. Senate, Washington, D.C.

DEAR CARL: Many friends in the area surrounding the Eufaula Wildlife Refuge, Eufaula, Ala., have been in touch with me concerning the need for an appropriation of $1 million to accelerate the full development of the project. This is a new refuge and it is being developed rather slowly. I will appreciate any consideration which can be given to an appropriation for this project for the coming fiscal year.

With best wishes, I am

Sincerely,

JOHN SPARKMAN.

DEPARTMENTAL STATEMENT

The Eufaula refuge encompasses 11,160 acres within and adjacent to the Walter F. George Reservoir in Alabama and Georgia. With development, this refuge will provide migration and wintering habitat for large flocks of Canada geese and ducks, nesting and rearing areas for wood ducks, and habitat for other migratory birds and resident species of birds and animals. The refuge

will provide recreational opportunities for those who enjoy hunting, fishing, picnicking, hiking, nature study, sightseeing, or other forms of outdoor activities.

The development of the refuge will cost approximately $1 million and is scheduled in four phases. Each phase will result in a complete management unit. The development and phases as shown in the following table:

Item	Phase 1	Phase 2	Phase 3	Phase 4	Total
Water facilities	$150,000	$150,000	$100,000		$400,000
Fencing and posting	15,000				15,000
Roads and trails	60,000	25,000	15,000		100,000
Recreational facilities	25,000	30,000	35,000	$85,000	175,000
Buildings, structures, and utilities	50,000	20,000	25,000	95,000	190,000
Biological development		25,000	75,000	20,000	120,000
Total	$300,000	250,000	250,000	200,000	1,000,000

STATEMENT OF REPRESENTATIVE RONCALIO RE FISH GENETICS LABORATORY, BEULAH, WYO.

I respectfully call the attention of this subcommittee to the critical need for appropriations for the Fish Genetics Laboratory at Beulah, Wyo. The regular appropriations for fiscal year 1966 neglect to include a needed increase in operating funds or funds for construction. In effect, this action tends to freeze the promising plans for development of this laboratory.

The Beulah Fish Genetics Laboratory is an integral part of the research activity of the Bureau of Sport Fisheries and Wildlife. Its objective is the development of strains of fishes better adapted to production and management needs—fish that can provide more and better sport fishing. Its findings are of national importance.

Less than a year ago, Congress provided a supplemental appropriation of $220,000 for restoration following severe flooding in May. The fact that Congress approved this appropriation verifies that Congress recognizes the vital functions this laboratory performs.

The wisdom of providing this supplemental appropriation is demonstrated by the speedy recovery being accomplished. Flood debris has been cleared, roads repaired, fences mended, and some earthen ponds restored to usable condition. Materials are on hand for permanent replacement of the temporary bridges installed to provide access.

Now, the news that the Beulah Laboratory has been denied an increase in operating funds and has received no appropriation for construction can be viewed in no other light than a disappointing and potentially costly setback.

It is costly not only in the delay it will cause in the promising benefits, but can only mean a larger expenditure at some future date.

As I understand it, the cost of construction is rising 4 percent a year. In terms of fulfilling its functions and in getting the most value for facilities constructed, it is advisable to make some start now.

If this subcommittee should agree to only $270,000, a relatively small amount in terms of the total project, at least progress will be sustained. It has been suggested that $75,000 could be used to rehabilitate the lodge and $185,000 for construction of the research laboratories, with $10,000 for other expenses.

If money is expended with utmost discretion, the Beulah Laboratory will at least be useful on an interim basis for some of its research, in the expectation that the state of the economy in the future will justify a substantial increase in the budget for fiscal year 1968.

I am certain the representatives of the Bureau of Sport Fisheries and Wildlife explained the courses of action open to them in their testimony earlier this month.

The important consideration is to provide them with some funds to continue their advance and maintain momentum. Without Congress providing the means, the beneficial end is so much farther away. I strongly urge this subcommittee to consider approving a minimum appropriation of $270,000 for the Beulah Fish Genetics Laboratory.

MARINE GAME FISH RESEARCH LABORATORY, PORT ARANSAS, TEX.

LETTER FROM REPRESENTATIVE WHITE (TEXAS)

MARCH 2, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations, U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: Enclosed is a copy of a letter I have received from Gov. John Connally, expressing his interest in inclusion of funds in the appropriations for the Department of the Interior for the proposed Marine Game Fish Research Laboratory for Port Aransas, Tex.

I would very much appreciate your seeing that the views of Governor Connally are given every proper consideration by the members of your committee at the appropriate time.

Thank you for your attention to this matter.

Sincerely yours,

RICHARD C. WHITE,
Member of Congress.

LETTER FROM GOVERNOR CONNALLY OF TEXAS

FEBRUARY 24, 1966.

Hon. RICHARD C. WHITE,
House of Representative,
Washington, D.C.

DEAR DICK: I would like to remind you once again of the importance to the entire State of the proposed Marine Game Fish Research Laboratory to be built at Port Aransas by the Department of the Interior. This facility will cost about $1.5 million. It is not in the budget of the Bureau of Sport Fisheries and Wildlife, and unless it can be added to the budget, will not be started this year.

It is my understanding that hearings on the agency's budget have already begun in the House and are scheduled March 3 in the Senate. I urge your support in getting this project added to the budget. Texas has been richly endowed in marine life, with some 424 species of salt water fish and an annual output of one-third of the Nation's fishery products.

For many species of our most valuable fish, the bays and estuaries of our coast are important for spawning, nursery, and feeding grounds. These areas are being rapidly lost or depleted. An example of what is happening is the Texas basin project, which proposed to intercept all the major coastal rivers in Texas. This plan will profoundly alter the estuarine habitat along the entire Texas coast, yet we know so little about the ecology of these areas that there is no sound basis to predict damages to the fishery resources or to propose how to save them.

The Port Aransas installation is one of two proposed by the Department. The other is to be in Panama City, Fla. As I understand it, Representative John Young of Corpus Christi and Representative Bob Sikes of Pensacola are working together in attempting to get funds for these projects. The Congress saw fit to appropriate $100,000 this fiscal year for each of these important projects. It is needless to state that an economical and orderly development of this program would require an immediate follow-up of the "first money" which has been appropriated.

DEPARTMENTAL STATEMENT

Preliminary design and cost estimates for the laboratory and supporting structures and land preparation have been completed. The estimated cost of $1½ million will cover a 28,000-square-foot main laboratory building, pier, garage and boathouse, shop and maintenance building, and circulating sea water system. Some advanced architectural planning will be contracted for and completed in 7 to 10 months.

Phase I of the construction schedule comprises the following items:

Complete design and specifications, engineering inspection costs	$75,000
Dredging and filling	33,000
Seawall and pier	90,000
Auxiliary and supporting structures	100,000
Seawater system	97,000
Total	395,000

Phase II of the schedule calls for construction of the laboratory building, which with engineering, inspection and related costs, amounts to $932,000.

Phase III, to complete, amounts to $173,000 for supporting facilities, paving and landscaping, and engineering charges.

The laboratory site is in the heart of marine game fishing in the western Gulf of Mexico. Some of the fishes which support the important recreational resources of the area and the service businesses which cater to marine anglers are threatened by loss or deterioration of their environments; others may be in danger of overfishing. Purpose of the laboratory's program will be to accumulate through research knowledge and understanding upon which conservation action can be based for enhanced fishing opportunity.

STATEMENT OF DUANE ORR, DISTRICT ENGINEER, PORT OF CORPUS CHRISTI, TEX.

Long-range plans to meet the responsibilities and opportunities contemplated by the act of September 22, 1959 (U.S.C. 760), for a national marine game and fish research program to stimulate recreational uses of the waters bounding the shores of the United States was passed by the 86th Congress, 1st session.

Under this act, two laboratories were authorized for the gulf coast along with other laboratories on the Atlantic and Pacific coasts. In furtherance of this program, the 89th Congress, 1st session, appropriated $100,000 planning funds for each of two sites that had previously been authorized on the gulf coast.

In the 1965 hearings before your committee, representatives of the Bureau of Sport Fisheries and Wildlife stated:

"A reconnaissance survey of the Texas coast narrowed the region of consideration to the Port Aransas-Corpus Christi area. There are several reasons for this. Marine laboratories of the Fish and Wildlife Service and Texas A. & M. College at Galveston serve the coastal area to the east. There is no suitable location for a laboratory to the southwest of Corpus Christi. The Port Aransas-Corpus Christi area offers many sites that would satisfy our criteria, provides the amenities of a metropolitan center, is adjacent to the Padre Island National Seashore, a 100-mile barrier beach where bay and ocean fishing will be the most important recreational activity, is a center of marine scientific activity due to the location at Port Aransas of the Institute of Marine Science of the University of Texas and the Rockport Laboratory of the Texas Parks and Wildlife Department, the University of Corpus Christi has an ichthyology curriculum, the area is a major center of sport fishing with a large fleet of party charter and private boats."

Subsequently, representatives of the Bureau of Sport Fisheries, Nueces County Navigation District No. 1 (port authority) and other community interests inspected all available sites in the Port Aransas-Corpus Christi area in accordance with the above statement outlining the criteria of the Bureau. After a detailed evaluation study, the Committee from the Bureau of Sport Fisheries recommended a 15.9-acre site on Mustang Island near Port Aransas, Tex., for the laboratory. The proposed site was on property owned by Nueces County Navigation District No. 1, a political subdivision of the State of Texas. By letter dated November 15, 1965, the navigation commission made this site available at no cost to the Federal Government. (See exhibit A.) Transfer of the property to the Federal Government is being processed now. Preliminary layouts for the proposed laboratory and cost estimates at the Port Aransas site have been prepared by the Bureau.

Rapid development along the gulf coast and the rivers that feed its bays, is a growing danger to the fishing industry and tourist trade. Too little is known about the effects of varied developments on spawning, nursery, feeding, and fishing areas in the bays and estuaries.

More knowledge is urgently needed to prevent irreparable damage to marine life and gaining that knowledge is the purpose of the proposed research laboratory. Therefore, considering the time lag between research and application of its findings necessitates an immediate followup with a reasonable appropriation that will permit completion of the detailed architectural and engineering plans and the beginning of construction of the initial phases of the project in an economical and orderly manner during the ensuing fiscal year.

The Bureau of Sport Fisheries has indicated a capability of $1,500,000 for the initial phases of this project during the ensuing fiscal year. Although funds were not included in the President's budget submitted to Congress, I respectfully urge that this committee give consideration to recommending an appropriation of not less than $400,000 to commence work on this project during the ensuing fiscal year.

EXHIBIT A

PORT OF CORPUS CHRISTI,
NUECES COUNTY NAVIGATION DISTRICT,
Corpus Christi, Tex., November 15, 1965.

DIRECTOR OF SPORT FISHERIES AND WILDLIFE,
Department of the Interior,
Interior Building,
Washington, D.C.

DEAR SIR: This is to acknowledge your telegram of November 9, requesting advices as respects the site at Port Aransas which is proposed for your Marine Game Fish Research Laboratory.

The board of navigation and canal commissioners of this district advises you that if condemnation proceedings are filed for the acquisition of the land which is hereinafter described, such proceedings and the payment of only a nominal amount for such land will not be opposed by this district. The property is:

> That tract at Port Aransas, Tex., bounded on the north by the navigation district bulkhead line on the Port Aransas-Corpus Christi Waterway; on the west by the lands of the U.S. Army Corps of Engineers; on the south by Port Street; and on the east by a line running at right angles from the navigation district's north bulkhead line to Port Street, which line is located a distance of 900 feet measured along the bulkhead line and east of and parallel to the east line of the property previously conveyed to the U.S. Army Corps of Engineers.

We will, of course, expect that the U.S. attorney handling the condemnation proceedings will confer with the district's counsel before any suit is filed.

Yours truly,

NUECES COUNTY NAVIGATION DISTRICT No. 1,
By R. E. SALLEE,
Chairman, Board of Navigation and Canal Commissioners.

STATEMENT BY REPRESENTATIVE PICKLE RE PONDFISH CULTURE DEVELOPMENT CENTER

I respectfuly request that your committee have included in the hearings in the Senate a request in the sum of $50,000 for a feasibility study for a pilot plant Pondfish Development Center at San Marcos, Tex.

Attached is a description of this fish hatchery with a statement of justification and the preliminary estimate of cost involved. I am most anxious that a sum of $50,000 be included in this year's appropriations for the feasibility study. The Interior Department will vouchsafe the desirability of conducting such a study, and officials of the Interior Department have visited with Dr. James McCrocklin, president of Southwest Texas State College, San Marcos, about this possibility.

The urgent need for the feasibility study is to ascertain if there is an adequate water supply for the project. It is my belief that in all other respects there is an availability of land and proper soil with the kind of year-round temperature needed. Inasmuch as the Interior Department contemplates building one or two of these pilot plants in the southern part of the United States, we all feel that this would be the ideal location. There is an abundant supply of good-quality spring water, but the well-water fact should be established.

I would be happy to furnish any additional information requested that would further establish the urgent need for this feasibility study.

JUSTIFICATION STATEMENT

Total cost estimated at $750,000. Require an initial appropriation of $50,000 to condust a feasibility study. This study will be to locate and compile engineering and water source data on one or more sites in southern Texas, to determine the most suitable location for the Center. Site prospects will be limited to the lower end of the Balcones Fault within a 50-mile radius of San Marcos, Tex. U.S. Geological Survey reports indicate that this general area possesses the most ideal prospects for obtaining high-quality water for the needs of a development center.

Hatchery development centers are required for conducting controlled investigations under practical field conditions to determine and evaluate new methods, procedures, and techniques in fish husbandry, pathology, physiology, nutrition, soil and water chemistry, pond and raceway management, fish distribution and production. These centers will serve two essential functions: first, to adopt, where necessary, basic research findings to hatchery management; and second, to apply methods developed by research to maintain the quality of the fish produced. Results of the work accomplished at the development centers will be applied to appropriate hatchery operations throughout the country. They will be of significant assistance in improving the quality of hatchery-reared fish and increasing the efficiency of hatchery operations (reduced costs and better utilization of manpower). The establishment of development centers will not only serve to increase the effectiveness of the national fish hatchery system, but will complement and serve the Division of Fishery Research as well.

The general requirements for a pondfish culture development center are a location in the southern United States where long growing seasons and mild winters can be expected; a minimum of 75 acres of relatively flat or generally sloping lands with deep, impermeable, noncolloidal clay soils; and an abundant supply of good quality spring or well water in a temperature range of 65° F. to 75° F.

Preliminary development program, Pondfish Culture Development Center, San Marcos, Tex.

FISH PRODUCTION FACILITIES

Construct 50 earth ponds from 1/10 acre to 1/2 acre in size complete with supply and drain lines	$180,000
Construct 30 concrete raceways	73,600
2 large capacity wells with pump	26,000
Main supply lines	36,500
Main drain lines	42,000
Total, fish production facilities	358,100

BUILDINGS

Office and laboratories	70,000
Hatchery building	84,900
Garage and shop	31,000
Oil and chemical storage	9,500
Residences (3)	60,000
Total buildings	255,400

Preliminary development program, Pondfish Culture Development Center, San Marcos, Tex.—Continued

OTHER PHYSICAL FACILITIES

Station roads and parking	$32,000
Clearing and grading	15,600
Domestic sewer and water	8,000
Utility lines	2,500
Landscaping grounds	2,500
Total, other physical facilities	60,600

RECREATIONAL FACILITIES

Visitor center	49,600

EQUIPMENT PURCHASES

Fish culture, laboratory and maintenance	25,000
Total estimated cost of program	750,000

DEPARTMENTAL STATEMENT

Hatchery development centers are required for conducting controlled investigations under practical field conditions to determine and evaluate new methods, procedures, and techniques in fish husbandry, pathology, physiology, nutrition, soil and water chemistry, pond and raceway management, fish distribution and production. These centers will serve two essential functions: first, to adopt, where necessary, basic research findings to hatchery management; and second, to apply methods developed by research to maintain the quality of the fish produced. Results of the work accomplished at the development centers will be applied to appropriate hatchery operations throughout the country. They will be of significant assistance in improving the quality of hatchery-reared fish and increasing the efficiency of hatchery operations (reduced costs and better utilization of manpower). The establishment of development centers will not only serve to increase the effectiveness of the national fish hatchery system, but will complement and serve the Division of Fishery Research as well.

The general requirements for a pondfish culture development center are: a location in the Southern United States where long growing seasons and mild winters can be expected; a minimum of 75 acres of relatively flat or generally sloping lands with deep, impermeable, noncolloidal clay soils; and an abundant supply of good quality spring or well water in a temperature range of 65° or 75° F.

Existing hatchery facilities are being examined to determine if they offer possibilities for conversion to this new project. Until this study is completed, no new locations are recommended.

A program for the development of a warm-water fish-cultural development center is as follows:

ADVANCE PLANNING

Feasibility study, including test wells	$50,000

FISH PRODUCTION FACILITIES

Construct 50 earth ponds from 1/10 acre to 1/2 acre in size, complete with supply and drain lines	157,500
Construct 30 concrete raceways	70,000
2 large capacity wells with pump	25,000
Main supply lines	35,000
Main drain lines	40,000

BUILDINGS

Office and laboratories	$66,000
Hatchery building	80,000
Garage and shop	28,000
Oil and chemical storage	8,500
Residences (3)	60,000

OTHER PHYSICAL FACILITIES

Station roads and parking	30,000
Clearing and grading	15,000
Domestic sewer and water	8,000
Utility lines	2,500
Landscaping grounds	2,500

RECREATIONAL FACILITIES

Visitor center	47,000

EQUIPMENT PURCHASES

Fish culture, laboratory, and maintenance	25,000
Total estimated cost of the program	750,000

ANADROMOUS FISH RESEARCH AND DEVELOPMENT

LETTER FROM LOUISIANA WILD LIFE AND FISHERIES COMMISSION

MARCH 9, 1966.

Senator ALLEN J. ELLENDER,
Senate Office Building,
Washington, D.C.

DEAR SENATOR ELLENDER: This is in reply to your telegram of March 1, 1966, requesting the Louisiana Wild Life and Fisheries Commission submit needs and justifications for appropriation of funds to the Public Law 89-304 program. Our interest in this new legislation was referenced in my letter of February 21, 1966.

After a meeting of my staff and reviewing our present fisheries program, it was determined that we could cost share in anadromous fisheries project which would amount to $70,000 total cost for fiscal year 1966-67.

There is presently a budget request for $35,000 to increase our present fish hatchery programs. This increase would allow us to initiate a comprehensive hatchery operation to reestablish and enhance the stripped bass fishery in Louisiana.

A limited amount of work on striped bass in Louisiana has already been undertaken. However, our work is limited due to lack of funds and personnel. With Federal assistance available through the Public Law 89-304 program we feel a valuable sport fishery could be revitalized which would increase Louisiana's sport and recreational fisheries resources.

The striped bass would not replace any of our established game or sport fisheries populations. It would, in fact, add to an already impressive list of valuable game fish species and fill a niche which is not in competition with existing sport fisheries resources.

Matching funds for future years have not been budgeted as yet. We only have requests in for the $35,000 in fiscal year 1966-67. Beyond this time there are no definite funds available for us to use in cost sharing Federal aid programs.

If by chance funds could be made available during fiscal year 1965-66, we could take advantage of $13,000 for work under Public Law 89-304.

Your interest and assistance in helping conserve and enhance Louisiana's fisheries resources is sincerely appreciated.

With kindest personal regards, I remain,

Sincerely,

J. D. HAIR, Jr., *Director.*

LETTER FROM CLERK, HOUSE OF REPRESENTATIVES, MICHIGAN

MARCH 8, 1966.

Senator CARL HAYDEN,
Senate Office Building,
Washington, D.C.

DEAR SENATOR HAYDEN: The following concurrent resolution was passed March 8, 1966, by the Michigan Legislature:

A CONCURRENT RESOLUTION ENDORSING THE MAXIMUM ALLOCATION OF FUNDS TO FINANCE THE ANADROMOUS FISH ACT (PUBLIC LAW 89-304)

Whereas the State of Michigan is vitally concerned with the chaotic state of the fisheries on the Great Lakes and is certain that maximum benefit from the Anadromous Fish Act will be forthcoming on the Great Lakes; and

Whereas this largest freshwater complex has the potential to become the most magnificant sport fishing region in the world as 40 percent of the Nation's population reside in this area; and

Whereas the State of Michigan is presently engaged in an anadromous fish program on the Great Lakes and is prepared to make use of maximum Federal funds available through Public Law 89-304 to aid in its programs to establish high-value fisheries of tremendous economic importance to the Great Lakes region: Now, therefore, be it

Resolved by the house of representatives (the senate concurring), That the legislature, on behalf of the State of Michigan, wholeheartedly endorses the principles of the Anadromous Fish Act, and urgently requests the Subcommittee on Appropriations for the Department of the Interior of the U.S. House of Representatives to give full consideration to the maximum allocation of funds for the Anadromous Fish Act; and be it further

Resolved, That copies of this resolution be sent to the Subcommittee on Appropriations for the Department of the Interior.

T. THOMAS THATCHER,
Clerk of the House.

FOREST SERVICE

FOREST RESEARCH EXPANSION

LETTER FROM SENATOR NELSON RE RESEARCH AT LA CROSSE, WIS.

MARCH 16, 1966.

Hon. CARL E. HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: I am writing to urge your consideration of an increased appropriation for research at the Lake States Forest Experiment Station at La Crosse, Wis.

For several years, a small two-man staff of dedicated and resourceful researchers have been conducting vitally needed watershed management research at the Coulee Experimental Forest near La Crosse. This research effort is aimed at finding answers to the critical flooding and erosion problems in the headwaters of the Mississippi River Basin. The experiment station staff has enjoyed the unstinting cooperation of the Wisconsin Department of Conservation, which originally purchased the land required to establish the experimental forest.

The problems being researched exist in some 5 million acres of steep, badly eroded lands in the four-State area of Wisconsin, Illinois, Minnesota, and Iowa. This rugged unglaciated area has frequent floods and some of the most spectacular erosion in the Nation. Flash floods arise quickly with frequent loss of life, and with heavy damage to crops, roads, and bridges. The gullied landscape and sediment deposits remain a problem long after the waters have receded. Forest production is far below potential and a severe shortage has been predicted for the local wood-using industries who depend upon products produced in the region.

For each of the past 2 fiscal years (1965 and 1966), the Forest Service La Crosse project has had to operate on a limited budget of approximately $50,000. This has resulted in concentration of research attention on only the most urgent problems of land, water, and forest use in the area.

The present program has been modest in size but abundant in results. But it is quite evident to experts involved in resource management in Wisconsin that the present staff and operating budget need to be expanded if the problems of land, forest, and water use in the local watersheds are to be solved before irreparable damage results. An increase of $150,000 in the fiscal 1967 appropriation for the Lake States Forest Experiment Station would permit its two-man staff to expand so that work could begin on many long-delayed projects essential to the better use of resources in the four-State area.

The need for increased funds for this project seems compelling. Furthermore, the Forest Service has assured me that it would like to increase the funding for the project by $150,000 as soon as the overall budgetary situation will allow. The Wisconsin Department of Conservation has given strong support to this program, and has urged that it be expanded. I have also received letters urging an increased level of funding from the Citizens Natural Resources Association of Wisconsin, the Erickson Hardwoods Co., and the State association of soil and water conservation district supervisors.

Thank you for whatever consideration you may give my request.

Sincerely yours,

GAYLORD NELSON, *U.S. Senator.*

DEPARTMENTAL STATEMENT—WATERSHED MANAGEMENT RESEARCH, LA CROSSE, WIS.

An increase of $150,000 would be used to finance urgently needed watershed management research at La Crosse, Wis. Studies would be designed to develop solutions to soil and watershed problems in a 5-million-acre problem area of rugged, unglaciated land in the four States of Wisconsin, Minnesota, Iowa, and Illinois. This is an area of flash floods and some of the most spectacular soil erosion in the Nation. The forested areas are in poor hydrologic condition, are heavily grazed, and of such low quality that they do not perform effectively either as watersheds or producers of timber.

Studies would be initiated and expanded to develop techniques for rehabilitating the steep, severely eroded lands, both agricultural and forest. Standard forest planting methods are not sufficient to establish trees on these abused lands and new ones must be found. Different tree species and other types of vegetation must also be investigated to find what will grow on such difficult sites.

Another phase of the research would be to determine how to gain control of surface runoff and thereby reduce the amount of erosion and gullying. Studies would be made of the basic characteristics of these loessal soils and of the processes of water movement into and through the soils, pointing to the development of land treatment measures and mechanical spreading to increase the infiltration of surface waters into the soil. Studies would be made of the overall hydrology of the open ridges, steep forested slopes, and open valleys so as to project management practices on a watershed basis.

LETTER FROM SENATOR SIMPSON RE WILDLIFE HABITAT RESEARCH, LARAMIE, WYO.

MARCH 14, 1966.

HON. CARL HAYDEN,
Chairman, Subcommittee on Interior and Related Agencies, Committee on Appropriations, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: I have just received a memorandum from our Governor, asking for my support in providing adequate funds to support the wildlife habitat research project for the Forest Service Research Unit at Laramie, Wyo.

I want you to know of my full support for this worthwhile project. I will appreciate any consideration your subcommittee can give to the needed funds.

With kind regards, I am,

Sincerely,

MILWARD L. SIMPSON.

STATEMENT OF SOUTHERN HARDWOOD FOREST RESEARCH GROUP AND DELTA COUNCIL

USE OF THE SOUTHERN HARDWOOD FOREST

There are about 200 million acres of forest land in the South. Of this area, almost half is in hardwood forest but the area is decreasing. About 45 million acres are in river and stream bottoms and support the traderecognized southern hardwoods. From these hardwood forests come almost half of the hardwood timber needs of the Nation.

The largest basic category of hardwood usage is sawlogs, most of which are cut into factory lumber. The lumber becomes a raw material for the manufacture of flooring, furniture, toys, athletic goods, architectural trim, and many other products. The second division is made up of logs that will yield face veneers for fine furniture and plywood, backs and core stock for plywood panels, or container veneer. A third principal category is in pulpwood products. Hardwoods impart desirable technical properties to fine papers, to food container board, to tissues, and to other converted products such as wallboard and flakeboard.

It is of great importance to note that consumption of hardwood for pulp is expected to increase by 372 percent to a total annual use of more than 66 million tons of wood. By the year 2000, hardwoods will comprise 40 percent of all wood pulped in the United States. Use of domestic hardwoods for lumber is expected to increase by 51 percent and veneer by 189 percent.

Despite marked increase in demand for hardwoods, land clearing, damming, and other land uses continue to erode the acreage needed to produce good hardwoods. For example, over a half million acres were cleared in the lower valley of the Mississippi River in a recent 2-year period. Thus, more knowledge and application of intensive forestry practices is the only means left to meet the expanding needs for raw materials.

One of the important facilities of the U.S. Forest Service that is trying to fill this need for research is the Southern Hardwoods Laboratory, headquartered at Stoneville, Miss. This laboratory is directly responsible for research on bottomland hardwoods in Alabama, Misissippi, Tennessee, Louisiana, Arkansas, and east Texas. Early studies there have now set guides for extensive management in some of the hardwood forests. Now the researchers are delving into fundamentals, the answers to which will help supply the ever-increasing demand for hardwoods.

RESEARCH NEEDS AT THE SOUTHERN HARDWOODS LABORATORY

Over 150 years of experience is represented by the scientists who conduct research in timber management, forest insects, and forest diseases at the Southern Hardwoods Laboratory. Three experimental forests and 24 other experimental areas provide field laboratories to complement the research laboratories, greenhouses, and experimental nurseries where research is conducted to improve knowledge for managing the 45 million acres of southern hardwood forest.

Much good has been produced by this research with over 100 technical publications resulting in the last decade. The surface is only scratched in comparison to what is needed. For example, over 4 million acreas of tupelo-cypress forest exists in south Alabama and southern Louisiana. Other than surveys and preliminary studies, no research has been conducted for these vitally important timber species.

Research progress and needs are briefly indicated in the following several pages, but summarized they emphasize the wisdom of filling the Southern Hardwoods Laboratory with the scientists it needs to do the total job cut out for this regional laboratory when it was established.

Scientists, supporting technicians and equipment will require a total increase of $250,000 to staff and operate on a reasonable basis. This means an increase of 6 scientists to the present staff of 14.

STATUS OF TIMBER MANAGEMENT RESEARCH IN SOUTHERN HARDWOODS

1. Research at the Southern Hardwoods Laboratory in seeding and planting of southern hardwoods has yielded methods of planting cottonwood and general recommendations for planting sycamore, sweetgum, and ash. However, begin-

ning research has developed no successful methods of direct seeding any southern hardwoods and many questions about planting hardwoods are unanswered. Basic and applied research will continue in this field. One company has planted over 10,000 acres to cottonwood, others are pilot-scale planting; all are seeking the most intensive methods.

2. Research will continue in naturally regenerating hardwoods and in determining requirements for maximum growth of desirable quality. Investigations include protection from animal damage, competition control and pruning in plantations, stocking requirements, spacing, and thinning. Additional work needs to be started in the water tupelo swamps.

3. Work is just started on the development of rational procedures for harvesting southern hardwoods to achieve maximum values; foundation information on volume and weight for all important products; procedures for inventorying, extracting, sorting, and routing different classes and grades of material to appropriate processing plants. Also, this area of research will seek the causes of variation in wood properties and their influence on wood use. Genetic factors, environmental factors, and silvicultural treatments may have an effect on wood properties. The effect of variation may affect the processing and seasoning characteristics of the wood. Increased returns of as much as $50 million annually could be expected from use of proper harvesting procedures alone.

4. Research in the last decade has developed guides for evaluating site as to its capability of supporting good hardwoods of some important species. This work needs to be completed and expanded to determine moisture and nutrient requirements of seedlings for best physiological quality for field planting. Moisture and nutrient requirements of older trees of priority species need to be found to obtain best growth and seed production.

5. Work has started in the production of strains superior to wild stock in growth, form, quality, and resistance to pests. Only cottonwood and sweetgum have substantial tests underway. Much additional study of these species is needed as well as other priority species. Selection of superior phenotypes, progeny testing, intraspecific hybridization all require tremendous effort over a long period of time. Additional work should be underway. It is interesting to note that an average increase of 1 foot in annual height growth can increase the dollar return of a 100-acre plantation by $2,500 in 10 years.

STATUS OF FOREST INSECT RESEARCH IN SOUTHERN HARDWOODS

1. Important research in tracing the life cycle of the carpenter worm has been initiated. This work has developed leads for control through the use of the female's sex attractant pheromone. This highly volatile material attracts males from over 1 mile. Continuing research will aim to use this attractant as a control tool. Success will mean big reductions in the annual loss of $40 million by preventing degrade of oak caused by the carpenter worm. One hope is the development of a male sterilization method. Females mated to sterile males are incapable of producing viable eggs.

2. Internal feeding insects cause terminal stunting and forking of young trees. Malformed trunks cannot produce high-value products. Studies have shown that systemic insecticides translocated within the trees can prevent this damage. Seven-year-old cottonwoods protected the first 3 years with phorate systemic contain over two bolts per tree more than an untreated plantation. This is equivalent to a difference of 5 cords per acre. Continued research is needed to develop improved application methods for large commercial plantings. In addition, basic research must be done to determine the pattern of chemical translocation and the period and degree of effectiveness in various parts of the plants.

3. Across the South, defoliating insects reduce growth and seed yields and occasionally cause mortality among the hardwood forests. The example of greatest damage is in the gum forests totaling 6 million acres. Annual defoliation, including flower kill, is apparent in tupelo swamps throughout the region. Defoliation in varying degrees occurs in adjacent sweetgum stands. For unknown reasons, the infestation is never completely controlled naturally. Chemical control is complicated because of the valuable wildlife resource which could be harmed by currently available poisons. Research needs to discover controlling biological factors and ways to increase their effectiveness. Also,

artificial controls should be sought to avoid damage to the wildlife component of these important forests. Other important defoliators include the eastern tent caterpillar and fall webworm in hardwoods and spider mites in cypress.

4. Studies are urgently needed on the effects of insects in the forest to guide management and cultural practices to reduce insect damage. No information on this subject has ever been developed for southern hardwoods.

STATUS OF FOREST DISEASE RESEARCH IN SOUTHERN HARDWOODS

1. Research on heart rots has provided leads for control through the use of pathological rotations. The importance of injuries caused by fire, logging, and storms as points of entry for rot have been recognized. Continued research on the life histories of the 25 or more important rot fungi will aim toward control of the large annual volume loss due to rot which is estimated to be larger than the loss of all other diseases combined. The effect of site and general tree vigor on rot incidence or rate of development needs to be determined.

2. The roll of mycorrhiza is little understood in hardwoods. Although mycorrhizae are usually considered beneficial, results of research underway indicate that changes in site conditions can change some of the fungi from beneficial to pathogenic. Results of this research should provide further leads on the control of little understood tree declines that affect several of our hardwood species. Before further progress can be made, the fungi associated with mycorrhizae must be identified.

3. Bark fungi are common on southern hardwoods. Many of these produce cankers that can cause heavy losses. Results of research underway have indicated that the Cytospora canker on cottonwood is only important on trees with low vigor. Further research should yield means of directly controlling this disease in cottonwood plantations.

4. Future research is needed on the control of tree diseases through stand management. Before this can be done, we need to know whether or not stand sanitation is effective, and the effects of various cutting and cultural methods. No information on this subject is available for southern hardwoods.

One of the outstanding qualities of this research has been the strong coordination with the needs of landowners. Hardwood industries and landowners recognized this early and have made substantial contributions to the program in the form of funds and in-kind services. In fact, 50 industries and landowners, banded together in the Southern Hardwood Forest Research Group, have contributed in cash, service, land, and timber to get research more adequately underway. They still have this vital interest.

Additional funds in the amount of $250,000 are urgently needed and we respectfully request favorable consideration of this important need.

STATEMENT OF THE LOUISIANA FORESTRY ASSOCIATION

SOUTHERN HARDWOODS LABORATORY

The Southern Hardwoods Laboratory of the U.S. Forest Service is located at Stoneville, Miss., and is responsible for research in Alabama, Mississippi, Tennessee, Louisiana, Arkansas, and east Texas to improve knowledge about managing and protecting hardwood forests on river and stream bottoms. Although research in these fields has been headquartered at Stoneville since 1945, Congress did not provide adequate laboratory facilities until 1962, when the Southern Hardwoods Laboratory building was completed.

Researchers work in the laboratories, greenhouses, and nurseries of this facility but continue to work in three recognized experimental forests and two dozen cooperatively maintained experimental areas throughout the South. One of the qualities of this research has been this strong coordination with the needs of landowners. Industry recognized this early by substantially contributing to the program at a time when the Forest Service had funds adequate for only three research men. Fifty industries and landowners banded together in the Southern Hardwood Forest Research Group in 1953, and have contributed in cash, service, land and timber to get research more adequately underway. They still keep this vital interest.

The Forest Service predicts in its recent review of the timber resources of the United States that consumption of hardwood for pulp is expected to increase by 372 percent to a total annual use of 66 million tons of wood by the year 2000, or what will comprise 40 percent of all wood pulped in the United States. Use of domestic hardwoods for lumber will increase by 51 percent and veneer use by 189 percent.

Despite these marked increases in demand expected for hardwoods, land clearing, damming, and other land uses continue to erode the acreage needed to produce good hardwoods. In a recent 2-year period, over a half million acres of the lower Mississippi Valley were cleared. Thus, to meet the rising demands, we are going to have to know how and manage intensively every acre of remaining hardwood forest land.

Research is our only answer to the need for knowledge. Much good has already come out of the limited program of research the Forest Service has been able to muster. Now with accelerating demands and reduced acreages imminent, more effort should be applied in research contributing to the better nurturing of one of this Nation's important base resources.

When the Southern Hardwoods Laboratory building was dedicated, it was contemplated that near 20 scientists should be based there to work on problems of hardwood soils, planting, genetic improvement, stand treatment, harvesting, insects, and diseases. Congress has wisely provided increases to allow the Forest Service to bring this staffing up gradually. Now the staff is at about two-thirds the strength contemplated, and, as suggested last year to this subcommittee, it is time to more nearly complete this staffing. Research needs doing now.

Translated into dollars, an increase over present funds in the amount of $250,000 is needed.

TIMBER MANAGEMENT RESEARCH

This increase would be used in part to improve the staffing of the timber management research project, now with experienced scientists to direct more intensive research in planting, soils, genetic improvement, and harvesting.

Research in seeding and planting of southern hardwoods has yielded methods for planting hardwoods and general recommendations for planting sycamore, sweetgum, and ash. However, beginning research has developed no methods for direct seeding southern hardwoods in order to reduce costs of regenerating understocked areas. Many questions about planting hardwoods are unanswered. For example, there is a strong demand for research into methods of regenerating tupelos in the swamps of south Louisiana and southwest Alabama.

Researchers find that as they develop general recommendations, landowners demand more intensive measures which multiply the demands on research. For example, one landowning company has planted over 10,000 acres to cottonwood in a pioneer commercial effort while others are pilot-scale planting. Starting with the results of early research, there is strong demand for knowledge about deep plowing, fertilizing, even irrigating and expensive forms of planting stock.

Although one scientist is working full time on tree improvement, as selections are made, tested in nurseries, propagated, and pilot tested throughout the mid-South, the work grows to a scope demanding at least one understudy and additional technician help. Uniformly straight, fast growing, relative insect- and disease-free trees of the poplar genus alone are being developed that can mean millions of dollars to the economy and much higher productivity from the land.

Hardwood forests are recognized by biologists as the preeminent game habitats, but populations of game often become great enough to almost destroy the habitat. Research in the regeneration of hardwoods must be supplemented with research to find ways to minimize the damaging influences of game. At present, only minimum research with cooperators paid from Forest Service funds is underway to find odor repellents to keep deer from young hardwood plantations or naturally reseeded areas. Work of this nature needs to be increased. The multiple uses of hardwoods in the South must have balance.

Research in the last decade has developed guides for evaluating site as to its capability of supporting good hardwoods. This work needs to be completed and expanded. For example, no such work has been done on the valuable swamp-loving tupelos which grow in about 6 million acres of the low areas of the southern coastal plan. Moisture and nutrient requirements of seedlings need to be

determined and the one-man effort currently underway needs to have additional help.

Appropriate inventory and harvesting techniques need development. Such research seeks the highest end use for the logs and other roundwood of the forest. A start is made in this research, but equipping and fully staffing the effort will require some additional help.

Finally, spacing, thinning, and otherwise treating the developing forests of hardwoods to obtain high-quality wood with the best technical properties at a rapid rate needs concentration of research effort. We feel that the most experienced men in the laboratory should be provided enough additional money to hire and train technicians or young professionals to do this work at an accelerated rate. Also, these experts should be installing research wherever adequate stands exist as well as planting tests on experimental areas for future research.

Protection Research

Protection research for southern hardwoods is done at the Southern Hardwoods Laboratory by four scientists, two in each of the disease and insect projects. Better financing is needed to do the work demanded of these projects.

Important work is underway in tracing the life cycle of the carpenter worm. This insect bores in the trunk of living oak trees and it, along with its close relatives, does about $40 million worth of damage annually.

Current research is developing leads for control through use of the female's sex attractant pheromone. This highly volatile material attracts males from over a mile. Synthesis of this attractant and development of a male sterilization method are objectives now and help to push the needed research is a must.

Across the South, defoliating insects reduce growth and seed yields and occasionally cause death of hardwoods. The example of greatest damage is in south Alabama, Mississippi, and Louisiana, where gum forests are stripped annually. Such defoliation also causes flower kill and loss of seed production. Only preliminary research on control of this defoliator has been done, but research needs to discover controlling biological factors and ways to increase their effectiveness. Also, chemical controls should be sought to avoid damage to the wildlife of these important forests.

Commercial plantations of cottonwood are showing some losses to cankers. Current research has found that a Cytospora canker on cottonwood is only important on trees of low vigor. Accelerated research should yield ways to directly control this disease in plantations.

No information is available on the control of insects and diseases through stand management. Research is urgently needed to determine if stand sanitation is effective in reducing incidence of diseases and insects. Also, the effects of thinning and harvesting systems on infections from diseases and infestations of insects must be known before sound directions for stand management can be given.

Many other disease and insect problems beset southern hardwood forests, and depth in these fields of protection research is demanded if these problems are to be fully explored in a reasonable period of time. For example, a start has been made with research on mycorrhiza in hardwoods. Although mycorrhizae are usually considered beneficial, this relationship between root and fungus can be changed from beneficial to disease-producing by changes in site condition. Results of this research should provide further leads on the control of little understood tree declines that affect several of our hardwood species.

Alexandria Research Laboratory

The research laboratory at Alexandria, La., works on four areas of forest management—insects, utilization (especially enunciated by us), range research (pine trees and cattle grazing can exist together under certain conditions) and timber management. Management of our forests, intensive management, is becoming more and more important as pressures on forest land for other uses increase, and as the demands for forest products by our increasing population are felt. The need for additional finances at Alexandria is evident in the field of

timber management. Due to the unparalleled increase in plywood and pulp mills over the South and especially in Louisiana, demands on the time of scientists in timber management has increased manifold. These demands have created a condition which does not allow for the best utilization of scientific personnel and their ability at the Research Center. We are in need of an additional $50,000 appropriation for Alexandria's timber management project. This increase will allow for the employment of technicians and laboratory assistants to enable more effective use of scientists' time and accelerating the outflow of useful information.

Not only will this increase make better use of Research Center personnel, but it will also help offset greater costs resulting from the station now being responsible for management research over the entire South.

Timber management at the Research Center is the oldest and the largest project. Excellent information has been obtained in brush control, machine planting, direct seeding and management techniques which have saved the South many millions of dollars while growing the forests which are the basis for the present southern pulpwood and plywood explosion. This appropriation will continue the flow of practical and useful knowledge which this section has produced.

Thank you, Mr. Chairman, for being allowed to present these views to the committee.

STATEMENT OF FOREST FARMERS ASSOCIATION

Mr. Chairman and members of the committee, my name is J. Walter Myers, Jr., and I am executive director of the Forest Farmers Association. It is a pleasure to appear before this committee again as a representative of our association. As you may recall, the Forest Farmers Association is an organization of timberland owners—primarily small owners—in 15 Southern States. Our association is headquartered in Atlanta, Ga.

Over the years this committee has repeatedly demonstrated its interest and support for maintaining a strong program of Federal research in forestry, and this has been most gratifying. At the same time, I am sure the committee is aware of the outstanding manner in which the private timberland owners, wood-using industries and the States are cooperating with the Federal Government in promoting forest research activities, particularly at the local level. Such cooperative participation is both logical and desirable.

Representatives of the Forest Farmers Association, in recent months, have carefully reviewed the status of forest research activities in the South, with numerous key individuals and groups, representing both public and private interests. In addition, we have also reviewed the 1967 budget, and we have noted that the only increase for strengthening research in the 1967 fiscal year budget is actually a transfer of approximately $990,000 from the Appalachia program funds. Since these funds were previously available, this action, as we understand it, merely incorporate these funds into the U.S. Forest Service's regular appropriations.

The Forest Farmers Association feels it is of utmost importance that forest research activities be maintained at a high level. Such research must keep abreast, and preferably ahead, of our forest development and land use programs. This is vital if we hope to meet the ever-increasing future needs for timber and other forest-related resources.

The Forest Farmers Association is, therefore, hopeful that the committee will recommend additional funds for strengthening forest research programs and for construction of much-needed research facilities.

To receive maximum results from our research dollars, it is highly important that researchers be provided with adequate tools and facilities. The committee's consideration, therefore, to providing construction funds for the following research facilities is invited: a Range and Timber Management Laboratory at Fort Myers, Fla. ($200,000); a Forest Hydrology Laboratory at Oxford, Miss. ($500,000); a Forest Tree Seed Laboratory at Starkville, Miss. ($250,000).

Planning funds for the Fort Myers, Fla., and Oxford, Miss., laboratories were provided in the 1965 fiscal year budget, and funds for planning the Starkville, Miss., Laboratory were included in the 1966 fiscal year budget. These facilities are all urgently needed, and the work must be done at the local level

to provide truly significant data. No construction funds, however, were included in the original 1967 fiscal year budget.

The committee's consideration is, also, invited to providing funds for drafting architectural plans for several other much-needed facilities including the second wing of a Forest Sciences Laboratory at the Research Triangle, located in the Raleigh-Durham, N.C., area ($85,000); a new Hydrologic Laboratory at Coweeta, N.C. ($35,000); a Wildlife and Silviculture Laboratory at Nacogdoches, Tex. ($30,000); and a Forest Research Projects Laboratory on the Virginia Polytechnic Institute campus, Blacksburg, Va. ($45,000).

Moreover, from our organization's review of research activities, an increase of $1,380,000 spread over nine Southern States is clearly indicated if minimum forest research program needs are to be met in fiscal year 1967. Included in this $1,380,000 increase would be strengthening of forest research programs in nine States as follows:

The forest survey.—This is, in our opinion, a very high-priority item. The survey provides invaluable State-by-State forest resource inventories on a recurrent basis. In fiscal year 1965 Congress raised the ceiling on funds which might be appropriated for this program. Since then, however, only a small increase—approximately $25,000 has been made available in the South. A minimum of $300,000 is needed in the South, alone, in fiscal year 1967 to achieve the goal of State resurveys on a 8-year cycle.

Insect and disease investigation and control research.—A minimum of $290,000 is urgently needed to keep pace with this work centered primarily in the States of Florida and Mississippi. A substantial portion of these funds would be used for strengthening existing insect and disease research centered at Stoneville, Miss., and involving southern bottom land hardwoods. A portion would, also, go to strengthen research on control of insects attacking pine cones and seed, with project headquarters at Olustee, Fla.

Forest management and silviculture studies.—Increasing demand for wood means that southern timberland owners must seek ways to grow bigger and better crops of pine and hardwood timber, and to grow them faster. A minimum of $350,000 is needed for strengthening this work in Louisiana, Mississippi, Tennessee, Texas, and Virginia.

Tree improvement research.—$70,000 is needed to finance and expand more fully the limited research now underway to develop genetically superior trees of the best commercial hardwood species of the Southeast. This work is centered at Athens, Ga.

Wetland forest water control.—A minimum of $75,000 is urgently needed to strengthen and expand research on feasibility, effectiveness, and improved methods of water control on the wet lands of the Southeastern Coastal Plain for improved resource productivity. This work is centered at Charleston, S.C.

Naval stores production.—$70,000 is needed to expand present basis research on the physiology of gum flow and to determine the maximum of stimulation of gum flow and the use of chemicals to increase productivity of naval stores. This work is centered in Florida.

Forest tree seed research.—A minimum of $50,000 is needed for strengthening and expanding the forest tree seed research project at Starkville, Miss., where studies will include seed physiology and processing, with initial attention given to important hardwood species.

Wildlife habitat management research.—$125,000 is needed to strengthen existing work centered in Texas and to initiate research on the ecology and economics of managing Appalachian forests for increased game production. Work in the Appalachian forests to be centered in Virginia.

Production economics research.—$50,000 is urgently needed to strengthen efforts in economic evaluations of forest land management and the consideration of alternate land-use possibilities. This work to be centered in Louisiana.

This committee's consideration to recommending additional funds to meet these minimum needs will be appreciated. I thank you for your courtesy in hearing me.

Minimum estimated research needs for the South in fiscal year 1967

[In thousands of dollars]

PROGRAM ITEMS	Florida	Georgia	Louisiana	Mississippi	North Carolina	South Carolina	Tennessee	Texas	Virginia	Total
Forest survey southwide										[1] 300
Naval stores production	[2] 70									70
Insects	[3] 70			[4] 85	[5] 70					225
Tree improvement		[6] 70								70
Management and silviculture			[7] 50	[8] 100			[9] 50	[10] 50	[11] 100	350
Production economics			[12] 50							50
Forest tree seed				[13] 50						50
Disease				[14] 65						65
Water control						[15] 75				75
Wildlife habitat								[16] 50	[17] 75	125
Total	140	70	100	300	70	75	50	100	175	1,380

[1] Need for additional forest survey funds was recognized several years ago when the ceiling was increased on survey funds. To date only further nominal implementation has been forthcoming for the South. These funds are necessary if the goal of State resurveys on an 8-year cycle are to be achieved.
[2] Expand existing basic research program, Olustee, Fla.
[3] Broaden and intensify existing program on control of insects attacking cones and seeds of slash pine, Olustee, Fla.
[4] Develop preventive and control measures for hardwood borers, defoliation, etc., Stoneville, Miss.
[5] Strengthen existing research on systemic insecticides, Research Triangle, Raleigh, Durham, N.C.
[6] Strengthen and expand existing program with hardwoods, Athens, Ga.
[7] Strengthen and expand existing program, Alexandria, La.
[8] Strengthen and expand existing programs, Stoneville, Miss.
[9] Equipping and staffing new Silviculture Laboratory, Sewanee, Tenn.
[10] Strengthen existing Multiple Use—Silviculture Program, Nacogdoches, Tex.
[11] Strengthen and expand existing program on Shortleaf and Virginia Pine, and associated hardwoods, Blacksburg, Va.
[12] Strengthen research in economic evaluations, particularly in alternative land uses involving forestry, New Orleans, La.
[13] Preliminary staffing of new forest tree seed research project with initial attention to hardwoods, Starkeville, Miss.
[14] Strengthen existing programs on hardwood diebacks, wilts, cankers, etc., Stoneville, Miss.
[15] Strengthen and expand existing program for improved resource productivity, Charleston, S.C.
[16] Strengthen and expand existing program into bottomland hardwood type, Nacogdoches, Tex.
[17] Initiate research on managing Appalachian forests for game, animals, etc., as sources of income for private timberland owners, Blacksburg, Va.

Minimum estimated research needs for the South in fiscal year 1967

CONSTRUCTION ITEMS

Ranger and Timber Management Laboratory, Fort Myers, Fla	[1] $200,000
Forest Hydrology Laboratory, Oxford, Miss	[2] 500,000
Forest Tree Seed Laboratory, Starkeville, Miss	[3] 250,000
Forest Sciences Laboratory, 2d wing, Research Triangle, North Carolina (planning money)	85,000
Coweeta Hydrologic Laboratory, near Franklin, N.C. (planning money)	35,000
Wildlife and Silviculture Laboratory, Nacogdoches, Tex. (planning money)	30,000
Forest Research Projects Laboratory, VPI Campus, Blacksburg, Va. (planning money)	45,000

[1] Plans and specifications completed from funds available in fiscal year 1965.
[2] Planning funds provided in fiscal year 1965.
[3] Planning funds provided in fiscal year 1966.

CONSTRUCTION

DEPARTMENTAL STATEMENT—SHELTERBELT RESEARCH, LINCOLN, NEBR.

One-fourth of the continental United States lies in the Great Plains. Trees have been planted on the Plains since first settlement. Initially, they were planted for shade and beauty; to make farmsteads into homes. Since that time we have learned by experience that properly designed tree plantings reduce the effects of strong winds and droughts. Also, tree shelterbelts, if properly designed, can be used to protect soils from blowing, control snow drifting, increase yields of field crops, and reduce home heating costs. Livestock sheltered by tree plantings hold weight better with less feed in winter; losses from blizzards are reduced.

There is a need to develop better trees from the Plains; trees that will tolerate heat and cold, drought and high moisture stress, wind and hail, and salt and alkali. Numerous varieties of trees have never been tested on the Plains; superior trees have not been sought systematically.

Trees grow well on some Plains soils, poorly on others; tree species differ in response to soils. Information is needed on the soil characteristics that influence tree growth. Effectiveness of wind barriers depends in part on the heights and growth form of trees. To design windbreak systems properly, the height and growth form for each tree species on the important soils types of the Plains and in each climatic situation must be known.

Trees in many shelterbelts lose vigor and become less effective when only 15 to 20 years old. Studies are needed on how they should be managed to maintain their vigor and effectiveness as wind barriers over a long period of time.

Trees in the nonforest environment of the Plains are especially subject to damage from insects and diseases. Methods to combat these damaging disease and inspect pests must be developed—either by effective and practical control measures or through developing disease and insect resistant tree varieties or strains.

An appropriation of $200,000 is needed to do an adequate research job on this research program.

CLARK NATIONAL FOREST

LETTER FROM SENATORS SYMINGTON AND LONG (OF MISSOURI)

MARCH 11, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: Enclosed please find statements for the record by Mr. James F. Gamble, Leo D. Dickey, and Harold Turner in support of funds for the proposed H–25 reservoir in Iron County, Mo., to be constructed by the U.S. Forest Service.

It is our understanding that the Forest Service capability for that work in fiscal year 1967 is $100,000 for preconstruction planning and design.

As a result of the rapid development of mineral deposits in this area, there is need for additional water supply, as well as for flood control and recreational facilities. Consideration by the committee of this request will be appreciated.

Sincerely,

STUART SYMINGTON.
EDWARD V. LONG.

STATEMENT OF MERAMEC BASIN ASSOCIATION

The Meramec Basin Association is a not-for-profit Missouri corporation organized to represent the people of the Meramec Basin of Missouri and to work with the people of the area in securing sound use and preservation of the resources of the basin and the closely adjacent localities having geographic, political, economic, and social ties with the basin area. The association has 800 members and a board of 54 directors representing a cross section of interests and localities in the region.

The association strongly supports funding of H–25 reservoir in Clark National Forest in Iron County, Mo., for the following reasons:

Construction and development of H–25 will serve as a pilot project for the eventual development of the U.S. Department of Agriculture plan for headwater reservoirs in the basin, of which H–25 is an approved unit.

The area in which the H–25 is located is undergoing very considerable changes in its life and economy. Projects of this nature will have great and multiple values. However, nothing of this kind has ever been done here, and a good example is much needed. This can be provided with the H–25 project going ahead at this time, and under the sole control of the Forest Service.

It is respectfully requested that the Appropriations Committee provide the necessary funds to substantially advance the development of H–25 reservoir by the U.S. Forest Service.

STATEMENT OF LEO D. DICKEY

As a farmer, landowner, and businessman in the area affected by this H–25 dam, I earnestly solicit your support on this project. I realize we are fighting a war, but I also hope that we can spend some money on this much-needed development. We sadly lack this, particularly in view of the mining development in this area and the change in farming.

The demand for recreational facilities near St. Louis is great. This lake would help meet the demand and would help us here in our economy.

STATEMENT OF HAROLD E. TURNER

I am a banker and businessman in the immediate area of the proposed H–25 impoundment on Upper Big River in the Clark National Forest, Iron County, Mo.

Our economy is in the midst of some very rapid and radical changes due to the decline and loss of what was formerly a family-type-farm economy. The decline in importance in farming has caused our people to go out of the area to find employment. A project of this nature would have important and numerous values.

In spite of mining, forestry, and some continued agriculture, we do not have a good economic picture. Recreational development so close to a major metropolitan area will give us a much greater stabilizing factor. Our Ozark country here is ideally suited for steady and consistant recreational use. On the other hand, we know that forestry and mining have their high and low periods.

It is estimated that site H–25 will have a capacity for handling 162,000 visitors annually. This would be a great contribution to our faltering economy.

FOREST RESEARCH LABORATORY, DURHAM, N.H.

LETTER FROM SENATOR MCINTYRE

MARCH, 14, 1966.

HON. CARL HAYDEN,
Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: I am writing to urge the inclusion by your committee, in the bill to provide appropriations for the Interior Department and related agencies, of the sum of $75,000 for the preparation of design and specifications for a forest research laboratory to be established at Durham, N.H.

This appropriation was approved by the Senate Committee on Appropriations and by the full Senate in 1965, but was, unfortunately, not accepted in conference.

I am joined in this request by my senior colleague, Senator Cotton, as well as by Congressman Huot, whose district would be the site of the research laboratory.

This laboratory has the support of the Forest Service. The University of New Hampshire is willing to donate, free, all the land which would be required, as well as free use of a number of university facilities.

I sincerely appreciate your consideration of this request.

With my best wishes,

Sincerely,

TOM MCINTYRE, *U.S. Senator.*

DEPARTMENTAL STATEMENT

This increase would provide plans for modern laboratory facilities needed at Durham, N.C., for use in research on several of New England's critical forestry problems. The University of New Hampshire now furnishes space for a part of this reserach but cannot accommodate the whole program, and is faced with its own expanding needs. A building site for a suitable laboratory facility is being offered on the campus.

The research for which the facility is needed includes (1) studies of management of the beech-birch-maple forests of New England; (2) studies of management of eastern white pine; (3) forest genetics and tree improvement of white pine and selected high-value hardwoods in the Northeast; and (4) studies on flood-runoff reduction and water-yield improvement for the New England States. The beech-birch-maple forests are an important multiple-use resource on 10 million acres in New Hampshire and adjacent New England States. Eastern white pine, likewise, has been and must continue to be an important segment in the New England timber economy. Research on the management of this species including genetics studies on weevil resistance, will produce benefits of lasting importance.

(Total cost, $955,000; planning cost, $75,000.)

FOREST INSECT AND DISEASE LABORATORY, DELAWARE, OHIO

LETTER FROM SENATOR LAUSCHE

MARCH 16, 1966.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
Washington, D.C.

DEAR SENATOR HAYDEN: It is my understanding that several responsible individuals from Ohio appeared before your Subcommittee on Appropriations for the Department of Interior and Related Agencies today, March 15, requesting that there be included in the Department of Interior and related agencies appropriations bill the sum of $72,000 to prepare architectural design and engineering specifications for an urgently needed addition to the Forest Insect and Disease Laboratory at Delaware, Ohio.

I will not go into details in my communication to you, but I am attaching hereto an outline of the proposed project together with supporting information concerning its immediate need.

May I point out that this Laboratory does not serve Ohio only, but an entire region, including, in addition to Ohio, the States of Indiana, Illinois, Missouri, West Virginia, Pennsylvania, and other parts of the Northeastern United States.

I sincerely and urgently request favorable consideration of this item by your committee.

Sincerely yours.

FRANK J. LAUSCHE.

STATEMENT OF NEED FOR LABORATORY ADDITION

The Forest Service, U.S. Department of Agriculture, completed construction and occupied in 1960, a Forest Insect and Disease Research Laboratory at Delaware, Ohio. The building is located on 137 acres of publicly owned land. This is a major regional research Laboratory, well located geographically to serve Ohio, Indiana, Illinois, Missouri, West Virginia, Pennsylvania, and other parts of Northeastern United States. Research is underway on control of forest and shade-tree insects and forest-tree diseases.

The Laboratory building is seriously overcrowded. It was designed to provide research laboratories, offices, and supporting facilities for a staff of 35. Now 58 people use the building, nearly 60 percent more than it was designed for. This heavy use has resulted from research program expansion authorized by the Congress. In addition, the Forest Service is reorganizing parts of its programs to improve efficiency and strengthen forest pest control action work. To capture fully the potential public benefits from this reorganization, scientists headquartered in Columbus, Ohio, and a staff of pest control specialists should be moved to the Delaware Laboratory.

Thus, an addition to the Laboratory is urgent. The immediate need is for $72,000 to prepare an architectural design and engineering specifications for the planned addition.

PRESENT PROGRAM

Concentrated study has been made for several years of insect transmission of dutch elm disease. Increased funding in 1965 permitted program expansion to: (1) strengthen research on dutch elm disease; (2) determine the chemical and physical factors in trees that attract or repel insects; (3) study control of insects with parasites or with chemicals that sterilize them; and (4) conduct research in the use of chemicals inserted in trees that prevent insect attack. Expansion of these programs required additional manpower and a considerable amount of scientific instrumentation.

The disease research underway deals with transmission and control of oak wilt which causes heavy losses over much of the central hardwood region. It also concerns the problem of heart rot which degrades large volumes of hardwood timber and is particularly serious in the larger trees that produce the highest quality wood. There still remains a major job of identifying the fungi causing heart rot, determining their distribution and the damage they cause, and finding practical control methods.

To meet authorized program expansions, highly unsatisfactory space adjustments have been made. Scientists and delicate instruments have been moved to trailers and greenhouses where research conditions are extremely poor. And some parts of needed research cannot be undertaken. These require radiological materials and highly toxic chemicals which must be used in isolated laboratories to protect the individual scientists and other studies in progress.

PLANNED EXPANSION

Expansion of the Delaware laboratory was included in the national forestry research program recently approved by the Secretary of Agriculture and transmitted to the Congress. The planned expansion would provide space for:

1. A more intensified attack upon the problems of dutch elm disease, oak wilt, and heart rot. It would also permit research not now possible in the role of viruses in other tree diseases; in isolation of viruses, determination of mode of transmission, and control measures; in the causes and control of two new diseases of poplar and alder; and similar work on wilts of maple and elm.

2. A pest control staff to facilitate the extension of research results to field application, and to provide the most efficient means of technical interchange between scientists doing research and control specialists. Because the present status of knowledge changes frequently as new information about pests and how to control them is developed by research, old methods are constantly being replaced with new ones. Thus, it is important that control specialists and scientists keep in close touch with each other. Moreover, both control and research workers require laboratories which, in some instances, can be shared for maximum efficiency.

3. Scientists and service personnel now headquartered in Columbus, Ohio. These employees were formerly part of the Central States Forest Experiment Station that has been closed to reduce the costs of research administration. The proposed expansion would bring together in one building all Forest Service employees in the Columbus and Delaware area. This would further reduce administrative costs as well as eliminate problems of coordination, transportation, and communication.

The cost of preparing architectural and engineering plans for the addition to the Delaware laboratory is estimated to be $72,000. The building would cost approximately $950,000 to construct.

LETTER FROM BOARD OF SUPERVISORS, MONO COUNTY, CALIF.

VISITORS CENTER, INYO NATIONAL FOREST

MARCH 2, 1966.

Hon. THOMAS H. KUCHEL,
Senate Office Building,
Washington, D.C.

DEAR SENATOR KUCHEL: The board of supervisors understands that the Inyo National Forest has had a budget item for a visitors information center deleted

from the budget of the U.S. Forest Service and that there will be an opportunity to comment upon said budget at the congressional Insular and Interior Affairs Committee hearing on March 16, 1966.

Due to the fact that there are some 1,820,000 visitors to the Mammoth Lakes area by actual Forest Service count, this visitor center is both needed and desirable, not only to this county but also to these persons from the metropolitan areas of this State who use the recreational potential of Mono County and Mammoth Lakes.

If you or your staff could appear in behalf of this valid project to restore this item to said U.S. Forest Service budget, it would be greatly appreciated.

Sincerely,

BOARD OF SUPERVISORS,
By Mrs. LORRAINE A. HARDESTY, *Deputy Clerk.*

DEPARTMENTAL STATEMENT

An increase would be used to construct a ranger station headquarters and visitor center at Mammoth Lakes, Calif.

For many years, the Inyo National Forest has been one of the top 10 national forests in terms of recreational use in the United States. In 1965, over 3 million man-days were spent by recreationists here. A visitor center at Mammoth Lakes would be available to meet the needs of 1½ million summer visitors and nearly a third of a million winter vistors who come to the ranger district each year.

This visitor center and ranger station complex will be used to provide for information and orientation requests which now number over 900 on peak summer days at the present ranger station. The complex would include a headquarters building featuring attractions found in the Inyo National Forest, interpretive programs, an amphitheater for movies and slides, parking areas, and other facilities.

The present ranger station, built in the late 1930's, is quite inadequate for meeting the visitor's or the ranger's need. In addition to the impact of recreation upon this area, the need for administration, coordination, and protection of the natural resources in this area requires a highly skilled group of professionals and technicians. The accommodations afforded by the present structure adversely affect the efficient administration of the organization. The present ranger station will be converted to a dwelling after the new facility is built.

This intensively managed ranger district is a keystone to the economy of Mono and Inyo Counties which are dependent upon recreation, timber, and range resources.

Planning	$25,000
Construction (including exhibits)	396,000
Total	421,000

MARCH 8, 1966.

Senator CARL HAYDEN,
Chairman, Senate Appropriations Subcommittee for the Department of Interior and Related Agencies, Washington, D.C.

DEAR SENATOR HAYDEN: I am advised that on March 16, 1966, your committee will conduct hearings on appropriation requests that include the following projects in southern Illinois:

1. George Rogers Clark Recreation Way; $260,000 for preliminary surveys and plans.
2. Lake of Egypt Recreation Area; $1,500,000 for development of 1,700 acres.
3. Shawnee Lake on Lusk Creek; $170,000 for engineering and design.

These projects could provide a long-needed stimulus to the economy of that area. My department has worked closely with the local organization sponsoring these projects and we have developed economic projections that could be valuable for your committee's deliberations. I request time be made available during your hearings on these projects for a representative of this department to present testimony in support of these projects.

Sincerely,

GENE GRAVES.

STATEMENT OF WILL HICKMAN, RE FOREST HYDROLOGY LABORATORY, OXFORD, MISS.

Mr. Chairman and members of the committee, my name is Will Hickman. I live in Oxford, Miss. I am a lawyer, legal counsel to the Lafayette County Board of Beat Supervisors, cattle farmer, and tree farmer.

I appreciate the privilege of testifying before this committee in support of forest watershed management research. I want to endorse Senator Stennis' statement and to speak briefly in support of one item.

Oxford is in the eroding uplands of north Mississippi. Each year land is abandoned for agriculture and is reverting to trees. Oxford is the headquarters of the largest tree-planting program in the country. Some 30 million pine seedlings are being planted in this area this winter. As we balance agriculture with industry our forests assume greater importance in our economy both as a source of raw material and as a source of water for the industries that we are trying to attract.

The South is blessed with abundant rainfall, but at times each year, drought conditions can be found in some areas. In order to plan intelligently, both for water supplies and for waste disposal, reliable data must be made available to those responsible for developing the facilities. As more demands are placed upon the water resources of the South it becomes increasingly important to have adequate information on which to base development and utilization plans.

A stronger research program on water and watershed management is essential if the South is to maintain the necessary supplies of water for an expanding population as well as industrial use. Forest owners must learn to manage their land not only for timber production, but also for flood control and water production. To help do these things, $450,000 is needed this year to build a Forest Hydrology Laboratory in Oxford to house and provide facilities for an expanding program of watershed management research. In fiscal year 1965, $35,000 was appropriated for architectural and engineering planning. Plans for the laboratory are essentially complete except for a few details.

This laboratory not only would serve the needs of north Mississippi but of the entire southern Coastal Plain and the Piedmont as well. The program will include research on Coastal Plain hydrology, rehabilitation of eroded soils and management of erosive forested watersheds. Briefly the research staff will be concerned about how forests can be managed to provide optimum quantity and quality of surface and ground water; how runoff and erosion can be reduced through revegetation of eroded areas; and what the effect of cutting intensity, logging, grazing, and prescribed burning is on sediment production and surface runoff.

The Oxford Research Staff has been working in crowded quarters and with limited equipment for the past 15 years on the the campus of University of Mississippi. Greater stress on basic research calls for a greater investment in office and laboratory space and in research tools. I hope that the committee will see fit to act favorably on this item and on the other items proposed for the benefit of the southern region.

I thank the committee for its courtesy in hearing me.

DEPARTMENTAL STATEMENT—ADDITION TO FORESTRY SCIENCES LABORATORY, ATHENS, GA.

Planning funds for an addition to the Forestry Sciences Laboratory were made available on October 31, 1965, through supplemental appropriation. Design criteria have been developed and estimates made by GSA, based on these criteria. Adjustments in the criteria were necessary to bring the estimates in line with preliminary plans. These have been made and the preliminary estimate of $1 million for the project is thus confirmed.

This addition would alleviate overcrowding in the present laboratory and provide space and facilities for 22 other staff members whose headquarters assignment is Athens, that the present laboratory will not accommodate. In addition to bringing related programs together under one roof for maximum coordination and efficiency, the new facilities would permit a stronger attack on problems of forest insects, diseases, and timber utilization. Research on biological control of bark beetles and defoliating insects would be advanced. Control of rust diseases in valuable seed orchards, and of root diseases would

be accelerated. The major effort being launched on wood use in housing and associated marketing problems would be aided.

Assuming that the architectural contract is executed by April 15, 1966, plans and specifications could be developed according to normal schedules by approximately March 1, 1967. Construction thus could begin in fiscal year 1967 funds are appropriated.

DEPARTMENTAL STATEMENT—FORESTRY SCIENCES LABORATORY, CARBONDALE, ILL.

The 1965 appropriation for the Forest Service included an amount for architectural design and specifications for a laboratory on the campus of Southern Illinois University, Carbondale, Ill. These plans are now ready so that construction can proceed as soon as funds are available. The estimated cost is $690,000. The university has made a site available under long-term lease that will maintain the Forest Service scientists in a productive research environment where they have access to consultation with staff specialists, libraries, and specialized equipment. These men are now housed in university space but there is urgent need for the room they occupy.

The research at Carbondale includes an intensive attack on the problems of producing black walnut. This exrtemely valuable hardwood is in short supply. For a time, controls were placed on its export, and veneer specifications have been revised to permit thinner sheets, thus extending the supply. Walnut grows on deep rich soil and has the potential for rapid development.

The specific soil, water, and other requirements for walnut growth need investigation. The information thus developed can then be channeled into a program of culture resembling the growing of agricultural field crops. Concurrent selection and breeding of strains that are hardy and fast growing, and that have superior wood quality, round out a research program in being that has great potential.

Utilization and marketing research is also included in the work at Carbondale. The upland hardwoods in the upper Mississippi and Ohio drainages contain much timber that should be cut to improve growing stock or to make way for better species. The industrial potential for this material is good, assuming a continuing flow of information on markets, characteristics of available raw material and the like. Improved facilities will greatly aid this research.

DEPARTMENTAL STATEMENT—SHELTERBELT LABORATORY, LINCOLN, NEBR.

Forest Service scientists at Lincoln, Nebr., lack modern facilities for research on shelterbelt establishment and management in the southern Plains. The University of Nebraska has made some space available, but demands on its facilities are heavy and increasing. A laboratory is needed that will combine adequate space for the professional staff with efficient facilities for scientific research. Such a laboratory is estimated to cost $350,000. Architectural design and specifications will require $28,000. A building site has been offered by the University of Nebraska.

Trees can modify local climate, benefit crops and livestock, control wind erosion of light soils, control snow drifting, improve wildlife habitat, and add substantially to the comfort and esthetic appeal of Plains environment. In recognition of their value, large numbers of trees have been planted in windbreaks, beginning with the time of first settlement. Only a few species have been able to withstand the rigorous climate. Also, the length of tree life and period of shelterbelt effectiveness has not been as great as would be desirable. These and other problems have been under study for the past several years.

The program of research currently underway includes introduction, selection, and breeding of trees particularly adapted for use in shelterbelts of the central and southern Plains. The relationship of soil characteristic to tree growth and longevity is under study. Nursery practices for production of planting stock are being investigated, including the control of disease that reduce the efficiency of production or that reduce the vigor or cause loss of trees after they are planted.

Problems in establishing plantings also are the subject of research. Release, thinning, underplanting, and cultivation all have potential for increasing the effective life of plantings. Vigorous trees are more pleasing to the eye and they perform more effectively in wind barriers. Means of maintaining or increasing vigor are being sought.

DEPARTMENTAL STATEMENT—SILVICULTURE AND SUGARBUSH LABORATORY, BURLINGTON, VT.

An increase of $40,000 will provide architectural design and plans for a laboratory on the campus of the University of Vermont. The estimated construction cost is $500,000. A site has been made available under long-term lease by the university. The laboratory will provide modern specialized facilities for scientists studying maple sap production. Present quarters were not designed for biological research and are inadequate for needed basic studies.

The maple sugar industry contributes substantially to the economy of many rural areas of the Northern States; especially through providing a source of income during a period of the year when other demands on the farm are light. There is potential for more efficient production through improving yields per tree, increasing the sugar content of sap produced, and developing new techniques of sap extraction. Research on these problems is laying the groundwork for further development of the maple products industry.

The new facilities would allow the scientists presently on the staff to supplement field studies with fundamental research on sap flow in maple trees, on inheritance of sap yield and sugar content, and on moisture and nutrition requirements for growing maple seedlings and propogating cuttings of superior maple stock.

Location of this research on the campus of the University of Vermont has many advantages. It would make cooperative facilities readily available to Forest Service scientists and would supplement university needs. Close proximity would stimulate interchange of ideas between scientists of the Forest Service and the university and encourage coordinated effort. In short, closer association can be expected to increase the active and very productive cooperation which now exists.

FOREST SERVICE LABORATORY, BEREA, KY.

LETTER FROM THE KENTUCKY FARM BUREAU FEDERATION

MARCH 16, 1966.

Senator CARL HAYDEN,
Senate Subcommittee for Appropriations for the Department of Interior and Related Agencies, Senate Office Building, Washington, D.C.

DEAR SENATOR HAYDEN: For the past several years the Kentucky Farm Bureau Federation has recommended that the U.S. Forest Service research program be strengthened substantially in Kentucky and elsewhere in the Nation. We are convinced we should continue to expand this important work until we have a program that meets our needs. We greatly appreciate your very effective support of our past recommendations and with your fine assistance we have made reasonable progress.

The Forest Service now has several excellent research programs underway at their Berea, Ky., office and is hard at work solving some of the more urgent forestry problems in our State. Their research includes restoration of strip-mined land, production of timber crops, and the marketing of forest products. The most urgent need now is construction of research laboratories and offices for Forest Service scientists and their assistants at Berea. The scientists do not have the laboratories they need to do the intensive difficult research required to solve the complex problems they are working on. Furthermore, the staff is split among three locations and this leads to inefficiencies and higher administrative costs. So the need for laboratories and offices is clearly justified and urgent.

A good start has been made toward obtaining the necessary research facilities. Berea College has provided the Forest Service a free building site under a long-term lease. A site development plan has been prepared, roads and utilities have been brought into the area, and warehouses, garages, and a small greenhouse have been built on the site.

Now is the time to plan and construct the major laboratory-office building needed at Berea and I recommend that funds be provided the Forest Service for the development of plans in the next budget year. The cost of architectural and engineering plans is estimated to be $48,000 and construction of the building to be $600,000. The $48,000 needed for planning are not included in the President's budget, so an addition of this amount to Forest Service appropriations for next year would be required.

I sincerely hope you will look with favor on our recommendation and add the funds needed to the Forest Service budget for next year.

If I can be of assistance to you in providing more detailed information, arranging for testimony at the hearings held by your subcommittee, or in other ways, I shall be glad to do so.

Very truly yours,

JOHN W. KOON, *Executive Secretary.*

DEPARTMENTAL STATEMENT

The amount ($500,000) would provide modern facilities for research on the management of the mixed hardwood forests of the Cumberland Plateau. Architectural design and plans are estimated to cost $40,000. A site for the building has been made available by Berea College.

Timberlands occupy three-fourths of the land area of the Cumberland Plateau. They are an essential part of the economy of the region and with improved management are capable of much greater and more diverse production than at present. A complicating factor in their management is surface mining and associated spoil banks in need of rehabilitation.

Practical methods need to be developed for reducing damage to forest resources during surface mining in rugged forested watersheds. Methods of rehabilitation also need further test and improvement. The laboratory phase of such research would be done at Berea. Other research in need of more adequate laboratory support at that location, deals with the productive capacity of the plateau forest lands for timber and for related crops such as Christmas trees and decorative and medicinal materials. Emphasis in connection with the latter would be given to the culture of certain forest plants, as an increased source of pharmaceuticals. Work on improvement of the markets for forest products in the region supplements other phases of the research.

FOREST PRODUCTS LABORATORY

LETTER FROM SOUTHERN PINE INDUSTRY COMMITTEE

MARCH 15, 1966.

Hon. CARL HAYDEN,
Chairman, Interior and Related Agencies Subcommittee of the Senate Appropriations Committee, Washington, D.C.

DEAR SENATOR HAYDEN: As chairman of the subcommittee interested in appropriations for the expansion of facilities at the U.S. Forest Products Laboratory, Madison, Wis., we earnestly solicit favorable consideration of funds necessary to provide adequate facilities for the Laboratory to complete the expanded program already in progress.

One item is $1,190,000 needed for construction of the wood chemistry unit, which was eliminated in last year's construction contract due to cost. Another amount desperately needed is $190,000 to complete plans and specifications to remodel and expand the present Laboratory building.

The need for new and expanded facilities at the Laboratory is recognized by the entire lumber industry, and our region certainly shares in this viewpoint.

In our judgement, the appropriations involved are not unreasonable when measured in terms of the invaluable work of the Laboratory in research and development in behalf of one of the Nation's most important natural resource materials.

Respectfully,

W. S. FOX, *Chairman.*

STATEMENT OF NATIONAL LUMBER & BUILDING MATERIAL DEALERS ASSOCIATION

This association represents the building materials distribution industry of the Nation which handles over $7 billion of building materials annually. A high proportion of the products distributed by our members are lumber or wood fiber products.

As the distribution intermediary between the manufacturer of wood products and the consumer, we are in a particularly advantageous position to appreciate the economic benefits of research both in terms of maximum utilization of forest resources and in terms of the consumer receiving more for his dollar.

For this reason, the National Lumber & Building Material Dealers Association and it national research council have for many years been keenly interested in and concerned with the work of the U.S. Forest Products Laboratory at Madison, Wis. We are especially cognizant of its major contributions over the years to the economy and the public welfare as a result of its research endeavors in the wood products field.

For this reason, we are compelled to call attention to the needs for modernization of its 1932 era facilities and especially for certain facilities planned, and previously approved, as an addition to the Laboratory. It is our understanding that, for some reason which we fail to comprehend, funds for these needed and planned facilities have been omitted from the budget currently under consideration. We consider this a grevious error which should be rectified.

Specifically, we have reference to the needed physical facilities at Madison to house a wood chemistry research unit requiring an appropriation of $1,190,000 and the planning funds of $190,000 required for remodeling the old 1932 laboratory for efficient use. In these facilities, we understand, there would be provided a structural research laboratory.

The reasons for our concern over the omission of these funds are as follows:

1. Expanded research facilities should achieve realizable economies which in the long run are passed onto the consumer in lower costs for housing and other end products which are composed of wood, in whole or in part, and result in the maximum utilization of extracted raw wood. Through advances in wood chemistry, we can achieve greater total economies in the use of extracted wood products. Every waste byproduct of the cutting and manufacturing process means a higher relative cost for the board or 2 by 4. The more we can use of the tree, the lower the ultimate cost of all products produced from it.

2. Certain byproducts or residues such as lignins are now waste or, worse yet, end up as pollutants of our streams and rivers. Wood chemistry research to neutralize or utilize such products is sorely needed both as sound economics and as part of our national effort to preserve our streams and water resources. We need not call attention to the urgency of our water resource problems; the relationship of waste utilization to the water problem may not, however, be so clearly evident.

3. The role of the Forest Products Laboratory in establishing more definitive methods for testing wood and wood-based materials and construction systems keyed to performance needs is well known and respected. The proposed structural research laboratory would permit advanced research on new designs, on wall, roof and floor systems, and, especially, the structural interrelation of these components in a whole house. The latter has long been needed in this country. When all components are put together, the relationship between design and performance needs under snowloads and wind pressure has been determined generally by theoretical calculations. For safety and economy, the proper balance between the two is needed. Presently, there are no adequate facilities to do this objectively.

For these and related reasons we respectfully urge that serious consideration be given to providing in the present budget, the $1,190,000 for the planned facilities described above, as well as $190,000 for planning the economical use of existing facilities.

There is no question that the needs of our rapidly expanding national economy and the long-term welfare of the public would be well served.

STATEMENT OF AMERICAN HARDBOARD ASSOCIATION

I am Donald Linville. I am and for 14 years have been executive secretary of the American Hardboard Association, a voluntary trade association of the domestic hardboard industry. My offices are in Chicago.

As spokesman for the U.S. hardboard industry, I give you our views on the importance of the Forest Products Laboratory and its current building program to our industry.

Hardboard, in varied thicknesses and surface textures and treatments, is made from wood. It is "engineered" wood—an American invention—being manufac-

tured from wood fibers bonded together again into thin, wide panels utilizing lignin, the natural binding material in wood. The 3 billion square feet of hardboard that our industry sends to market annually, to be used in residential and commercial construction and remodeling and in countless industrial applications, comes from 18 plants located in 14 different States in all areas of the country.

The hardboard producers I represent have a vital interest not only in the wise use of our forests and the replenishment of the Nation's timber supply, but also in finding ways of making better and more widely used wood products. Our industry helps utilize the "whole tree," since wood in almost any form can be reduced to fibers to make hardboard: second-growth timber; logging, sawmill and plywood plant residues; and cuttings from woodlots. The products of our industry, that support such wood utilization, the accompanying employment that helps undergird the economies of whole States, and the versatility of hardboard uses in every walk of life, have been and are the direct result of intensified research by both Government and industrial laboratories.

Our industry is convinced that the key to an extension of the uses of hardboard is research, and that in that research the Forest Products Laboratory plays a vital role.

Much of the major research necessary to define and extend uses of hardboard must of necessity be done at a central laboratory since most manufacturers do not have the staff or facilities for such research and are oriented primarily toward product development. Even where such facilities are available the broad experience of the scientists and the basic research conducted at the Forest Products Laboratory have proved invaluable to our industry.

In the past, for example, research on and the development of the proper procedures for measuring physical and strength properties of hardboard at the Forest Products Laboratory have resulted in standardized test methods which have been accepted in this country and elsewhere. These basic methods are used in all specifications for maintaining the quality of hardboard. Research under simulated service conditions, such as school burnout tests, has permitted hardboard to be used in new ways and is serving to remove restrictions on its use in many areas. This kind of cooperation by the Laboratory has had a material influence on our industry which has increased its production by a factor of 2½ since 1950.

Our association has cooperatively supported research at the Laboratory that should permit an even further extension of hardboard use. For the past 4 years the Forest Products Laboratory has been studying the behavior of hardboard under stress of various kinds to enable our industry to have, for the first time, the basic information needed to derive design stresses for our material.

As a final step in this research it will be necessary to build and load actual structures and components of structures to demonstrate the feasibility of structural design with hardboard. One of the items urgently needed in the expansion plans at the Forest Products Laboratory is the construction of a structural, creep, and fatigue laboratory for the Division of Wood Engineering. It will be in that facility where the final evaluations of structures constructed with hardboard should be done.

We urge your continued support of the Forest Products Laboratory and of the urgently needed new facilities there to enable it to continue making a most unique contribution of basic research and leadership in new, useful wood "engineered" products. It urgently needs the new research facilities contemplated.

STATEMENT OF KOPPERS CO., INC.

My name is Maurice J. Rhude. I am chief engineer of the Unit Structures Department of the Koppers Co., Inc., Forest Products Division.

The Koppers Co. operates structural glued laminated timber fabricating plants in Wisconsin, Arkansas, and North Carolina; in each of these States the economy is based heavily upon forest products industries. I am located at Peshtigo, Wis., where the economy is almost totally dependent upon wood and wood products. Employment is concentrated there in wood-using industries at Badger Paper Mills, Thompson's Boat Co., and Unit Structures.

Structural glued laminated timber uses techniques developed by the U.S. Forest Products Laboratory in the early 1930's whereby narrow and short boards are edge-glued, end-glued, and face-glued into large, shop-grown timbers. The

Laboratory has pioneered in the development of wood design criteria and the efficient use of combinations of high and low grades of lumber into profitable products for the lumber, plywood, and glued laminated timber industries.

We appreciate the opportunity to appear before your committee in support of the request by the U.S. Forest Products Laboratory for appropriations to complete construction of a wood chemistry building, where plans are already completed, and to finance planning to modernize space in eisting facilities, where the present layout is unsuited to modern pilot plant occupancy.

Following the construction of the pulp and paper facilities, now underway at Madison, Wis., the planned construction of wood chemistry facilities and the modernization of the main building, it is planned that construction of a wood structural laboratory will be required.

These several steps are so interrelated that failure at this time to allocate money for the wood chemistry building and planning money for modernization of the present structure will seriously handicap their research program, which is conducted for the entire wood industry.

The planning money for modernization of the present building will provide the means for again putting released space into production as moves are made into the new facilities now being built. Without the planning money now, portions of the present facilities could lie idle for lack of revision to the then current need.

The proposed wood chemistry building will permit an increased understanding of the chemistry of wood, help reduce stream pollution, develop new products of wood based on the new-found chemical composition of wood fibers, and allow more low-grade timber to be better utilized by the new pulp and paper facilities.

The urgently needed wood structural laboratory will be delayed unless these steps are taken one by one and in proper sequence. Facilities to test structural elements full size, a test procedure so necessary to the development of the proper design criteria for large structural wood elements, cannot be further delayed in light of the 100-, 200-, and 300-foot clear-span structures being built today. The facilities at Madison are capable of testing only spans no greater than 40 feet.

As chairman of the American Institute of Timber Construction Research Committee, I am in frequent contact with the Forest Products Laboratory. The fact that I am located in Wisconsin permits me that close liaison which our industry desires. Our committee and our industry believe it necessary to use the findings of the past 55 years of research at Madison; we believe that the basic knowledge available in the personnel at Madison must be given the facilities and equipment to keep pace with the research efforts in other structural materials.

Currently, we have several cooperative test programs underway at the Laboratory; test facilities capable of handling larger members and assemblies, such as planned for the later phase of construction, are needed to provide continuity to our research efforts.

The world population explosion, the need for vast quantities of food, and chemical fertilizers to help produce that food, are related to the research underway and planned at Madison. Our firm today designs and builds numerous bulk storage facilities for the chemical industry, particularly for fertilizer storage. Wood is resistant to chemicals which are destructively corrosive to many other construction materials.

Still, the paper industry, employing some 40,000 persons in Wisconsin, uses chemicals to separate wood fibers. Thus, the basic knowledge required of the relationship between wood and various chemicals is our daily need.

The work which has been mentioned calls for highly developed skills and increasingly complex and costly laboratories, instrumentation, and equipment to keep the wood industry in step with competitive materials, and with products from foreign countries. It is the personnel at Madison who are the best qualified to research the maximum use of wood.

There has always been close cooperation between industry and the Forest Products Laboratory. Due to the magnitude of differences between wood species and the way each species of timber grows over a large area of our country, industry will continue to require the help of the U.S. Forest Products Laboratory.

Because most of the economically distressed areas of the Nation have abundant forest resources, research must develop the products to make their wood industry keep in step with developments in other materials. It is amazing how the solution to problems in wood researched at Madison have brought side benefits beyond the fondest expectations. The completely new southern pine plywood

industry is an example. The use of wood chemicals in new products, at the same time aiding to clear up stream pollution, could be another.

I respectfully request that this statement be printed in the record.

Mr. Chairman, thank you and members of this subcommittee for the opportunity to support the needs of the U.S. Forest Products Laboratory.

FOREST ROAD CONSTRUCTION

STATEMENT OF SENATOR CHURCH

In 1962, President Kennedy submitted a 10-year program to Congress for the development of the national forests. It was a well-conceived and long-overdue plan. Its basic concept was multiple use of our national forest lands; its key was an adequate transportation system, allowing easy access to the forests for vacationers as well as loggers.

Unfortunately, that program has never been implemented. Today, despite its efforts to provide the American public with development commensurate to our growing population needs, the U.S. Forest Service is forced to continue "horse and buggy" planning in the age of high-speed transportation.

It is not my purpose, Mr. Chairman, to bewail or belabor past inadequacies. The very problem we face today in the urgent need to achieve adequate development of our forest lands is the result of regressive thinking. But we can no longer delay, we can no longer defer action, nor finance national forest development on an outmoded, piecemeal basis. Although our dedicated Forest Service planners have sought to provide comprehensive development of an adequate road system, lack of funds have forced them to dissipate what moneys they have been authorized in greasing the wheels that squeaked the loudest.

It is time now to lubricate the entire forest transportation vehicle.

The development of the network of roads in our national forests has been a process of evolution, starting with the simple logging trail that eventually widened into a forest road and became a main thoroughfare many years later. Because the prime concern then was for a means of removing salable timber, these evolved roads later proved inadequate for recreational purposes. But a few decades ago, these simple trails were enough since the overall growth of the forest road system was slow. A smaller national population was just beginning to find the forests as sources of relaxation and recreation. Today, with a national population over 190 million persons and expected to reach 350 million by the turn of the century, roads cannot be built fast enough. Almost from the instant a new road or trail is opened, the touring public is vying with the logger for use of the road, even to the most remote back-country regions.

We can no longer afford the luxury of leisure in the conservation of any of our natural resources, whether it be in the development of river basins or forest lands.

Financing of the forest transportation system has heretofore fallen into four categories: (1) authorized appropriations under the Federal-Aid Highway Act; (2) funds returned to the Secretary of Agriculture for road construction and maintenance for forest roads and trails; (3) construction of roads by timber purchasers; and (4) construction by users of national forest lands, including roads built under easement to serve private land within the boundary of the national forest.

To compound this cumbersome system, the actual construction funds in each category are controlled by a different source.

Forest highway funds are appropriated to the Department of Commerce and are administered by the Bureau of Public Roads in accordance with regulations approved by both the Secretary of Commerce and the Secretary of Agriculture.

Forest development roads and trail funds are administered by the Forest Service.

Timber purchaser roads are built as a condition to the timber sales contracts. Those logging roads which will be retained and maintained by the Forest Service are located and designed by the Forest Service which also supervises construction.

I submit, Mr. Chairman, that under such a system, it is amazing that we have a road network today capable of handling even a portion of the demands made upon our national forests.

In 1962, President Kennedy submitted his 10-year program to Congress. The accumulated authorizations since that time have lagged behind the planned

road-construction program by $169 million. In addition, the program has been further reduced by a series of catastrophes which occurred in the last 3 years, including an earthquake in Alaska, and floods in Washington, Oregon, California, Montana, Idaho, Utah, and South Dakota. Although Congress added $38 million to regular authorization for fiscal years 1966 and 1967, it was still necessary to reprogram about $18 million from regular authorizations to restore damaged roads and trails.

In 1965, by way of example, while $33 million was appropriated for construction of forest highways under the Bureau of Public Roads program, almost double that amount, or $57 million, was spent by timber purchasers for roadbuilding in the national forests.

Such disproportionate expenditures between public and private funds for the development of a public resource is no longer feasible and is, in fact, a serious danger to the already shaky viability of the timber industry.

I cited a 350 million national population figure, Mr. Chairman, that will be crowding the limits of all of our national facilities by the end of this century. Multimillions of Americans already live within the boundaries of our vast cities. Improved national highway systems, combined with shorter workweeks, rising incomes, all add up to a need for tremendously expanded natural recreational facilities to serve this vast population.

But the need for recreation just represents a part of the problem. This same growing population will make new demands upon forest products. In order to avoid depletion of our rich timberlands, the most efficient and well-developed management system will have to be applied. Again, building a forest transportation system that allows for orderly harvest of our trees at one place, and reforestation and growth at another, is most urgent.

Obviously, such comprehensive, multiple-use road planning cannot be accomplished under the haphazard system of financing heretofore in effect. The timber users have borne an inordinate share of road construction costs, and it has been difficult to require timber operators to build roads to standards needed for multiple-purpose use of national forest resources.

No State, Mr. Chairman, is more aware of the multiple values of national forests than my own State of Idaho and few Federal programs have stirred the interest and concern of Idahoans as has the need for revitalizing our methods of forest road development.

I will submit as part of the record of this hearing Senate Joint Memorial No. 1, passed by the second extraordinary session of the 38th session of the Legislature of the State of Idaho, together with resolutions adopted by 16 governmental, civic, and industrial organizations (withdrawn for committee file), as well as a letter from the Honorable Robert E. Smylie, Governor of Idaho, all supporting congressional approval of new financial assistance to forest road development.

This basic change, Mr. Chairman, is embodied in the concept of general fund appropriations for such road development, under a single monetary source, eliminating the current requirements of roadbuilding as a condition of timber sales.

The need for this change is imperative. Only through long-range, comprehensive, forest-road planning can we protect our resources from fire and pests; provide orderly marketing of timber, when there is a demand and when values are high assure competitive bidding for forest resources; eliminate road supervision problems and thereby reduce timber sales administration; and finally, reduce costs in roadbuilding.

There are today in my State of Idaho 17,700 miles of yet-to-be-constructed roads and trails that, under present planning and financing, will take 150 years to complete. There are 1,225 miles of roads and trails that should be brought up to standards of forest highways. Present financial planning will require 39 years to complete this work. And there are yet another 1,560 miles of roads and trails eligible for inclusion in the system. This is in one State alone.

We do not have a century and a half, Mr. Chairman. We don't even have the 39 years to upgrade one small group of roads. National economic and recreational demands require that we immediately return to the 10-year program proposed by President Kennedy, salvage what we can of the lost years in that program, and begin an accelerated program of forest-road planning.

Accordingly, Mr. Chairman, I urge the committee to recommend that $169 million be provided in supplemental general fund appropriations to the U.S. Forest Service for fiscal year 1967, the amount that authorizations have lagged behind the 10-year program in fiscal years 1963 through 1967.

I would further urge the committee to include in its recommendations, that all future forest-road systems be built through public financing, a method which has the concurrence of the Secretary of Agriculture and the support of every category of forest user.

I now ask, Mr. Chairman, that my statement, together with the supporting documents I cited earlier, be included in the record of these hearings.

STATE OF IDAHO

DEPARTMENT OF STATE

CERTIFICATE

I, Arnold Williams, Secretary of State of the State of Idaho, and legal custodian of the Great Seal of the State, and of Legislative enactments, do hereby certify that the attached copy is a full, true, and complete transcript of Joint Senate Memorial No. 1, enacted by the Second Extraordinary Session, Thirty-Eighth Session of the Legislature of the State of Idaho, received and filed in this office the Twenty-Eighth day of February, 1966.

In testimony whereof, I have hereunto set my hand and affixed hereto the Great Seal of the State of Idaho. Done at Boise, the Capital of Idaho, the First day of March, A. D. 1966.

ARNOLD WILLIAMS,
Secretary of State.

[SEAL]

LEGISLATURE OF THE STATE OF IDAHO

SECOND EXTRAORDINARY SESSION, THIRTY-EIGHTH SESSION

IN THE SENATE—SENATE JOINT MEMORIAL NO. 1, BY STATE AFFAIRS COMMITTEE

A JOINT MEMORIAL TO THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES IN CONGRESS ASSEMBLED:

We, your Memorialists, the Legislature of the State of Idaho, respectfully represent that:

Whereas the lack of an adequate transportation system is the greatest deterrent to the full use of the natural resources in the national forests in the State of Idaho; and

Whereas, under the present rate of road construction, it will take 100 years to complete an adequate national forest conservation road transportation system;

Now, THEREFORE, BE IT RESOLVED, by the Second Extraordinary Session of the Thirty-Eighth Session of the Legislature of the State of Idaho now in session, the Senate and House of Representatives concurring, that we most respectfully urge the Congress of the United States of America to proceed at the earliest possible date to enact the necessary legislation to authorize the financing of primary National Forest Conservation roads from the general funds of the United States Treasury and to provide an appropriation commensurate with the urgency of the demonstrated need.

BE IT FURTHER RESOLVED, That the Secretary of State of the State of Idaho be, and he hereby is authorized and directed to forward certified copies of this memorial to the President and Vice President of the United States, the Speaker of the House of Representatives of the Congress, and to the Senators and Representatives representing this state in the Congress of the United States.

This Senate Joint Memorial was adopted by the Senate on the 18th day of February, 1966.

W. E. DREVLOW,
President of the Senate.

This Senate Joint Memorial was adopted by the House of Representatives on the 24th day of February, 1966.

PETE T. CENARRUSA,
Speaker of the House of Representatives.

I hereby certify that the within Senate Joint Memorial No. 1 originated in the Senate during the Second Extraordinary Session of the Thirty-Eighth Session of the Legislature of the State of Idaho.

ARTHUR WILSON,
Secretary of the Senate.

STATE OF IDAHO,
Boise, January 26, 1966.

Hon. FRANK CHURCH,
Senate Office Building, Washington, D.C.

DEAR FRANK: Mr. Theodore Hoff, Jr., has kindly made available to me a copy of your letter to the Secretary of Agriculture relative to the problem of access roads into our national forests.

Today's press carries a report that Senator Jordan had again pointed out the great need for a more aggressive program of access road construction.

It is of the utmost importance that we create as soon as possible an adequate forest transportation system for use by all types of forest users, along the lines of the program proposed by President Kennedy in 1961. That plan would, if it had been pursued with vigor, have produced an adequate network of multiple-use roads by 1972.

Road planning on a forest-by-forest basis, conceived so as to promote and secure maximum multiple use would serve not only the historic users of the forest but would promote recreation and tourism and really sound conservation.

The speed with which these available forested areas are opened up is of extreme economic importance to Idaho, and for that matter to all the Northwest. For the rest of the United States it seems to me that it constitutes prudent management and conservation of resources that belong to all the people.

I agree most wholeheartedly with you in your statement that it is imperative that an entirely new concept of forest road construction be developed and implemented. The Kennedy proposal is sound, but it should be activated by the Department of Agriculture pursuant to appropriations by the Congress.

I am unable to ascertain what amounts are contained in the new budget specifically allocated to access roads construction. The budget document is not yet available here. I have little doubt, however, that the amounts recommended are inadequate to our needs.

I desire to suggest a concerted effort on the part of the entire congressional delegation and the State government, acting together to secure a favorable consideration of your proposal. You will recall that we conferred in Boise in December with the leaders of conservation groups and forest user groups. Remarkably, unanimity of purpose was achieved in that meeting.

It occurs to me that there might be merit in seeking special consideration of this problem from the Appropriations Committee of either the House or the Senate, where a goodly delegation from Idaho could give testimony supporting the need for a new construction concept and the need for moving ahead with a program designed to secure an adequate access road program at the earliest possible time.

I shall be most happy to be guided by your suggestions and to attempt in any way to accommodate our total resources in manpower and information to the successful accomplishment of an adequate forest use highway construction program.

I have a feeling that a concerted effort might secure results again, as it sometimes has in the past. I am thoroughly mindful that military expenditures have required a downhold on domestic investment, but I do believe this problem is of sufficient magnitude to the State that we should pursue a satisfactory solution with great vigor.

Sincerely yours,

ROBERT E. SMYLIE, *Governor.*

GEORGE WASHINGTON MEMORIAL PARKWAY

STATEMENT OF REPRESENTATIVE MACHEN

Mr. Chairman and members of the Senate Appropriations Subcommittee, my name is Hervey G. Machen, and I represent the Fifth Congressional District of Maryland.

My purpose here today is to plead for the future of the George Washington Memorial Parkway in Prince Georges County. And I say that I am pleading for its future because I sincerely believe that the future of this scenic drive along the Potomac River shoreline literally hangs in the balance in this session of the 89th Congress.

I am not appearing before you today with a long list of facts and figures. I leave that to the experts. I am appearing as the Congressman from Prince Georges County and as a person who has lived near the Potomac River for 48 years. Years ago—before the urban boom—we along the river took this historic waterway for granted. Our reticence resulted in pollution of the water and desecration of the banks. Much that we admired the river for slipped through our fingers because we were not fully aware of all the evils of uncontrolled and unplanned urban encroachment.

Now we are, and I hope it is not too late. There has certainly been a price for the fantastic growth of our metropolitan areas and we have paid that price in the loss of clean water and natural beauty. Some persons had the foresight and intuition to see what was coming. I cite the authors of the Capper-Cramton Act who in 1930 established the George Washington Memorial Parkway.

Although it is now almost 36 years from the date of enactment of that law, I believe that we still may move ahead to preserve the shoreline along the Potomac River in Prince Georges County before it is truly too late. Unfortunately it is almost a now-or-never proposition. Preservation of natural beauty cannot be after the fact, after the bulldozers have arrived and after the towers are built into the sky. Therefore, for the sake of the natural beauty of the Potomac shoreline I plead for this appropriation request of $2.9 million.

Secondly, it has the strong support of President Johnson. This is the year of the "guns and butter" budget. The President and his advisers have made it very clear that they applied stringent tests to each item before it was justified for inclusion in his budget. They judiciously weighed all factors involved in each item and I do not think that the President would have included this request for $2.9 million if it did not meet the tests. It is not a frivolous request, nor is it an exercise in fantasy.

At the same time I realize that the mere fact that the President has asked you to approve this request is not sufficient justification. It is not the function nor the duty of the Congress to rubberstamp the requests of the executive department. All too many times the executive department acts as if the world would be a better place in which to live if it had free reign over the three branches of Government. But in this case, in this request for land acquisition for the parkway I believe the request is a very realistic and justifiable one.

A third point I would like to make is to cite the support this revised shoreline route has received from the many agencies involved. This route was approved in a meeting last January with Members of Congress, the chairman of the Prince Georges County commissioners, the State senator from Prince Georges County, the National Park Service, the chairman of the Maryland-National Capital Park and Planning Commission, the National Capital Planning Commission, and the Interior Department. At this point I would like to submit for the record a letter signed by myself and by Congressman Sickles and Senators Brewster and Tydings endorsing the revised shoreline route.

I also want to mention the fact that the State senator from Prince Georges County—who as a private citizen opposed the shoreline route a few years ago—has introduced a companion measure in the Maryland State Senate to authorize the Prince Georges County commissioners to match the request before you today. This bill has passed the State senate and is pending in the house of delegates.

I believe that this is the first time representatives of all these agencies have been able to get together and agree on a route. They certainly would not have done that if they felt this route would cause massive relocation and destruction of homes. I did not take a position on a route for a long time because I wanted a route with the least amount of relocation as possible. I am now satisfied that this revised shoreline route is the most satisfactory one to meet the purposes of the Capper-Cramton Act and little relocation.

At the same time I want to acknowledge that there is still opposition to the parkway. I believe that there will always be opposition to the parkway

regardless of where it goes. The opponents told me yesterday that they intend to do everything in their power to kill the parkway. That is their privilege in our democracy. But I do not think this should deter us from reaching our goal. The substantial agreement that this route has been accorded is a landmark in the history of the parkway in Prince Georges County and to me is like a green light.

I have weighed all the factors in this issue and I feel that it boils down to a question of private versus public benefits. In this case I feel that the good of the public will far outweigh the inconvenience that the private landowners may suffer. The National Park Service has indicated that this road can be built without the necessity of destroying homes. The program they offer is a life estate to those affected by land acquisition and I believe this is equitable.

While I am reluctant to disagree with any of my constituents I do feel this compromise route is the best under the circumstances.

A fourth factor I wish to cite is the proposed National Armed Forces Museum. The advisory board on this project has recommended location of it in Price Georges County. I welcome this project and have so indicated to the advisory board staff. For purposes of discussing the parkway, it is a moot point as to the location of the museum either at Fort Washington or Fort Foote.

In either place or both this museum will make a significant contribution to the study and understanding of the historic role the military has played in our society and democracy. As a member of the Armed Services Committee, I am well aware of the need for greater comprehension by the public of the military role in the United States. I think that if and when this museum is built it will be greatly enhanced if it were attached to the parkway system under the George Washington Memorial Parkway.

I would expect tens of thousands of visitors to take advantage of the benefits to be offered by the museum if it is ultimately approved by the Congress. What could be more attractive for them than to approach and leave this national museum along a scenic drive on the shores of the Potomac? The drama of the museum itself would be multiplied if it stood alone in the scenic setting of a park and parkway on the river. In addition, the National Park Service is requesting funds to build an amphitheater at Fort Washington, to be the scene of a historical pageant. Here, too, the parkway and the natural beauty it would protect and provide would enhance what the visitor's eye sees.

Just as the museum and amphitheater are proposed as "national" in nature and not local so is the George Washington Memorial Parkway national in nature. It is not to be the Prince Georges County Parkway nor the Prince Georges County Armed Forces Museum. It just happens that in this great National Capital we are looking into the suburbs as cohesive and natural adjuncts to the metropolitan area. And the whole National Capital region largely belongs to the people of the Nation, despite the county and State lines which still exist.

Last year I campaigned partly on the concept of a capital that would have the beauty, grace, and stature of a world capital, like the cities of Rome or Paris. I see no reason why Washington, D.C., and the adjacent suburban areas could not eventually meet that criteria.

More and more everyday the suburbs and the city are becoming interwoven in many respects. We in the suburban area are going to do our part of this project by matching the money I hope you will see fit to appropriate.

Each and every step we take toward preservation of natural beauty in this area contributes to the wealth of our Nation, and not in terms of dollars and cents. We can't buy or make natural beauty but we can do something to preserve it for every American citizen to value and enjoy.

Therefore, Mr. Chairman, for the reasons I have cited I respectfully request that you approve the budget item for appropriation of $2.9 million for the George Washington Memorial Parkway from the District line to Fort Washington.

Thank you for your time and consideration.

LETTER FROM MARYLAND CONGRESSIONAL DELEGATION

JANUARY 25, 1966.

Hon. STEWART L. UDALL,
Secretary of the Interior,
Department of the Interior, Washington, D.C.

DEAR MR. SECRETARY: We want to take this opportunity to voice our support of the revised George Washington Memorial Parkway route in Prince Georges County as proposed by your agency. The new plan has the merits of protecting the shoreline and maintaining the esthetic value of the area.

We are aware that many problems may arise relating to the property interests of citizens directly affected by the road but are confident that the Department will make every effort to work out these problems as equitably as possible to all parties.

In this regard, we would also recommend that your Department take necessary steps to protect the remaining shoreline property between the parkway and the river's edge through a cooperative effort of donated scenic easements by private landowners.

We have also passed on our sentiments to the Prince Georges County Commissioners. In the meantime, if there is anything further that we can do, please do not hesitate to contact us. We are eager to see this worthwhile project started as soon as possible.

Very sincerely,

DANIEL B. BREWSTER,
U.S. Senator.
JOSEPH D. TYDINGS,
U.S. Senator.
HERVEY G. MACHEN,
Member of Congress.
CARLTON R. SICKLES,
Member of Congress.

MISCELLANEOUS

LETTER FROM THE IZAAK WALTON LEAGUE OF AMERICA

MARCH 10, 1966.

Hon. CARL HAYDEN,
Chairman, Subcommittee on Interior and Related Agencies, Committee on Appropriations, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: The Izaak Walton League of America appreciates the opportunity to comment on fiscal year 1967 budget estimates for Interior Department agencies and the U.S. Forest Service. We request that this letter be incorporated in the hearing record.

Generally, we believe that the American people recognize the need to move ahead on a broad range of natural resources problems, and that they will support the financing necessary to implement sound and critically needed programs. This support has recently been demonstrated in the field of water pollution control by overwhelming approval of local and State bond issues—we are certain it exists equally relative to matters under jurisdiction of your committee.

Basically, the league supports President Johnson's natural resources budget requests. We regard these as minimal, and are naturally concerned about reductions for wetlands acquisition and other important programs. However, we recognize that other obligations of the United States—particularly military commitments—require setting of priorities for Federal funds.

There are several items which we respectfully recommend to your committee for special consideration:

Land and water conservation fund.—We are disappointed that 1967 estimates for this program indicate a substantial decrease from the 1966 level. However, we are aware that the fund has not been operating as originally expected—at the same time, we are confident that existing difficulties will be overcome, and are contributing to that end where we can. Looking to the future, we hope the committee will develop long-range plans to alleviate the effects of this year's

cutback. We are particularly concerned about impact of the 1967 decrease on Forest Service acquisition of critical lands in the Eastern States—particularly in the Spruce Knob-Seneca Rocks, Mount Rogers, and Allegheny Reservoir areas. Such acquisition must be completed before rapidly rising costs and changes in land use make meaningful action impossible.

Redwood National Park.—We fully support the proposal to establish a Redwood Park in northern California, and endorse budget planning which will permit immediate implementation of congressional authorization of such park during 1966.

U.S. Forest Service.—The league recognizes a critical need for greatly accelerated Forest Service land acquisition in the East under the Weeks Act and the land and water conservation fund. We therefore endorse increase in Weeks Act funds for purchase of the new Redbird unit in Kentucky. We also support deletion from the appropriation act of language requiring formal local consent to acquisition of lands within national forest boundaries.

We question whether 1967 budget estimates include sufficient funds for outdoor recreation development by the Forest Service. Public use of the national forests is growing at about 10 percent each year, yet the budget request calls for only a 4 percent increase in funds to handle such use. Coupled with a long-standing backlog of recreation development needs, the fact is that, due to inadequate facilities, existing public use of the national forests is impairing the total range of forest values. Particularly critical examples are provided by the Boundary Waters Canoe Area, Spruce Knob-Seneca Rocks National Recreation Area, and the Allegheny National Forest.

Finally, we note that the 1967 budget permits no expansion of Forest Service outdoor recreation research activities. Ultimate success of the recreation development program depends on better knowledge of public need and demand. We urge that the recreation research program be substantially increased.

Bureau of Land Management.—The Izaak Walton League commends Congress and the Bureau of Land Management for actions over the last several years to modernize classification, administration, and management of the public lands. However, long-recognized needs have just begun to be met. Much more emphasis, for example, should be given to outdoor recreation development and improvement of wildlife habitat; in this regard, we note that BLM's 1967 recreation budget estimate is the same as last year—too low. And overall, assuming no overhead or recordkeeping costs, the Bureau's whole 1967 budget request would permit at most the ridiculously low investment of 11½ cents on each acre it manages—31½ cents per acre if Alaska holdings are not considered. Meanwhile, one public lands resource alone—oil shale—is valued between $300 and $3,000 billion, depending on whom one consults.

Our members in the public lands States are convinced that the Bureau's greatest need is more personnel. It has long been woefully understaffed. According to our calculations, BLM overall has but 1 employee for every 60,000 acres under its jurisdiction, and only 1 "field professional" for every 400,000 acres. This just doesn't make sense.

We strongly urge that BLM be allowed more personnel, that its appropriations be increased. We vigorously oppose the $1 million decrease proposed for fiscal year 1967.

Fisheries research.—The league associates itself with the excellent review of problems in this field presented by the Sport Fishing Institute.

Respectfully,

ROBERT T. DENNIS,
Assistant Conservation Director, IWLA.

STATEMENT OF NATIONAL ASSOCIATION OF COUNTIES

My name is Paul N. Carlin and I am the assistant director for Federal ownership problems of the National Association of Counties. Our association is a nonprofit organization which represents the Nation's 3,049 county governments.

My testimony is specifically directed toward portion of the fiscal year 1967 appropriations for the Bureau of Land Management and the Bureau of Outdoor Recreation.

1. *Bureau of Land Management.*—We recommend restoration of the $50,000 cut from the $100,000 additional amount requested by the Bureau of Land Management for its lands and minerals field operation.

The full $100,000 amount is required in order to enable the Bureau to work at a faster pace in meeting its responsibilities under the new Public Land Sale Act (Public Law 88–608).

This new statute permits, pending the Public Land Law Review Commission's final report, the sale of public lands which are (*a*) required for the orderly growth and development of a community, or (*b*) chiefly valuable for residential, commercial, agricultural (exclusive of lands chiefly valuable for grazing and raising forage crops), industrial, public uses, or development purposes.

Disposals of land under this statute are limited to sales, at the "appraised fair market value," of tracts up to 5,120 acres in size.

In addition, section II of this new statute provides that "no sale shall be conducted under the authority of this Act until zoning regulations have been enacted by the appropriate local authority."

In the opinion of our association, these 22 words offer an exciting and far-reaching opportunity for the development of a "partnership" approach to Public Land Management between the Bureau of Land Management and the counties and cities of the West by saying in effect: if the local governments of the West will officially develop comprehensive plans for the long-range development of their areas and implement these local plans with enforcible zoning regulations, then the Federal Government will base its public land management decisions upon these local determinations."

Because of the close interrelationship between planning and zoning, numerous western counties have been initiated or sharply expanded their comprehensive, countywide planning program in order to responsibly meet their obligations under this new statute.

Though final congressional approval was given to the Public Land Sale Act on September 9, 1964, the Bureau of Land Management has yet to hire its first planner. As the barest possible minimum, the Bureau should have at least one qualified planner on the staff of each of its State offices.

We understand that the lack of qualified planning personnel was a major factor in the delay of more than a year before the appropriate regulations were issued pursuant to this new statute.

Of greater concern is the fact that few, if any, sales of public lands have been made to date under this new statute.

Appropriation of the full $100,000 amount would allow the Bureau to implement a concerted effort of developing adequate working relationships with western counties and cities.

More important, public lands located in close proximity to expanding communities are urgently needed for the orderly growth of these areas and appropriation of this amount would accelerate the disposal of these lands.

Appropriation of this full amount can be considered as an "investment," since an early consummation of these sales would result in revenue to the Federal Treasury which are substantially in excess of this requested amount.

2. *Bureau of Outdoor Recreation.*—We recommend that 70 percent of the land and water conservation fund's appropriation request of $110 million for fiscal year 1967, or $77 million, be earmarked for grants to State and local governments.

This recommendation would conform with Congress action last year on the fiscal year 1966 appropriation.

In addition, this recommendation also coincides with the basic recommendation of the Outdoor Recreation Resources Review Commission that the State and local governments have the primary public responsibility in providing for the outdoor recreation needs of our Nation.

Since the land and water conservation grants are made to State and local governments on a 50–50 matching basis, earmarking of these funds would, in addition, double the public funds which are expended for outdoor recreational purposes.

Our association shares the disappointment that the revenue from the initial year's sales of land and water conservation fund stickers were substantially lower than originally anticipated. We have joined with other national organizations in encouraging, through our membership, the sale of these stickers.

Because of the reduced revenue from the sale of these stickers, the total amount available through the land and water conservation fund has been reduced from $124,996,000 to $110 million.

Unless altered by your subcommittee, the land and water conservation fund's fiscal year 1967 budget provides that assistance to States be reduced from $84,377,000 during fiscal year 1966 (approximately 70 percent of the total fund less administrative expenses) to $64,440,000 (approximately 60 percent); while at the same time increasing the fund's share for Federal programs from $39,179,000 (approximately 30 percent) to $43 million (approximately 40 percent).

We would appreciate a directive from your subcommittee that 70 percent of the land and water conservation fund for fiscal year 1967 be earmarked for grants to State and local governments.

This action by your subcommittee will not add to the cost of the Federal budget, since it involves a reallocation of the moneys which have been accumulated for these purposes in the land and water conservation fund.

On behalf of the National Association of Counties, I would like to express my appreciation for this opportunity to publicly express our association's strong support for both of these important programs.

Statement of the National Wildlife Federation

Mr. Chairman, the National Wildlife Federation appreciates the invitation to comment briefly upon proposed appropriations for the Department of the Interior and Related Agencies, including the Forest Service, for fiscal 1967.

The National Wildlife Federation is a private organization which seeks to attain conservation goals through educational means. It has independent affiliates in 49 States. These affiliates, in turn, are composed of local clubs and individuals who, when combined with associate members and other supporters of the National Wildlife Federation, number an estimated 2 million persons.

We will discuss only the highlights, as we see them, of the budget proposals for several agencies funded by the Interior appropriations bill.

Bureau of Sport Fisheries and Wildlife

The National Wildlife Federation is disappointed that the proposed budget does not contain funds for the newly authorized anadromous fisheries program. Several States have informed us that they are primed and ready to bear their share of this cooperative 5-year program and we recommend that the full authorization of $5 million be granted. Anadromous fish, moving from fresh water to salt water and back, offer both sport and commercial fishing opportunities and there is widespread interest and support for getting this new program off to an early start.

The Bureau of the Budget slashed the proposed appropriation from the emergency waterfowl wetlands acquisition loan fund from $7.5 million in the current year to $6 million for fiscal 1967. The Bureau has demonstrated an ability to obligate more than the $14 million available in 1966, through the loan program and the sale of duck stamps. Certainly, no less should be allocated for fiscal 1967. Since this program is financed from duck stamp receipts, it should not be subject to a curtailment resulting from the Vietnam conflict. Such large-scale acquisition programs take time to get geared up and should not be subject to large fluctuations in appropriations. In fact, in our opinion the acquisition program must be extended if the 7-year, $105 million goal of acquiring 2½ million acres of wetlands is to be realized. Thus far, only one-quarter of the goal has been acquired. We recommend this appropriation be restored to the $7.5 million the subcommittee saw fit to allow last year.

We are pleased that the 1967 budget includes $1,100,000 for construction of a general-purpose laboratory-office at the Patuxent Wildlife Research Center in Laurel, Md. However, we are distressed that no money is proposed for construction of the new marine gamefish research laboratories at Port Aransas, Tex., and Panama City, Fla. The oceans must provide more sport fishing opportunities to meet rising demands and the research facilities are badly needed. We recommend that $1.5 million be allowed for each. We also are concerned that only $88,000 is being requested for operation of the Marine Game Fish Laboratory at Tiburon, Calif., whereas that at Sandy Hook, N.J., is proposed for $464,000. The Tiburon Laboratory is investigating the critical long-line fishing problem on the high seas and information is vital if the United States is to make a proper representation on behalf of fisheries conservation in international conferences. We hope that at least $400,000 more can be allocated to the Tiburon facility.

We are pleased that the item of "Wildlife Services" is being increased by $120,000 to allow for a new program of wildlife enhancement. This program should complement the successful fishery management services program, enhancing wildlife conditions on Federal areas.

Two other subjects merit attention of the subcommittee.

First, we hope that $50,000 can be allowed to open a new cooperative wildlife research unit at Washington State University. The establishment of this unit has the solid backing of State agencies and conservation organizations, as well as the university. Wildlife resources have unique habitat conditions in Washington and Oregon and research is vital for the proper management of them.

Second, we are hopeful that the subcommittee can allocate funds to begin construction of phase B of the Willamette River fish ladders at Oregon City, Oreg. The contract for phase A now has been let, we understand, and the construction of phase B is necessary if the full potential benefits are realized. This construction, of course, is a cooperative effort involving the Oregon State Fish Commission and segments of private industry as well as the Interior Department.

Bureau of Outdoor Recreation

The National Wildlife Federation would like to express its approval of the proposal to allocate $110 million from the land and water conservation fund. We believe the distribution of $64,440,000 to the States on a matching basis is a fair and equitable distribution. Private conservation organizations are cooperating with Federal and State governmental agencies in promoting the sale of the recreational admittance and user fee recreational program. We believe the acquisitions proposed for the Park Service are necessary and desirable to make the maximum use of Federal funds in an escalating market. The acquisitions by the Forest Service from this fund are mostly (95 percent) in the East and entirely within boundaries of existing national forests. We are confident that the endangered species program soon will be authorized and hope that the funds requested for the Bureau of Sport Fisheries and Wildlife are granted.

National Park Service

Mr. Chairman, the National Wildlife Federation is concerned that appropriations for planning and investigations are not keeping pace with the demand for information. New emphasis which has been placed on natural beauty, outdoor recreation, and on adding suitable areas to the National Park System is placing a tremendous workload on Park Service personnel who study and plan. Even with a modest proposed increase, the Park Service would have only a fraction of the staff necessary to keep abreast of deadlines. We urge that additional funds be granted for this activity, believing as much as $1 million should be spent in developing information the Congress will need to properly evaluate proposals for parks, monuments, scenic highways, seashores and lakeshores, recreation areas, etc.

We have been impressed by work of the Park Service to identify areas of importance, yet not of national significance. As a result, we are pleased that the budget proposes an increase of $61,700 to finance the National Registry of Landmarks and hope the subcommittee will allow the funds. We also recommend that $157,100 be allowed to continue the historic American building survey at the same level as during fiscal 1966.

Finally, it is good to know of State and local agreement, particularly in Maryland, to plans of the Park Service to extend the George Washington Parkway. We urge that the budget request of $6.1 million be allowed.

Bureau of Commercial Fisheries

The National Wildlife Federation is pleased that the proposed budget contains requests for additional research. We particularly welcome the added emphasis on the effects of pesticides on commercial fisheries and on studies of the California anchovy.

Bureau of Land Management

As we see it, Mr. Chairman, the major need for the BLM is to carry out its function of serving a publicwide national interest, rather than a regional special

interest. This need can be filled through larger appropriations and manpower for two related functions: wildlife habitat development and human recreation in a broad scope, from picnicking and camping to lengthy trails. Certainly the traditional activity on range could use more funds. Greater sums are necessary in watershed management, and more cash could be applied in forest management. However, all of these tie directly into wildlife habitat work and, to a lesser extent, into recreational development, with more access to publicly owned lands. We would recommend that at least $1 million be allocated here.

This Bureau, with its newly broadened outlook and congressional authority for multiple use, can only achieve this service for a national public by investing more cash and manpower in these two great national demands for recreation and wildlife habitat. A primary step, of course, is land classification—a function BLM is now performing with limited funds. We also recommend additional money and manpower to speed up this basic analysis work.

FOREST SERVICE

Mr. Chairman, wildlife people believe that wildlife habitat research performed by the Forest Service in the West, particularly California, needs to be increased. Range and other conditions for the interstate deer herd, for example, should be improved and management must be based on sound knowledge gained through research. We urge that an additional $200,000 be allowed for fish and wildlife habitat research in California. Part of these funds well could be used for a coordinator to correlate all research work by Federal and State agencies in this field. By disseminating such information, a coordinator could expedite wildlife habitat research for the benefit of all agencies concerned.

We are intrigued by a recent report which should be considered in conjunction with the proposed budget for the Forest Service. This agency, working with the Bureau of Sport Fisheries and Wildlife and the Minnesota Department of Conservation, has developed information showing that wetlands of the Chippewa National Forest is of major importance for waterfowl production. The report shows that 50,000 acres of wetlands can be improved for waterfowl at a cost of $1.3 million, or a figure much less than the cost for developing comparable areas elsewhere. Since the budget for "Wildlife Habitat Management" essentially is unchanged, we recommend that funds be allowed to intiate this fine development program in the Chippewa Forest. This information was not available when the budget was prepared and the request for additional funds is valid.

Finally, we are extremely heartened at the increase proposed for acquisition of lands under the Weeks Act. We believe that the Red Bird purchase unit, even thought now in a depleted condition, will become a valued addition to the Cumberland National Forest in Kentucky and we urge allocation of the necessary funds.

In conclusion, Mr. Chairman, we should make one additional observation. We are hopeful that the new Federal Water Pollution Control Administration will not be left in "limbo" due to a reorganization. If appropriations for that agency are to be considered in conjunction with the Interior budget rather than Health, Education, and Welfare, we wish to state our general concurrence with the proposed allocation of funds. We are in accord with the overall increases for construction grants as well as those for program grants, research, training, and demonstrations and for direct operations.

Thank you for the opportunity of making these observations.

LETTER FROM THE NATIONAL WILDLIFE FEDERATION

March 18, 1966.

Hon. CARL HAYDEN,
Chairman, Subcommittee on Interior and Related Agencies,
Senate Committee on Appropriations,
Washington, D.C.

DEAR MR. CHAIRMAN: The National Wildlife Federation would like to supplement our statement of March 16, 1966, relative to appropriations for the Department of the Interior, with one additional comment.

While attending the North American Wildlife and Natural Resources Conference in Pittsburgh, Pa., earlier this week, we learned additional details about a crisis in the valuable salmon and steelhead fishery in the Pacific North-

west. Information revealed at the conference shows that great losses of these migratory fishes have occured between the lower Columbia River and the lower Snake River. In fact, the summer chinook season was closed in the whole Columbia Basin in 1965 and, for the first time in history, salmon fishing was suspended in Idaho.

While some of the causative factors in the fishery decline are apparent, many others are unknown. It is necessary that all of the factors be known, and solutions to the problems developed, or a multimillion-dollar ($50 million annually estimated) asset will be lost. Fishery experts recommend implementation of an emergency research program which has been begun. It is our understanding that the Department urgently needs $362,000 for fiscal 1967 to continue the studies. We are hopeful that the subcommittee can see fit to grant these funds.

Thank you for the opportunity of making these observations.

Sincerely,

THOMAS L. KIMBALL,
Executive Director.

STATEMENT OF WILDLIFE MANAGEMENT INSTITUTE

I am C. R. Gutermuth, vice president of the Wildlife Management Institute, with headquarters in Washington, D.C. The institute is one of the older national conservation organizations, and its program has been dedicated to the restoration and improved management of renewable natural resources in the public interest for more than 50 years.

The institute wishes to comment on budget items for the Bureau of Sport Fisheries and Wildlife, Bureau of Outdoor Recreation, Bureau of Land Management, National Park Service, and the U.S. Forest Service. My comments will be brief and to the point, in order to conserve the committee's time. I hope, however, that the brevity is not construed to mean that the various appropriations items are not of interest to conservationists. The institute wishes to associate itself with the comments of other national conservation organizations as they pertain to items not mentioned in this statement.

BUREAU OF SPORT FISHERIES AND WILDLIFE

Conservationists are disturbed by the proposed $1.5 million reduction in the migratory bird conservation account for the purchase of wetlands and other habitat necessary for the preservation of migratory waterfowl. A summary of the pertinent facts makes the reason for this clear. Public Law 87-383, which responded to an urgent need to spare wetlands needed by waterfowl from drainage and destruction, authorized the advance appropriation of $105 million over a 7-year period. The advance is to be repaid at the rate of 75 percent of the annual revenues from the sale of duck stamps beginning in fiscal year 1969. Appropriations made thus far under the act have fallen short of program schedules, and the acquisition and leasing of wetlands has lagged seriously.

The $6 million suggested by the Bureau of the Budget for next year would make a total of $38.5 million appropriated for the program so far. This is slightly more than 50 percent of the $75 million that should have been provided during the same period in order to meet program plans. Conservationists urge the committee to provide at least $7.5 million for the advance to the migratory bird conservation account, the same amount that was appropriated last year. Certainly, it would be a waste of the time and talent of the Bureau's field crews to cause them to function at less than their peak efficiency. Land costs increase yearly, and the delay in providing funds, plus the $105 million ceiling limitation, means that fewer acres of wetlands are going to be preserved than originally contemplated.

Conservationists support the appropriation of $1,514,000 from the land and water conservation fund, which would be transferred from the Bureau of Outdoor Recreation for the purposes of the Bureau of Sport Fisheries and Wildlife's rare and endangered wildlife species and recreation programs. The money would be used to acquire a nucleus refuge area for the rare Florida sandhill crane and for the acquisition minimum of recreation facilities at nine wildlife refuges and fish hatcheries.

It is not believed that the $17.17 million shown under the Federal aid in wildlife restoration program is realistic. This is a receipt-limitation item, and the excise tax collections which fund this program reached an all-time high last year, exceeding the $20-plus million collected the previous year. The long-time, highly successful Federal aid in wildlife restoration program contributes to worthwhile wildlife restoration projects in every State through matching grants to the State fish and game departments. It is hoped that the committee will make clear that no arbitrary limitation suddenly is going to be imposed on this essential program. Such limitation would be contrary to the long administrative and operational procedure of the program, and I can assure the committee that the States, through their Governors, legislatures, and others, would react strongly to a suggestion of this kind.

A final comment on the Bureau of Sport Fisheries and Wildlife's appropriations is directed to the cooperative wildlife research unit program, which is administered through the Bureau's Division of Wildlife Research. This widely respected program was begun in 1935, and there now are 18 units located at land-grant universities and colleges. Each unit receives financial support from the State fish and wildlife agency, the land-grant university, the Bureau of Sport Fisheries and Wildlife, and the Wildlife Management Institute.

Units are located at universities in 11 of the States represented by members of the full committee. I will not attempt to detail the progress that has been made under the unit program. Its history and its successes are highlighted in the attached brochure. I want to spend the little time available to me in describing the problem that has developed. Briefly stated, it is that the State support has increased from the original minimum of $12,000 per unit to the present average of about $40,000 a year. This overshadows the Federal Government's contribution, mainly the salary and travel expenses of the unit leader, a Federal employee, which is about $15,000 per unit per year now.

In contrast, the parallel cooperative fishery research unit program, begun in 1961 and patterned after the highly successful wildlife units, is receiving $40,000 yearly in Federal financial support for each of the 20 units.

Many of the fishery units are located at the same universities and colleges as the wildlife units, and this tremendous disparity in Federal support is obvious. I might say parenthetically that the reason for this different level of support is lost upon the professional fish and wildlife community. This shortage of funds retards the graduate-level education and research mission of the unit program. Without assistance, the unit leader is forced to devote much of his time to routine administrative details.

Increased Federal financial support for the wildlife units was recommended by the International Association of Game, Fish, and Conservation Commissioners in annual meeting at Portland, Oreg., on September 21 of last year. I will not read the resolution, but it appears below:

"RESOLUTION NO. — WILDLIFE RESEARCH UNIT FUNDING AND STAFFING

"Whereas the wildlife research units were first established in 1935 and since that time have contributed significantly to wildlife research, wildlife management, and the training of professional personnel; and

"Whereas the fishery research units were first established in 1961 and were patterned in most respects after the successful wildlife research units; and

"Whereas the fishery research units have been staffed with assistant leaders who are Federal employees, and provided with several thousand dollars in operating funds annually; and

"Whereas the wildlife research units have not been staffed with assistant leaders who are Federal employes, nor provided adequate operating funds: Now, therefore, be it

"*Resolved*, That the International Association of Game, Fish, and Conservation Commissioners urges the U.S. Fish and Wildlife Service to include in its budget request adequate Federal financing for the wildlife research units, so as to provide staffing and operating funds equal to those of the fishery research units."

The committee is urged to approve an increase in the appropriations for the cooperative wildlife research unit program. If the committee decides it is

inadvisable to appropriate the full amount that would be required, i.e., $540,000 (18 units at $30,000 each) we would suggest that this goal be attained over the next 2 to 3 years, with the units carrying the biggest workload in terms of students and cooperative projects considered first. Some of those burdened units are in Arizona, Maine, Montana, and Missouri.

Bureau of Outdoor Recreation

Conservationists support the budget requests for this agency. We believe that BOR must have the additional funds and positions it seeks, if that agency is to do anywhere near the kind of job that is expected of it. We wish to point out, however, that appropriation authorizations for seashores, recreation areas, parks, and other projects approved by Congress exceed by far estimated revenues to the land and water conservation fund over the next 4 to 5 years. The act authorizes an advance appropriation of $480 million, beginning July 1, 1967, and we urge the committee to put the Congress and the administration on notice that this advance must be appropriated promptly in order to get this most meaningful program more fully operational.

Bureau of Land Management

Many things could be said about the inadequacy of the suggested level of appropriations for this agency, ranging from the next fiscal year well back into the past. For some reason, successive administrations and Congresses appear unable to grasp the fact that this agency, with its hundreds of millions of acres, vast mineral leasing, grazing, timber, and other resources, is one of the foremost producers of revenue for the Treasury. Returns to the Treasury historically have exceeded administrative and operation costs manifold. A traditionally extractive philosophy has guided the program of this agency, unfortunately. That is, the Federal Government willingly abets the constant diminution of the capital assets represented by these hundreds of millions of acres of public lands by making only a token effort to provide for their replenishment and provident management. Even though the BLM is a major natural resources agency, one-third or less of its 3,700 employees actually are engaged in resources management activities. The remainder are engaged largely in programs to dispose of the resources.

For the 465 million acres of public land it administers, BLM has 15 trained wildlife personnel. That is 1 man for every 35 million acres. In the Western States, excluding Alaska, in which there are about 180 million acres of public lands, BLM lands yield about one-third of all the deer bagged by hunters and two-thirds of the antelope. BLM lands represent almost entirely the available range for the rare desert bighorn sheep, the Sonoran antelope, and the tule elk. Hunting and fishing generate about $700 million in sportsmen's expenditures in the public lands States.

To conduct its wildlife program, BLM receives $420,000 which figures out at approximately 0.0009 cent per acre for wildlife habitat development and management. BLM has 60 land districts, but there are only 2 wildlife men in the field, the rest are in the State and central offices. There is an acute need for at least one man in each district.

Conservationists ask that the committee provide an additional $690,000 for the essential wildlife program, which would be adequate for the planning, supervision, and management of needed wildlife projects and for 23 man-years of permanent employment in fiscal year 1967.

U.S. Forest Service

We support the recommended amendment of the Appropriations Act, under "Administrative provisions, Forest Service," that would rescind the requirement that land acquisitions be approved by the local government. As has been shown in the case of the proposed Sylvania Tract in Michigan, a most meritorious project can be frustrated by this requirement despite widespread favor in the county, among State officials, and in the congressional delegation.

JUSTIFICATIONS SUBMITTED PURSUANT TO SENATE DOCUMENT NO. 86, APRIL 13, 1966

Geological Survey

SURVEYS, INVESTIGATIONS, AND RESEARCH

An additional amount of $10,300,000 for fiscal year 1967 is requested to accelerate the programs of the Department of the Interior devoted to the exploration, discovery, and production technologies of heavy metals in short supply.

This request includes $6,600,000 for the exploration and discovery programs of the Geological Survey. The production technology is provided for in the request for the Bureau of Mines.

The increased needs for these metals by both industry and Government has placed heavy demands on our known mineral reserves. Improved knowledge of geochemical distribution and new techniques of identification now make possible the location of resources hitherto unrecognized or concealed. With research, new mining and metallurgical technologies can be applied to currently uneconomical deposits. It is necessary at this time to expand our mineral reserves of heavy metals to meet growing requirements as well as to understand thoroughly the status of our resource base.

Program and financing

[In thousands of dollars]

	Request pending	Proposed amendment	Revised request
Program by activities:			
Direct program:			
2. Geologic and mineral resource surveys and mapping	18,793	6,450	25,243
8. General administration	1,948	150	2,098
All other activities—no change	53,974		53,974
Total direct program costs, funded	74,715	6,600	81,315
Reimbursable program:			
No change	42,654		42,654
Total program costs, funded	117,369	6,600	123,969
Change in selected resources	−211		−211
Total obligations	117,158	6,600	123,758
Financing:			
Receipts and reimbursements from:			
Administrative budget accounts (−)	−22,177		−22,177
Trust fund accounts (−)	−2,100		−2,100
Non-Federal sources (−)	−18,377		−18,377
Unobligated balance available, start of year (−)	−984		−984
Unobligated balance available, end of year	400		400
New obligational authority	73,920	6,600	80,520
Relation of obligations to expenditures:			
Total obligations	117,158	6,600	123,758
Receipts and other offsets	−42,654		−42,654
Obligations affecting expenditures	74,504	6,600	81,104
Obligated balance, start of year	14,061		14,061
Obligated balance, end of year (−)	−15,955	−1,900	−17,855
Expenditures	72,610	4,700	77,310

Object classification

[In thousands of dollars]

		Request pending	Proposed amendment	Revised request
Direct obligations:				
	Personnal compensation:			
11.1	Permanent positions	49,190	1,200	50,390
11.3	Positions other than permanent	2,110	100	2,210
11.5	Other personnel compensation	400		400
	Total personnel compensation	51,700	1,300	53,000
12.0	Personnel benefits	3,885	100	3,985
21.0	Travel and transportation of persons	3,019	385	3,404
22.0	Transportation of things	980	500	1,480
23.0	Rent, communications, and utilities	2,540	175	2,715
24.0	Printing and reproduction	1,255	60	1,315
25.1	Other services	3,372	3,315	6,687
25.2	Services of other agencies	510		510
26.0	Supplies and materials	3,475	100	3,575
31.0	Equipment	2,955	665	3,620
33.0	Investments and loans	800		800
42.0	Insurance claims and indemnities	15		15
95.0	Quarters and subsistence charges (−)	−2		−2
	Total direct obligations	74,504	6,600	81,104
	Total reimbursable obligations (no change)	42,654		42,654
99.0	Total obligations	117,158	6,600	123,758

Personnel summary

	Request pending	Proposed amendment	Revised request
Total number of permanent positions	8,491	173	8,664
Full-time equivalent of other positions	750	15	765
Average number of all employees	9,084	170	9,254

Bureau of Mines

CONSERVATION AND DEVELOPMENT OF MINERAL RESOURCES

An additional amount of $10,300,000 for fiscal year 1967 is requested to accelerate the programs of the Department of the Interior devoted to the exploration, discovery, and production technologies of heavy metals in short supply.

This request includes $3,700,000 for the production technology programs of the Bureau of Mines. The exploration and discovery programs are provided for in the request for the Geological Survey.

The increased needs for these metals by both industry and Government have placed heavy demands on our known mineral reserves. Improved knowledge of geochemical distribution and new techniques of identification now make possible the location of resources hitherto unrecognized or concealed. With research, new mining and metallurgical technologies can be applied to currently uneconomical deposits. It is necessary at this time to expand our mineral reserves of heavy metals to meet growing requirements as well as to understand thoroughly the status of our resource base.

Program and financing

[In thousands of dollars]

	Request pending, 1967	Proposed amendment, 1967	Revised request, 1967
Program by activities:			
Research:			
(d) Metallurgy	10,121	795	10,916
(e) Mining	3,085	1,281	4,366
(f) Marine mineral mining	235	1,258	1,493
Resource development:			
(b) Economic analysis	466	90	556
(f) Minerals	3,054	276	3,330
All other activities, no change	14,505		14,505
10 Total obligations	31,466	3,700	35,166
Financing:			
New obligational authority (appropriation)	31,466	3,700	35,166
Relation of obligations to expenditures:			
71 Total obligations (affecting expenditures)	31,466	3,700	35,166
72 Obligated balance, start of year	6,283		6,283
74 Obligated balance, end of year	−6,549	−400	−6,949
90 Expenditures	31,200	3,300	34,500

Object classification

[In thousands of dollars]

	Request pending, 1967	Proposed amendment, 1967	Revised request, 1967
Personnel compensation:			
11.1 Permanent positions	22,060	1,105	23,165
11.3 Positions other than permanent	660	63	723
11.5 Other personnel compensation	170		170
Total personnel compensation	22,890	1,168	24,058
12.0 Personnel benefits	1,750	86	1,836
21.0 Travel and transportation of persons	515	150	665
22.0 Transportation of things	140	29	169
23.0 Rent, communication, and utilities	1,100	45	1,145
24.0 Printing and reproduction	410	10	420
25.1 Other services	1,005	887	1,892
26.0 Supplies and materials	1,850	175	2,025
31.0 Equipment	1,700	1,150	2,850
32.0 Lands and structures	106		106
42.0 Insurance claims and indemnities	2		2
Subtotal	31,468	3,700	35,168
95.0 Quarters and subsistence charges	−2		−2
99.0 Total obligations	31,466	3,700	35,166

Personnel summary

	Request pending, 1967	Proposed amendments, 1967	Revised request, 1967
Total number of permanent positions	2,571	119	2,690
Full-time equivalent of other positions	100	10	110
Average number of all employees	2,610	111	2,721

AGENCY REQUESTS FOR AMENDMENTS TO HOUSE BILL

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., April 11, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Referring to your letter of April 6, 1966, there are submitted proposed adjustments in the Department of the Interior and related agencies appropriation bill for 1967 presented in the form of amendments with an explanatory statement covering each change recommended. The amendments refer to page and line numbers of the bill as reported by the House Committee on Appropriations.

We appreciate the opportunity to present to the committee recommendations for changes in the bill, which we consider essential to our operations. It is our desire to cooperate in every way in the consideration of these amendments.

Sincerely yours,

STEWART L. UDALL,
Secretary of the Interior.

BUREAU OF INDIAN AFFAIRS

EDUCATION AND WELFARE SERVICES

(House hearings, pt. I, pp. 240–268)

(Senate hearings, p. 261)

Appropriation, 1966	$107,048,000
Estimate	115,296,000
House allowance	114,475,000
Restoration requested	821,000

(P. 6, line 1)

Amendment requested:

Page 6, line 1 strike out "$114,475,000" and insert in lieu thereof "$115,296,000", the estimate, or an increase of $821,000 in the appropriation.

HOUSE REPORT

"The amount allowed by the committee by activity compared with the 1966 appropriation, and the estimate for 1967 is as follows: * * *.

"The amount allowed is $821,000 below the budget estimate. The net decrease consists of a reduction of $221,000 in the amount included in the estimate for increased pay costs for fiscal year 1966 positions; $400,000 of the increase requested for grants to Indian college students; and $200,000 of the increase requested to provide for additional trainees in vocational training.

"The reduction recommended by the committee pertaining to higher education is not intended as a desire to reduce or retard this program in any way. The committee fully endorses the encouragement of Indian youths to participate in the higher education programs and recommends the reduction solely on the basis that funds available for this activity, even after the reduction in the requested increase, will be adequate in fiscal year 1967 when other sources of financial assistance are taken into consideration * * *."

JUSTIFICATION

This amendment restores the reduction of $821,000 made by the House in the budget estimate. This amount is distributed to activities as follows:

Activity	Appropriation, 1966 [1]	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Educational assistance, facilities, and services	$76,075,000	$83,309,000	$82,709,000	$600,000
2. Welfare and guidance services	13,513,000	13,909,000	13,899,000	10,000
3. Relocation and adult vocational training	14,522,000	15,184,000	14,973,000	211,000
4. Maintaining law and order	2,938,000	2,894,000	2,894,000	
Total	107,048,000	115,296,000	114,475,000	821,000

[1] Includes pending pay act supplemental.

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$204,000
12	Personnel benefits	17,000
41	Grants, subsidies and contributions	600,000
	Total	821,000

The restoration of the $400,000 deleted by the House under the higher education program is requested so that the Bureau can assist an estimated 2,045 applicants for higher education grants at the rate of $1,075 per student.

If these funds are not restored the Bureau will be able to provide an average grant of only $880 for each applicant. This represents an amount $720 less than the national average cost of $1,600 per year for higher education. Our experience has led us to believe that inadequate financing plays a significant role in causing college dropouts.

The restoration of the $200,000 deleted by the House for adult vocational training and relocation will provide adult vocational training services to 51 new institutional trainees and 165 participants in on-the-job training. A recent survey of the backlog of applicants for adult vocational training revealed that there were 1,137 applications in process which could not be provided services in fiscal year 1966. The survey also showed an estimate of 4,072 application potential for fiscal year 1967 making a total desiring adult vocational training service of 5,209. The House allowance for fiscal year 1967 will service approximately 1,672 new institutional trainees and 2,335 participants in on-the-job training for a total of 4,007. This service estimate when subtracted from the applicant potential will still leave approximately 1,200 new applicants who cannot be furnished services during fiscal year 1967 thereby accumulating a further backlog of unserved applicants.

The restoration of the $221,000 deleted by the House for increased pay costs for fiscal year 1966 positions is also requested. To absorb any part of the funds needed for increased pay costs will result in a corresponding reduction in services provided.

RESOURCES MANAGEMENT

(House hearings, pt. 1, pp. 268–300)

(Senate hearings, p. 279)

Appropriation, 1966	$43,365,000
Estimate	44,611,000
House allowance	44,086,000
Restoration requested	625,000

(P. 6, line 13)

Amendment requested:

Page 6, line 13, strike out "$44,086,000" and insert in lieu thereof "$44,711,000" an increase of $625,000 in the appropriation.

HOUSE REPORT

"The decrease of $525,000 recommended by the committee consists of a reduction of $205,000 in the request for the increased pay costs for fiscal year 1966 positions, and a reduction of $320,000 in the request for maintenance of new facilities.

"The committee recommends that the agricultural extension program in Oklahoma be funded at a $100,000 level in 1967 with funds reprogramed from the mutual help and low-rent housing program."

JUSTIFICATION

This amendment restores the reduction of $525,000 made by the House in the budget estimate, and also restores $100,000 reprogramed from the mutual help and low-rent housing program to the agricultural extension program in Oklahoma. This amount is distributed to activities as follows.

Activity	Appropriation, 1966 [1]	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Forest and range lands	$5,278,000	$5,259,000	$5,224,000	$35,000
2. Fire suppression	140,000	140,000	140,000	
3. Agricultural and industrial assistance	7,343,000	7,636,000	7,592,000	144,000
4. Soil and moisture conservation	5,501,000	5,283,000	5,248,000	35,000
5. Maintenance of roads	3,804,000	3,891,000	3,887,000	4,000
6. Development of Indian arts and crafts	372,000	374,000	374,000	
7. Management of Indian trust property	6,903,000	6,829,000	6,780,000	49,000
8. Repair and maintenance of buildings and utilities	12,744,000	13,988,000	13,631,000	357,000
9. Operation, repair, and maintenance of Indian irrigation systems	1,280,000	1,211,000	1,210,000	1,000
Total	43,365,000	44,611,000	44,086,000	625,000

[1] Includes pending pay act supplemental.

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$440,000
12	Personnel benefits	41,000
26	Supplies and materials	144,000
	Total	625,000

Restoration of the $320,000 deleted by the House under the repair and maintenance of buildings and utilities activity is needed to repair and maintain newly constructed facilities at a level which the Bureau feels is necessary to protect the Federal investment in these facilities.

Restoration of the $100,000 deleted by the House in the mutual help and low-rent housing program is needed to provide construction superintendents at all of the locations programed for fiscal 1967. The reduction of $100,000 made by the House will eliminate seven construction superintendents and delay construction at seven locations.

Restoration of the $205,000 disallowed by the House for increased pay costs for fiscal year 1966 positions under this appropriation is requested. To absorb any part of the funds needed for increased pay costs would result in a corresponding reduction in service provided.

CONSTRUCTION

(House hearings, pt. I, p. 300–354)

(Senate hearings, pp. 315)

Appropriation, 1966	$35,151,000
Estimate, 1967	57,164,000
House allowance	55,325,000
Restoration requested	2,129,000

(P. 6, line 19)

Amendment requested:

Page 6, line 19, strike out "$55,325,000" and insert in lieu thereof "57,454,000", an increase of $2,129,000 in the appropriation.

HOUSE REPORT

"The committee, with the exception of fall-out shelters, recommends approval of the construction program proposed for fiscal year 1967. However, a reduction of $2,000,000 in the amount of funding is recommended based on anticipated slippage in the construction program.

"An additional $129,000 has been deleted for fall-out shelters planned for schools for which construction has been approved. The Committee does not see the need for this expenditure in the areas where it proposed.

"The committee recommends an increase of $100,000 for continued planning and design of a high school at Sisseton, S. Dak., and $25,000 for an elementary school at Peever, S. Dak., to serve students from the Sisseton Indian Reservation.

"The committee has also included the amount of $165,000 for the second phase of construction of Black Lake Dam, Mont.

"The committee is of the strong opinion that actual construction should be expedited to the fullest possible extent on the Eufaula Boarding School, Eufaula, Okla., for which $37,000 is included in the bill for planning. To the extent that construction work can be initiated on a practical basis during fiscal year 1967, the committee will be inclined to give favorable consideration to a proposal by the Bureau of Indian Affairs for the reprograming of funds in the amount of $75,000 to accomplish this purpose."

JUSTIFICATION

This amendment restores the reduction of $2,129,000 made by the House in the budget estimate for the appropriation, and adds $290,000 above the estimate for continued planning and design of a high school at Sisseton, S. Dak. ($100,000), for an elementary school at Peever, S. Dak. ($25,000), and for the second phase of construction of Black Lake Dam, Mont. ($165,000).

Activity	Appropriation, 1966	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Buildings and utilities	$23,141,000	$46,664,000	$44,660,000	$2,129,000
2. Irrigation systems	12,010,000	10,500,000	10,665,000	
Total	35,151,000	57,164,000	55,325,000	2,129,000

A breakdown of the restoration requested by object classification follows:

32 Lands and structures $2,129,000

It is requested that the reduction of $2 million in construction funding be restored so that the complete school construction program and advance planning program can proceed without delay. The planning of all of the major projects contained in the fiscal year 1967 budget request is proceeding rapidly and construction of all projects has been scheduled to start during the 1967 fiscal year. The advance planning funds provided in prior year appropriation acts has contributed most significantly to this scheduling. The committee in fiscal year 1966 directed that all major construction projects be planned in advance of a request for construction funds. The use of advance planning funds in fiscal year 1966 has permitted the Bureau to prepare working drawings and to iron out detail work, such as subsurface soil explorations, topographic surveying and mapping, water explorations, and the transfer of property all of which are necessary before construction can be started. To a large extent advance planning precludes the delays which have plagued the construction program in the past because of the discovery that there is inadequate water at a site or because site clearance could not be obtained. Advance planning has proven to be a very useful and desirable feature and restoration of the funds as requested will make it possible to continue this work. Less than full funding of the programs could result in the deferment of the construction of urgently needed facilities if the projects are ready for award during fiscal year 1967.

Restoration of $129,000 is requested to provide fallout shelters at six school locations which are enumerated in the fiscal year 1967 budget request. The inclusion of fallout shelters in our buildings will provide the children and employees of these schools with a protected area in the event of radioactive fallout. These shelters will be the only such areas available to these people.

GENERAL ADMINISTRATIVE EXPENSES

(House hearings, pt. 1, pp. 360–364)

(Senate hearings, p. 336)

Appropriation 1966	$4,623,000
Estimate 1967	4,677,000
House allowance	4,623,000
Restoration requested	54,000

(P. 7, line 19)

Amendment requested:

Page 7, line 19, strike out "$4,623,000" and insert in lieu thereof "$4,677,000," the estimate, or an increase of $54,000 in the appropriation.

HOUSE REPORT

"The committee has disallowed the requested increase of $54,000 to provide services of a resources management assistant and pay costs for 1966 positions. With the increase of $167,800 of administrative expenses to be charged to program activities, it is the opinion of the committee that the request of $54,000 for an additional direct appropriation can be absorbed."

JUSTIFICATION

This amendment restores the reduction of $54,000 made by the House in the budget estimate. The amount is distributed to activities as follows:

Activity	Appropriation 1966 [1]	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Departmental office	$1,351,300	$1,380,500	$1,351,300	$29,200
2. Field offices	3,271,700	3,296,500	3,271,700	24,800
Total	4,623,000	4,677,000	4,623,000	54,000

[1] Includes pending pay act supplemental.

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$49,700
12	Personnel benefits	4,300
	Total	54,000

The restoration of the requested increase of $54,000 in the general administrative expenses will provide the minimum expansion needed to service Bureau operating programs.

The $18,000 requested for implementing the President's new system of budgeting will require the application of scientific analysis and cost-control techniques to each of the Bureau's programs in establishing goals, priorities and in measuring accomplishments, over a long range period. The services of the proposed GS–15, resources planning assistant, are vital for the transition into this new system.

Because the general administrative expenses appropriation has not been increased in proportion to the expansion of the operating programs, the absorption of the requested $36,000 pay cost for 1966 positions will reduce services to these programs.

The total amount requested for the administrative program in 1967 is only 2.7 percent of the total funds requested for the entire Bureau.

BUREAU OF OUTDOOR RECREATION

LAND AND WATER CONSERVATION

(House hearings, pt. 1, pp. 410–542)

(Senate hearings, p. 453)

Appropriation, 1966	$125,000,000
Estimate	110,000,000
House allowance	110,000,000
Restoration requested	200,000

(P. 10, lines 20, 21, 23, 24; p. 11, line 2)

Amendments requested:

(1) Page 10, line 20, strike out "$110,000,000" and insert in lieu thereof "$110,200,000" an increase of $200,000 in the appropriation.

(2) Page 10, lines 20 and 21, strike out "$76,203,000" and insert in lieu thereof "$64,440,000" the estimate, or a decrease of $11,763,000 for assistance to States.

(3) Page 10, line 23, strike out "$17,971,500" and insert in lieu thereof "$28,516,000" an increase of $10,544,500 for the National Park Service.

(4) Page 10, line 24, strike out "$13,093,000" and insert in lieu thereof "$13,170,000" the estimate, or an increase of $77,000 for the Forest Service.

(5) Page 11, line 2, strike out "$172,500" and insert in lieu thereof "$1,514,000" the estimate, or an increase of $1,341,500 for the Bureau of Sport Fisheries and Wildlife.

HOUSE REPORT

"The committee recommends approval of the budget request of $110,000,000 with certain exceptions as follows:

Activity	Budget estimate	Committee bill, 1967	Change
1. Assistance to States	$64,440,000	$76,203,000	+$11,763,000
2. Federal land acquisition program:			
National Park Service, requirements for recently authorized areas:			
Delaware Water Gap National Recreation Area, Pa. and N.J.	4,000,000	4,000,000	
Piscataway Park, Md.	544,500		−544,500
Fire Island National Seashore, N.Y.	2,000,000	2,000,000	
Whiskeytown National Recreation Area, Calif.	1,425,000	1,425,000	
Assateague Island National Seashore, Md.	3,360,000	3,360,000	
Cape Cod National Seashore, Mass.	1,000,000	1,000,000	
Nez Perce National Historical Park, Idaho	440,000	440,000	
Hubbell Trading Post National Historic Site, Ariz.	312,500	312,500	
Great Falls (George Washington Memorial Parkway), Va.	1,000,000	1,000,000	
Herbert Hoover National Historic Site, Iowa	630,000	630,000	
Agate Fossil Beds National Monument, Nebr.	231,200	231,200	
Ozark National Scenic Riverways, Mo.	400,000	400,000	
Lake Mead National Recreation Area, Ariz.	142,000	142,000	
Canyonlands National Park, Utah	14,500	14,500	
Fort Scott National Historic Site, Kans.		200,000	+200,000
Subtotal, new areas	15,499,700	15,155,200	−344,500
Redwood National Park, Calif.	10,000,000		−10,000,000
Inholdings in 9 park areas	2,816,300	2,816,300	
Total, Park Service	28,316,000	17,971,500	−10,344,500
Forest Service:			
Wilderness areas	432,050	355,050	−77,000
Primitive areas	26,200	26,200	
Other recreation areas	12,711,750	12,711,750	
Total, Forest Service	13,170,000	13,093,000	−77,000
Bureau of Sport Fisheries and Wildlife:			
Endangered species: Florida sandhill crane	1,335,000		−1,335,000
Recreation areas	179,000	172,500	−6,500
Total, Bureau of Sport Fisheries and Wildlife	1,514,000	172,500	−1,341,500
Total, Federal program	43,000,000	31,237,000	−11,763,000
Administrative expenses	2,560,000	2,560,000	
Total, 1967	110,000,000	110,000,000	

"*National Park Service*

"The reduction of $10,544,500 in the Federal land acquisition program of the National Park Service consists of the following:

"1. Redwood National Park, Calif.	−$10,000,000
"2. Piscataway Park, Md.	−544,500
"Total	−10,544,500

"The action of the committee in recommending the reduction of $10 million for the Redwood National Park is not to be construed as an indication by the committee of its disapproval of the proposal for the establishment of this park. The reduction is recommended at this time solely on the basis that authorization for the establishment of this park has not yet been enacted, and it is not the policy of this committee to appropriate funds for such projects until adequate legislation has been enacted in connection therewith.

"Likewise, the committee's action in recommending the reduction of $544,500 for land acquisition in Piscataway Park, Md., does not necessarily indicate the committee's oposition to this proposal. Proposed legislation is now pending which if enacted would increase the ceiling on the appropriation of funds for this project. The committee is of the opinion that in those instances where legislation is pending on certain land acquisition projects, the appropriation of funds should not precede the policy guidelines to be established by the authorizing committee.

"The committee has approved an increase of $200,000 for the acquisition of land at Fort Scott National Historical Site, Kans.

"Forest Service

"The recommended reduction of $77,000 in the land acquisition program of the Forest Service relates to a tract proposed for acquisition in the Selway-Bitterroot Wilderness Area in Idaho. The committee is not convinced that the acquisition of this land which includes relatively high improvement costs is practical or necessary at this time.

"The committee notes that the Forest Service has not succeeded in purchasing the Sylvania tract in the Ottawa National Forest. Should efforts to purchase this tract not reach a successful stage before July 1, 1966, the committee will expect the Bureau of Outdoor Recreation to reprogram the funds previously planned for Sylvania to the purchase of other tracts by the Forest Service. The committee will then expect negotiations for the purchase of Sylvania to proceed with funds herein appropriated.

"Bureau of Sport Fisheries and Wildlife

"The committee recommends deletion of $1,335,000 requested by the Bureau of Sport Fisheries and Wildlife for the acquisition of 7,040 acres for a sand-hill crane refuge in Florida; and $6,500 for the Willapa tract in Washington.

"Testimony developed during the hearing indicated these cranes are now using about 25 percent of a 145,000-acre refuge in the Loxahatchee National Wildlife Refuge in Louisiana. The estimated population of the sand-hill crane, according to testimony in the hearings, is somewhere between 700 and 2,000.

"Information developed by the committee indicated that the appraised value of the acreage in the Willapa tract was considerably in excess of what the actual value of this land should be. Therefore the committee has deleted this acreage pending a reappraisal of the actual value of the land and the actual need for the acquisition of this tract.

"LAND AND WATER CONSERVATION FUND POLICY

"With respect to the Bureau of Outdoor Recreation's consideration of acquisition proposals by the Federal agencies, the committee expects the Bureau to pay particular attention to tracts that have a high cost per acre or substantial costs for improvements. The committee further expects first priority to be given to Federal acquisitions which will implement recent authorizations of the Congress and lower priority to acquisitions of lands within existing units of the National Park Service.

"ADMINISTRATIVE PERSONNEL

"The committee is of the opinion that an improper balance exists between positions and funds in the administrative expense activity of the land and water conservation fund. It is the view of the committee that the Bureau should reduce the amount of work proposed to be performed by contract, and employ approximately 35 employees over and above the number provided in the budget estimate to administer the expected volume of work. No increase would be required to accomplish this."

JUSTIFICATION

General statement

Both the States and the Federal agencies need additional funds to provide recreation resources but since revenues to the fund are not expected to exceed the total amount appropriated there must be a proper balance in the distribution of the funds between State and Federal agencies.

The Land and Water Conservation Fund Act of 1965 provides that in the absence of a provision to the contrary in the appropriations act, appropriations shall be distributed 60 percent to States and 40 percent to Federal agencies. It was on a 60–40 basis that the budget was submitted to Congress since this ratio appeared to provide funds for meeting the most pressing needs of both the State and Federal agencies. The House Appropriations Committee elected to change the ratio by shifting over $11 million from Federal to State purposes.

It should be emphasized that funds are urgently needed to acquire recently authorized Federal recreation areas that will serve visitors from all over the Nation. It will be impossible to provide new areas with a disproportionate amount of funds going to the States.

The importance of providing adequate funds for Federal land acquisitions is readily apparent when consideration is given to the amount of funds needed to complete land acquisitions on some of the major recreation areas recently authorized. For example, the seven recently authorized areas listed below will require almost $100 million in the next several years in order to complete land acquisition at the present value of the dollar:

Delaware Water Gap	$33, 162, 000
Fire Island National Seashore	12, 900, 000
Whiskeytown National Recreation Area	20, 175, 000
Assateague Island National Seashore	12, 790, 000
Cape Cod National Seashore	11, 000, 000
Virgin Island National Park	5, 600, 000
Lake Mead National Recreation Area	3, 500, 000

At the rate land prices are escalating, which the House committee so forcefully comments upon, ultimate acquisition costs will be substantially higher than present cost estimates shown above.

It is, therefore, urged that the Federal funds be restored for reasons set forth in subsequent paragraphs.

The House committee report in regard to the administration of the land and water conservation fund program contains the following comments:

"The committee directs the Bureau of Outdoor Recreation to initiate an effective system of audits and inspections on State acquisition and development projects."

The Department shares the committee's view that adequate audit and inspection systems are a vital part of grant administration. To provide adequate audit coverage of our several major grant programs in an economical efficient manner, the Department has moved to consolidate grant auditing in the Office of the Secretary. This plan will be fully implemented in fiscal year 1967. The audit program will be responsive to the audit needs of the Bureau of Outdoor Recreation and is closely coordinated with Bureau management. As a matter of fact, audits pertinent to the land and water conservation fund have already been initiated and reports thereon are in process.

The audit activity will concern itself essentially with grantee compliance as to costs and general financial requirements as well as other regulatory aspects.

The professional staff of the Bureau of Outdoor Recreation will make on-site inspections of the substantive content of State and local activity financed with Federal funds. The inspection will center upon program as distinguished from financial and regulatory aspects.

In combination, the objective audit disclosures and the continuing scrutiny by responsible program managers will provide assurance that Federal objectives are being achieved.

The proposed amendments to the House allowance are distributed as follows:

Activity	Appropriation, 1966	Budget estimate, 1967	House allowance, 1967	Restoration requested
(a) Assistance to States	$84, 377, 000	$64, 440, 000	$76, 203, 000	−$11, 763, 000
(b) Federal programs	39, 183, 000	43, 000, 000	31, 237, 000	+11, 963, 000
(c) Administrative expenses	1, 440, 000	2, 560, 000	2, 560, 000	
Total	125, 000, 000	110, 000, 000	110, 000, 000	+200, 000

A breakdown of the restoration request by objects of expenditure follows:

11.0	Personnel compensation	$69,500
12.0	Personnel benefits	5,000
21.0	Travel and transportation of persons	5,000
22.0	Transportation of things	1,000
25.1	Other services	1,000
25.2	Services of other agencies	1,000
26.0	Supplies and materials	2,000
31.0	Equipment	1,000
32.0	Lands and structures	11,877,500
41.0	Grants, subsidies, and contributions	−11,763,000
	Total	200,000

Explanation of amendment (1).—This amendment adds $200,000 above the total budget estimate to finance the land acquisition costs at Fort Scott National Historic Site, Kansas, which project was added by the House.

Explanation of amendment (2).—This amendment reduces the allowance for assistance to States by $11,763,000 which is the same amount the House deducted from the total budget estimate for Federal land acquisition.

Explanation of amendment (3).—This amendment restores the net reduction of $10,344,500 made by the House in connection with the National Park Service program for Redwood National Park, Calif., and Piscatway Park, Maryland, and adds $200,000 above the budget estimate to finance the land acquisition costs at Fort Scott National Historic Site, Kansas, which item was added to the budget estimates by the House.

PROPOSED REDWOOD NATIONAL PARK

Restoration is strongly recommended of the item of $10 million included in the 1967 budget request for acquiring lands for purposes of the proposed Redwood National Park, Calif. There is extreme urgency to start acquisition of the land as soon as the park is authorized to assure that the residual old growth redwoods on the lands will not be cut prior to acquisition. The annual harvesting rate of about 32 million board feet within the proposed park boundaries makes early acquisition essential if the redwoods are to be saved.

The redwood is the earth's tallest living tree, commonly growing more than 200 feet high and occasionally more than 300 feet. The inspirational quality of virgin stands of these age-old giants in natural settings constitute some of the most extraordinary scenery in the world.

S. 2962 and H.R. 11705 now pending consideration of the Congress would authorize establishment of the Redwood National Park, including acquisition of necessary lands. It is possible that final action on the 1967 appropriation bill will be taken by the Congress prior to enactment of the proposed legislation. Experience has shown that when a new park is authorized and there are no appropriated funds to proceed with immediate acquisition, speculation starts and the land values soar. This would result in added costs of acquisition which were not taken into consideration at the time the original estimates, included in the proposed legislation, were prepared.

The Senate is urged to restore $10 million for the redwood acquisition. A limiting provision could be inserted in the appropriation language authorizing the use of these funds only if S. 2962 or similar legislation is enacted.

The principal reason that the request for appropriation before authorization was included in the budget was to demonstrate and express as strongly as possible the concern of the administration about the indiscriminate destruction of the redwoods.

With the passage of the redwoods authorization, action could be taken immediately to start acquisition. The appropriation procedure is such that at least 3 to 6 months would elapse between the time of authorization and such time as funds could be appropriated. Even this relatively short period of delay would give further opportunity for cutting of the redwoods and for land price escalation.

Should the Senate not wish to restore the redwood funds, it is urged that financing be provided to acquire those lands which were held in abeyance so that the redwoods could be included in the budget. These items appear on page 497 of the Senate hearings and are listed below:

Land acquisition program, 1967, held in abeyance to provide for Redwood National Park

State and management unit	Forest Service	National Park Service
Alabama: National forests	$19,000	
Arkansas:		
Ouachita National Forest	108,743	
Ozark National Forest	92,000	
Total, Arkansas	200,743	
Arizona: Tonto National Forest	680,000	
California: Whiskeytown-Shasta-Trinity National Recreation Area	250,000	
Georgia: National forests	447,700	
Idaho: Targhee National Forest	34,500	
Illinois: Shawnee National Forest	251,460	
Indiana: Hoosier National Forest	174,123	
Kentucky: Cumberland National Forest	241,500	
Maryland: Assateague Island National Seashore		$500,000
Massachusetts: Minute Man National Historic Park		500,000
Michigan:		
Hiawatha National Forest	245,496	
Huron-Manistee National Forest	77,150	
Ottawa National Forest	3,600	
Total, Michigan	326,246	
Minnesota:		
Chippewa National Forest	52,500	
Superior National Forest	115,136	
Total, Minnesota	167,636	
Mississippi: National forests	99,500	
Missouri:		
Clark National Forest	148,925	
Mark Twain National Forest	527,293	
Total, Missouri	676,218	
New Jersey: Delaware Water Gap National Recreation Area		2,339,500
New York: Fire Island National Seashore		1,000,000
Ohio: Wayne National Forest	252,735	
Pennsylvania: Allegheny National Forest	357,500	
Tennessee: Cherokee National Forest	392,935	
Utah: Zion National Park		141,700
Virginia:		
Jefferson National Forest	66,340	
Mount Rogers National Recreation Area	45,180	
Total, Virginia	111,520	
Washington: Okanogan National Forest	23,000	
West Virginia:		
Monongahela	98,285	
Spruce Knob-Seneca Rocks National Recreation Area	195,399	
Total, West Virginia	293,684	
Wyoming: Grand Teton National Park		518,800
Grand total, all States	5,000,000	5,000,000

PISCATAWAY PARK

The Department strongly urges restoration of the item $544,500 included in the 1967 budget request for acquisition of lands in Piscataway Park, Md. We believe that any further delay in acquiring land for this vital area can result only in serious—and perhaps permanent—impairment of the administration's efforts to preserve the present magnificent view from Mount Vernon.

The donation of 151 acres of fee land and of many of the scenic easements are conditioned upon the acquisition by the Federal Government prior to the fall of 1967 of lands necessary for the establishment of the park. To complete the necessary action on this before this fast approaching date would, even now, put a strain on the National Park Service to meet such a tight schedule. Delaying all action until the passage of amendatory legislation raising the statutory ceiling and the appropriation of funds thereunder could well impose an impossible deadline on the land acquisition process.

The Department is cognizant of the House committee's views with regard to awaiting completion of action on the pending legislation concerning this park. However, the near emergency conditions presently existing make it imperative that the remainder of the money presently authorized be made available immediately.

With this money we would expect to buy the Howe estate property, acquisition of which at this time is feasible since representatives of the owners indicate a willingness to dispose of the property now and settle the estate. Delay and possible change of ownership could well place this property beyond economical purchase.

Explanation of amendment (4).—This amendment restores the reduction of $77,000 made by the House in the Forest Service program for land acquisition costs in the Selway-Bitterroot wilderness area in Idaho.

The concern of the House committee, as reflected on page 4 of House Report No. 1405, about escalating land prices is greatly appreciated. The Selway-Bitterroot wilderness area in Idaho contains only 1,269 acres of private lands on Selway River and its tributary, Moose Creek. All but 160 acres are used as a part of commercial operations that are incompatible with wilderness management (Public Law 88-577).

The acquisition funds requested in the budget estimates are to continue purchase on a systematic basis of the above lands. Every year's delay means higher costs. For example, the owner of the tract involved in the $77,000 reduction plans to subdivide the property into smaller home lots. This could mean dealing with 40 to 50 owners instead of one.

Explanation of amendment (5).—This amendment restores the reduction of $1,341,500 made by the House in the Bureau of Sport Fisheries and Wildlife program for the acquisition of 7,040 acres in Florida for a Sandhill Crane refuge, and for the Willapa tract in Washington.

FLORIDA SANDHILL CRANE

Due to the great influx of people to Florida along with the accompanying developments such as roads, drainage, urban developments, powerlines, rights-of-way, etc., many of the former wild acres have been and are now being converted to purposes of our civilization. Many lakes, marshes, and swamps have been drained and many miles of coastal bays and inlands have been dredged.

The Florida sandhill crane population has been significantly affected. In 1965 best estimates place the population at less than 2,000 birds. Their numbers are gradually declining as their habitat disappears and unless a sizable acreage of suitable habitat is preserved for the cranes their continued existence will be imperiled.

None of the national wildlife refuges in Florida has been or can be developed specifically for the Florida sandhill crane. The 145,000-acre Loxahatchee National Wildlife Refuge in Florida is used by about 20 to 30 nesting pairs. The nests of these 20 to 30 pairs are scattered over approximately 25 percent of the entire refuge. The Florida sandhill cranes nest in shallow marsh areas in situations where their nest will be over water. Water levels in the Loxahatchee National Wildlife Refuge cannot be controlled and are subjected to rather drastic fluctuations which prevents any extensive nesting within the refuge or for that matter any extensive use of the area.

A sandhill crane sanctuary in Florida is required. Key habitat must be reserved now to insure preservation of the crane. Undoubtedly in a few more years, with the continued change in land use, it will be too late. An area of adequate size in known sandhill crane territory where water levels can be maintained through times of drought must be acquired and placed in public ownership as a permanent refuge. Substantial benefits to the people of this country will result from a refuge for the Florida sandhill crane. The opportunity to visit it and observe the unusual association of plant and animal life as well as the possibility of actually seeing the Florida sandhill cranes will be increasingly valued as areas of this type continue to disappear at their present rapid rate. People of the future should not be denied this opportunity.

An area of 7,040 acres in southeastern De Soto County, Fla., has excellent values for the Florida sandhill crane. It has the potential for providing all of their habitat requirements, including shallow marshes that are the key to the maintenance of and increasing the crane populations. If not acquired at an early date, it could be developed for other purposes and would contribute nothing to the preservation of the threatened Florida sandhill crane.

WILLAPA REFUGE

A reappraisal of the land values and need for the 19-acre recreational area at the Willapa Refuge in Washington will be made.

Geological Survey

Surveys, Investigations, and Research

(House hearings, pp. 70–221) (Senate hearings, p. 573)

Appropriation 1966	$73, 190, 870
Estimate	73, 920, 000
House allowance	72, 782, 000
Restoration requested	1, 138, 000

(P. 15, lines 8 and 9)

Amendments requested:

(1) Page 15, line 8, strike out "$72,782,000" and insert in lieu thereof "$73,-920,000", the estimate, or an increase of $1,138,000 in the appropriation.

(2) Page 15, line 9, strike out "$12,350,000" and insert in lieu thereof "$12,-850,000" the estimate, or an increase of $500,000 in the limitation on the amount available only for cooperative water resources investigations.

HOUSE REPORT

"The amount allowed by activities as compared with the 1966 appropriation and the estimate for 1967 is as follows:

Activity	Committee bill, 1967	Bill compared with—	
		1966 appropriation	Estimate, 1967
Topographic surveys and mapping	$22, 686, 000	−$554, 000	−$400, 000
Geologic and mineral resource surveys and mapping	18, 793, 000	−77, 780	
Minerals exploration	421, 000	−343, 090	
Marine geology and hydrology	862, 000	+2, 000	
Water resources investigations	23, 178, 000	+559, 000	−638, 000
Soil and moisture conservation	201, 000		
Conservation of lands and minerals	4, 693, 000	+9, 000	−100, 000
General administration	1, 948, 000	−4, 000	
Total, Geological Survey	72, 782, 000	−408, 870	−1, 138, 000

"The reduction of $400,000 below the budget estimate for 'Topographic surveys and mapping' relates to the accelerated program of mapping in Appalachia for which the budget estimate provided an increase of $500,000. In excess of $99,000 is available for this activity in fiscal year 1966 and $1,530,000 is included in the regular program for Appalachia in fiscal year 1967.

"For 'Water resources investigations' the committee recommends a decrease of $638,000 below the budget estimate. $500,000 of this reduction relates to the requested increase of $1 million to match increased State offerings for cooperative investigations; $100,000 of this reduction relates to the requested increase of $225,000 to provide for flood plain mapping in Appalachia; and $38,000 of the reduction relates to the increase requested for U.S. participation in the International Hydrological Decade.

"The reduction of $100,000 recommended by the committee under 'Conservation of lands and minerals' relates to the requested increase of $450,000 to provide for expanded workload created by increased prospection and production activity on Federal and Indian land, oil and gas, and mineral leases."

JUSTIFICATION

Explanation of amendment (1).—The amendment restores the reduction of $1,138,000 made by the House in the budget estimate. This amount is distributed to activities as follows:

Activity	Appropriation, 1966 [1]	Budget estimate, 1967	House allowance, 1967	Restoration requested
(a) Topographic surveys and mapping	$23,240,000	$23,086,000	$22,686,000	$400,000
(b) Geologic and mineral resource surveys	18,870,780	18,793,000	18,793,000	
(c) Minerals exploration	764,090	421,000	421,000	
(d) Marine geology and hydrology	860,000	862,000	862,000	
(e) Water resources investigations	22,619,000	23,816,000	23,178,000	638,000
(f) Soil and moisture conservation	201,000	201,000	201,000	
(g) Conservation of lands and minerals	4,684,000	4,793,000	4,693,000	100,000
(h) General administration	1,952,000	1,948,000	1,948,000	
Total	73,190,870	73,920,000	72,782,000	1,138,000

[1] Includes pending pay act supplemental.

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$645,000
12	Personnel benefits	52,000
21	Travel and transportation of persons	30,000
22	Transportation of things	14,000
23	Rent, communications, and utilities	23,000
24	Printing and reproduction	55,000
25	Other services	163,000
	Services of other agencies	3,000
26	Supplies and materials	68,000
31	Equipment	85,000
	Total, Geological Survey	1,138,000

(a) Topographic surveys and mapping

The reduction of $400,000 related to the accelerated program for topographic mapping in Appalachia should be restored to raise the scope of the program now underway in that area to a level commensurate with the need for Appalachian development and progress. The mapping involved will contribute directly to progress in the national topographic program.

The welfare of the people in Appalachia is directly tied to the efficient use of its land and resources by the people who live there and those from outside who will contribute to its development and enjoy its environment. To arrive at this goal, accurate and up-to-date topographic maps are essential to (1) locate Appalachia's natural resources, (2) implement a vigorous increase in water and mineral surveys and evaluation, (3) effect water pollution control, and (4) perhaps most urgent of all, furnish a means of facilitating the engineering planning of new highway routes for access to all parts of the region. The Appalachia Regional Commission has stressed the need for mapping these highway corridors as well as prospective growth centers, and the planning and budgeting for this mapping have been fully coordinated with the Commission.

Under the accelerated plan, which would not be possible without the funds requested, the program would include starts on about 4,500 square miles of new mapping, constituting most of the remaining unmapped area. In addition, the requested funds would provide for resurveying a comparable amount of the older 15-minute maps to more modern 1:24,000-scale standards, as the older 15-minute maps are not adequate to meet present-day planning and development requirements. About 1,700 square miles of existing 1:24,000-scale mapping would be updated to take account of manmade changes as would about 12 of the less detailed 1:250,000-scale maps which are used extensively in general regional planning.

State and local agencies are already helping to provide the topographic map information needed for economic development. Much of the continuing expenditure in Appalachia is in support of Federal-State cooperative programs in New York, Pennsylvania, West Virginia, and Virginia. These continuing programs and the accelerated Federal program proposed for fiscal year 1967, are considered fundamental in the efficient and orderly development of the Appalachian region.

(e) Water resources investigations

Restoration of $638,000 is requested in order to (1) match the major portion of the increased funds offered by States for cooperative Federal-State investigations which are essential to the solution of the mounting problems of water development and management, (2) conduct work in support of the President's Appalachian program, and (3) achieve minimum participation in the International Hydrological Decade.

The Survey requested an increase of $1 million to match cooperative offerings even though estimated offerings determined by discussion with State cooperative officials in mid-December 1965 exceeded the budget request by $217,480. It was felt that this amount could be declined by postponing projects of lesser urgency. However, since mid-December, prospective offerings have increased by nearly $400,000 and represent work that is urgently needed. A tabulation follows showing estimated offerings as of December 1965 and as updated on March 21, 1966. As of March 21, 1966, the Survey would need an increase of $604,393 above the budget request to match all the estimated offerings.

WATER RESOURCES INVESTIGATIONS

Estimates of State and municipal offerings for fiscal year 1967

State	Estimated offerings		State	Estimated offerings	
	Justification (December 1965)	As of Mar. 21, 1966		Justification (December 1965)	As of Mar. 21, 1966
Alabama	$233,400	$233,400	New York	660,000	675,835
Alaska	83,000	180,000	North Carolina	315,000	325,248
Arizona	455,450	455,450	North Dakota	211,700	211,700
Arkansas	124,000	124,000	Ohio	257,100	258,500
California	1,202,500	1,251,300	Oklahoma	125,550	137,650
Colorado	354,000	353,616	Oregon	184,885	180,545
Connecticut	135,000	142,500	Pennsylvania	422,000	459,180
Delaware	32,000	31,500	Puerto Rico	205,000	170,000
District of Columbia	4,000	3,750	Rhode Island	37,000	41,000
Florida	700,000	669,225	South Carolina	116,000	142,000
Georgia	184,000	199,775	South Dakota	139,000	130,750
Hawaii	227,500	284,700	Tennessee	185,000	179,000
Idaho	145,900	185,500	Texas	691,175	691,142
Illinois	187,900	188,825	Utah	305,900	322,250
Indiana	345,000	345,000	Vermont	28,000	27,800
Iowa	186,270	191,400	Virginia	70,000	109,100
Kansas	413,000	408,100	Virgin Islands	34,000	34,000
Kentucky	220,700	205,700	Washington	459,050	463,310
Louisiana	361,000	359,500	West Virginia	61,000	59,800
Maine	40,000	37,600	Wisconsin	256,250	299,500
Maryland	199,000	205,625	Wyoming	182,450	184,650
Massachusetts	200,000	201,100			
Michigan	310,000	315,000	Subtotal	13,067,480	13,454,393
Minnesota	225,000	238,000	Adjustments	−217,480	−604,393
Mississippi	175,275	206,525			
Missouri	250,700	206,250	Budget request	12,850,000	12,850,000
Montana	111,500	108,150	Adjustments	−500,000	−500,000
Nebraska	156,400	158,000			
Nevada	131,500	136,500	House allowance	12,350,000	12,350,000
New Hampshire	40,000	39,200			
New Jersey	300,000	281,200	Not matched	717,480	1,104,393
New Mexico	387,425	405,042			

If the $500,000 reduction is not restored the Survey will have to reject increased offerings totaling $1,104,393. If the $500,000 is restored it still will be necessary to decline offerings of approximately $600,000. Without the full amount of the requested increase of $1 million for cooperative offerings the Survey will fall short, by more than $2 million worth of cooperative programs ($1.1 million Federal plus $1.1 million State), of doing what should and can be done to help State and local governments in a shared responsibility for the solution of the Nation's water resources problems.

Reduction by $100,000 of the requested increase for flood plain mapping in Appalachia (part of the floods and droughts program component), will reduce the initial program recommended by the Appalachian Regional Commission by about 45 percent, limiting the number of urban growth areas that can be studied. Failure to obtain the information that would be derived as a result of the increase could result in future flood losses many times greater than the requested funding.

The International Hydrological Decade is an international cooperative effort which originated in the United States. The concept has been accepted and elaborated on by other nations with the result that the Survey's present participation is at a token level while that of the sister agencies in other countries is rapidly expanding. The reduction by $38,000 of the Survey's participation in the program will cause the Survey to fall behind in a program that will add immeasurably to the world's hydrologic knowledge over the next 10 years.

(g) *Conservation of lands and minerals*

Restoration is requested of $100,000 for supervision of operations on Federal and Indian mineral leases. The reduction, if sustained, will result in curtailment of programs which relate to inspections of drilling and production operations on Federal oil and gas leases, principally on the Outer Continental Shelf; and to engineering evaluation of conservation measures proposed by operating companies. The latter relates to studies of rates of production from reservoirs which will maintain optimum pressures for maximum recovery of oil and to analysis of proposals for secondary recovery from fields which have ceased to produce economically by conventional techniques.

The most serious impact will be the reduced inspections of completed Outer Continental Shelf producing operations which are relatively self-contained and remotely controlled. These require periodic supervisory inspections to insure that proper maintenance is being performed to prevent leaks of oil or gas which pollute waters and endanger aquatic life and environmental resources.

Helicopter transportation to these operations, some as far as 100 miles offshore, is the most economical means of travel for inspection of drilling and producing operations. The need increases as additional producing wells are drilled. Use of oil company service is impractical and could be misconstrued as influencing the inspectors.

The reduction will also result in increased intervals between inspections of core hole drilling to prospect the continental slope in the Gulf of Mexico and to "twin" prospect holes off California, which were cored under State supervision but are now a responsibility of the Federal Government by Supreme Court decision of May 17, 1965. Curtailed supervision increases the possibility of pollution. Any delay increases the time required to gather offshore California data necessary to equitably offer leases for sale and postpones the receipt of revenue.

Restoration of the House reduction would place these supervisory functions of the Survey back on a schedule which, from all indicators of increases in prospecting and producing activity, is a minimum for efficient supervision.

Explanation of amendment (2).—This amendment restores the reduction of $500,000 in the limitation on funds available only for cooperation with States or municipalities for water resources investigations. The justification for this restoration is the same as for item (e)(1) under amendment (1) above.

Bureau of Mines

Conservation and Development of Mineral Resources

(House hearings, pp. 191–256, 295–302, 303–313, 318–321)

(Senate hearings, p. 670)

Appropriation, 1966	$32,391,000
Estimate	31,466,000
House allowance	31,540,000
Reduction requested	−74,000

(P. 16, line 22)

Amendment requested:

Page 16, line 22, strike out "$31,540,000" and insert in lieu thereof "$31,466,000", a reduction of $74,000 in the appropriation.

HOUSE REPORT

"The amount provided by activity compared with the 1966 appropriation, and the estimate for 1967 is as follows:

"The net increase of $300,000 under "Coal research" is for investigation and research to develop a practical means of extinguishing smoldering fires in culm dumps in the State of Pennsylvania. These fires constitute a serious threat to

the health of individuals in that vicinity and are causing considerable property damage. In the opinion of the committee, it is imperative that a practical and feasible way to extinguish these fires be developed at the earliest possible moment.

"The committee recommends a reduction of $226,000 in the amount requested under 'Economic analysis' to expand analyses of economic aspects of the minerals industry. The sum of $240,000 would still be available for this activity in fiscal year 1967, and with the information available from the Department of Commerce, Department of Labor, and the Bureau of the Census, the committee is of the opinion that the funds provided will be sufficient to meet the program requirements in fiscal year 1967."

JUSTIFICATION

The amendment provides for a net reduction of $74,000 below the amount allowed by the House. This amount is distributed by activities as follows:

Activity	Appropriation, 1966 [1]	Budget estimate, 1967	House allowance, 1967	Reduction requested
Research:				
(a) Coal	$6,524,000	$6,290,000	$6,590,000	−$300,0000
(b) Petroleum	2,360,000	2,125,000	2,125,000	
(c) Oil shale	1,042,000	1,309,000	1,309,000	
(d) Metallurgy	10,476,000	10,121,000	10,121,000	
(e) Mining	3,126,000	3,085,000	3,085,000	
(f) Marine mineral mining	234,000	235,000	235,000	
(g) Explosives	567,000	570,000	570,000	
Resource development:				
(a) Statistics	1,839,000	1,803,000	1,803,000	
(b) Economic analysis	231,000	466,000	240,000	+226,000
(c) Bituminous coal	989,000	893,000	893,000	
(d) Anthracite	407,000	366,000	366,000	
(e) Petroleum	588,000	592,000	592,000	
(f) Minerals	3,435,000	3,054,000	3,054,000	
(g) International activities	573,000	557,000	557,000	
Total	32,391,000	31,466,000	31,540,000	−74,000

[1] Includes pending pay act supplemental.

A breakdown of the reduction of objects of expenditure follows:

11	Personnel compensation	$19,000
12	Personnel benefits	1,000
25	Other services	39,000
26	Supplies and materials	5,000
31	Equipment	10,000
	Total	74,000

Research

(a) *Coal.*—The House committee added $300,000 to the 1967 appropriation estimate for coal research for investigation and research to develop a practical means of extinguishing smoldering fires in culm dumps in the State of Pennsylvania. The purpose of the work would be to demonstrate the feasibility and cost of extinguishing fires in culm banks and disposing of the waste material in a suitable fashion. This type of work is specifically provided for in the Solid Waste Disposal Act and it is believed the funding would be more appropriate under the solid waste disposal appropriation.

Therefore, the Bureau of Mines recommends that the $300,000 added by the House be deleted from the conservation and development of mineral resources appropriation and that the solid waste disposal appropriation be increased by that amount.

Resource development

(b) *Economic analysis.*—The economic analysis activity in the Bureau of Mines is the only group in Government with specialized analytical ability with respect to the minerals industries. Other departments, such as the Department of Commerce and the Department of Labor, use this group because of its expertise. The functions performed by this group are not duplicated anywhere else in Government, and if they are not provided here, they will not be available to Government.

The group provides the analysis upon which, through the Secretary of the Interior, the President makes policy decisions with regard to tariffs, taxes, subsidies, and other mineral policy questions. Further, economic analytical functions are basic to the program procedures promulgated by the Bureau of the Budget in Circular No. 66–3.

If the increase is not restored, the economic analysis group will be unable to (1) service requests of the secretariat and executive offices for analysis of the impact of tariff and tax change proposals; (2) provide the analysis of program alternatives for the Department's activities in the minerals area as required under the planning-programing-budgeting system; (3) maintain the scope and depth of economic expertness required to respond to general staff needs; and (4) undertake the fundamental analytical studies of the mineral economy required for an understanding of the impact of Federal Government policies, including decisions involving management and disposition of federally owned resources.

Solid Waste Disposal

(House hearings, pp. 279–286, 306, 312–320 Senate hearings, p. 723)

Appropriation, 1966	$1,400,000
Estimate, 1967	4,335,000
House allowance	4,000,000
Restoration requested	300,000

(P. 17, line 8)

Amendment requested: Page 17, line 8, strike out "$4,000,000" and insert in lieu thereof "$4,300,000", an increase of $300,000 in the appropriation.

House Report

"The committee recommends a reduction of $335,000 in the amount requested to develop engineering data and contract for design, construction, and operation of demonstration plants for utilization of automobile scrap. Of the $1,400,000 appropriated in fiscal year 1966 there was an unobligated balance of $1,356,690 as of January 31, 1966. It is the opinion of the committee that with these available funds, the reduction in funding for fiscal year 1967 will not adversely affect the progress on this project.

"The amount provided in the bill will fund the activities of this program as follows: Problem appraisal, $200,000; scrap metal demonstration plants, $2,265,000; utilization of processed solid waste, $300,000; utilization of incinerator waste, $260,000; recovery of alumina from red muds, $175,000; and $800,000 for demonstration grants."

Justification

The amendment restores $300,000 of the reduction made by the House in the budget estimate. This amount is distributed by activity as follows:

Activity	Appropriation, 1966	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Grants		$800,000	$800,000	
2. Research, training, and technical services	$1,400,000	3,535,000	3,200,000	$300,000
Total	1,400,000	4,335,000	4,000,000	300,000

A breakdown of the increase by objects of expenditure follows—

11	Personnel compensation	$148,000
12	Personnel benefits	11,000
22	Transportation of things	3,000
25	Other services	93,000
26	Supplies and materials	25,000
31	Equipment	20,000
	Total	300,000

Research, training, and technical services.—The House added $300,000 under the "Conservation and development of mineral resources" appropriation for investigation and research to develop a practical means of extinguishing smoldering fires in culm dumps in Pennsylvania. These fires constitute a serious threat to the health of individuals in that vicinity and are causing considerable property damage. It was the opinion of the House committee that it is imperative that a practical and feasible way to extinguish these fires be developed at the earliest possible moment.

The Bureau of Mines recognizes the seriousness of burning culm banks and agrees with the House that something should be done immediately. The $300,000 would be employed in selecting suitable sites for demonstrating practical means of controlling and extinguising fires in the culm banks and disposing of the waste material in a suitable fashion. Engineering plans and specifications, together with all of the work preliminary to a demonstration scale program, would be completed with these funds. This type of work is provided for in the Solid Waste Disposal Act, and it is believed that the funding would be more appropriate under the "Solid waste" disposal appropriation. Therefore, the Bureau is recommending that the $300,000 added by the House for culm bank work be deleted from the "Conservation and development of mineral resources" appropriation and provided for under this appropriation.

Bureau of Commercial Fisheries

Construction

(House hearings, pt. 1, pp. 798, 868–878, 930-933; Senate hearings, p. 838)

Appropriation, 1966	$1,980,000
Estimate, 1967	495,000
House allowance	1,245,000
Reduction requested	750,000

(P. 20, line 22)

Amendment requested: Page 20, line 22, strike out "$1,245,000" and insert in lieu thereof "$495,000", a decrease of $750,000 in the appropriation.

HOUSE REPORT

"The amount recommended includes the following:

Construction of a new bridge and seawalls at the Beaufort, N.C., Biological Laboratory	$160,000
Columbia River fishery facilities:	
Hatchery facilities	45,000
Management techniques	240,000
Program supervision and engineering	50,000
Total	495,000

"In addition, the committee recommends an appropriation of $750,000 for the second phase of construction on the Willamette Falls Fishway. Based on the testimony developed during the hearings, it is the opinion of the committee that work on this project should proceed without interruption. To complement the funds appropriated by the Federal Government, 16.3 percent of the Government's contribution is contributed as industry's share of of the total cost of the project under the provisions of the existing Federal Power Commission license held by the industrial complex at the falls."

JUSTIFICATION

The amendment eliminates $750,000 for the second phase of construction on the Willamette Falls Fishway. This reduction will affect the appropriation's activities, as follows:

Activity	Appropriation, 1966	Budget estimate, 1967	House allowance, 1967	Reduction requested
1. Fishery facilities	$980,000	$160,000	$160,000	
2. Columbia River fishery facilities	1,000,000	335,000	1,085,000	$750,000
Total	1,980,000	495,000	1,245,000	750,000

A breakdown of the proposed reduction by objects of expenditure follows:

25.1 Other services $750,000

The decrease proposed is to provide for an appropriation in the same amount as the budget estimate, which is sufficient to fund all projects high enough in priority to be included in the President's budget.

CONSTRUCTION OF FISHING VESSELS

(House hearings, pt. 1, pp. 879–882)

(Senate hearings, p. 903)

Appropriation 1966	[1] $5,000,000
Estimate, 1967	3,300,000
House allowance	3,000,000
Restoration requested	300,000

[1] Excludes reappropriation of $2,105,203 in the Department of the Interior and Related Agencies Appropriation Act, 1966.

(P. 21, line 5)

Amendment requested:

Page 21, line 5, strike out "$3,000,000" and insert in lieu thereof "$3,300,000", an increase of $300,000 in the appropriation.

HOUSE REPORT

"Funds recommended under this appropriation item are required to carry out the provisions of Public Law 88–498, approved August 30, 1964, which amended and extended the Act of June 12, 1960, authorizing the payment of construction differential subsidies for fishing vessels constructed under certain restrictive conditions. The new Act, extends coverage to the entire commercial fishing industry, authorizes appropriation of $10,000,000 annually for the program, and increases the subsidy from 33⅓ percent to 50 percent.

"The reduction of $300,000 recommended by the committee is based on the premise that the reduced amount will provide sufficient funds in fiscal year 1967 to process all applications in this connection. As of January 31, 1966, the unobligated balance in this fund amounted to $6.3 million, and testimony developed during the hearings indicated that the processing of applications necessarily would continue at a rather slow pace."

JUSTIFICATION

The amendment restores the reduction of $300,000 for subsidy payments. This amount is for the following activity:

Activty	Appropriation, 1966	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Subsidy payments	$6,719,387	$2,960,000	$2,660,000	$300,000
2. Program administration	385,816	340,000	340,000	
Total	7,105,203	3,300,000	3,000,000	300,000

A breakdown of the restoration request by objects of expenditure follows:

41 Grants, subsidies, and contributions $300,000

Restoration of the $300,000 is needed to fund the subsidy payment program at a level that will permit the final processing of as many of the subsidy applications now on hand as possible by the end of the fiscal year 1967.

The unobligated balance, as of March 31, of the funds available for subsidy payments in the fiscal year 1966, is $6,059,055. This balance plus the requested appropriation of $2,960,000 would provide a total of $9.1 million for subsidy obligation from April 1, 1966, through June 30, 1967. The obligational program proposed for that period is as follows:

(1) $0.6 million for five vessels on which bids have opened. These funds should be obligated by May 30, 1966.

(2) $0.4 million for three vessels on which bid invitations have been issued. These funds should be obligated by June 30, 1966.

(3) $2.0 million for nine vessels for which subsidy applications have received initial approval but for which invitations for bids on construction have not been issued. These funds should be obligated by October 31, 1966.

(4) $2.3 million for five vessels for which subsidy applications have initial approval on which an intervenor has appealed to the Secretary. If the hearings examiners decision is upheld these funds should be obligated within 3 or 4 months.

(5) $3.8 million for approximately 12 vessels of the 19 vessels involved in applications on hand, in addition to those referred to above. Subsidies for all of the 19 vessels are estimated at $5.7 million. Processing of these applications and obligation of all available funds should be completed by June 30, 1967.

If any of the cases which have already received initial approval are not completed the funds involved would be used for additional vessels covered by applications on hand (item 5 above) or applications received after April 1, 1966.

FEDERAL AID FOR COMMERCIAL FISHERIES RESEARCH AND DEVELOPMENT

(House hearings, pt. 1, pp. 790–791, 882–898, 934–936)

(Senate hearings, p. 906)

Appropriation, 1966	[1] $4,713,200
Estimate, 1967	3,210,000
House allowance	4,710,000
Reduction requested	1,500,000

[1] Excludes $86,800 transferred to "Management and Investigations of Resources," Bureau of Commercial Fisheries.

(P. 21, lines 11 and 15)

Amendment requested:

(1) Page 21, line 11, strike out "$4,710,000" and insert in lieu thereof "$3,210,000", a decrease of $1,500,000 in the appropriation.

(2) Page 21, line 15, strike out "$4,100,000" and insert in lieu thereof "$2,600,000", a decrease of $1,500,000 in the limitation of the apportionments to the States.

HOUSE REPORT

"Funds provided under this item are to implement the 5-year program authorized under sections 4(a) and 4(b) of the Commercial Fisheries Research and Development Act of 1964, Public Law 88–309.

"The purpose of the program is to stimulate research and development projects by the several States in the development of the Nation's commercial fisheries on a matching-fund basis with Federal funding of up to 75 percent of the cost; to assist in the reestablishment of a commercial fishery that has failed due to a resource disaster arising from natural or undetermined causes; and to assist in development of new commercial fisheries.

"Because of the wide interest in this program and the number of States ready to participate, the committee has approved an increase of $1,500,000 over the budget estimate. This will provide funding for distribution of allocations to States in fiscal year 1967 on the same level as prevailed in fiscal year 1966.

"The recommended appropriation would provide $4,100,000 in aid to States under section 4(a) of the act; $400,000 under section 4(b) of the act, and $210,000 for program administration."

JUSTIFICATION

The amendment would reduce payments to the States by $1,500,000. This reduction will affect the appropriation's activities as follows:

Activity	Appropriation, 1966 [1]	Budget estimate, 1967	House allowance, 1967	Reduction requested
1. Aid to States	$4,100,000	$2,600,000	$4,100,000	$1,500,000
2. Resource disaster aid	400,000	400,000	400,000	----------
3. Program administration	213,200	210,000	210,000	----------
Total	4,713,200	3,210,000	4,710,000	1,500,000

[1] Excludes $86,800 transferred to "Management and investigations of resources," Bureau of Commercial Fisheries.

A breakdown of the reduction request by objects of expenditure follows:

41 Grants, subsidies, and contributions ---------- $1,500,000

The decrease proposed is to provide for an appropriation in the same amount as the budget estimate, which is sufficient to fund all projects high enough in priority to be included in the President's budget.

BUREAU SPORT FISHERIES AND WILDLIFE

MANAGEMENT AND INVESTIGATIONS OF RESOURCES

(House hearings, pt. 2, pp. 4–7, 11–99, 125–127, 147–178, 181–183)

(Senate hearings, p. 961)

Appropriation, 1966	$36,612,300
Estimate	37,304,000
House allowance	37,164,000
Restoration requested	230,000

(P. 23, line 14)

Amendment requested:

Page 23, line 14, strike out "$37,164,000" and insert in lieu thereof "$37,394,000", an increase of $230,000 in the appropriation.

HOUSE REPORT

"The amount allowed by the committee by activity compared with the 1966 appropriation and the 1967 budget estimate is as follows:

Activity	Committee bill, 1967	Bill compared with—	
		1966 appropriation	Estimate, 1967
Fish hatcheries	$7,857,000	+$380,100	−$52,000
Wildlife refuges	10,396,000	−680,665	−59,000
Soil and moisture conservation	708,000	----------	−4,000
Management and enforcement	3,389,000	----------	−17,000
Fishery research	3,335,000	+123,000	−24,000
Wildlife research	5,866,000	+420,600	−36,000
Fishery services	1,466,000	+90,000	+81,000
Wildlife services	2,521,000	+100,000	−20,000
River basin studies	1,414,000	----------	−9,000
Pesticides registration	212,000	+1,432	----------
Transfers in the estimates	----------	+117,233	----------
Total, management and investigations of resources	37,164,000	+551,700	−140,000

"The net decrease of $140,000 below the budget estimate consists of a decrease of $230,000 requested in the budget estimate to provide for increased pay costs for fiscal year 1966 positions and an increase of $90,000 for cooperative fishery units

consisting of: $40,000 for a unit at Auburn University, Ala.; $40,000 for a unit at Humboldt College, Calif.; and an increase of $10,000 for funding of the cooperative fishery unit at the University of Massachusetts."

JUSTIFICATION

This amendment restores the reduction of $230,000 made by the House in the budget estimate, and adds $90,000 above the estimate for cooperative fishery units.

Activity	Appropriation, 1966 [1]	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Fish hatcheries	$7,448,900	$7,909,000	$7,857,000	$52,000
2. Wildlife refuges	11,055,000	10,455,000	10,396,000	59,000
3. Soil and moisture conservation	708,000	712,000	708,000	4,000
4. Management and enforcement	3,376,000	3,406,000	3,389,000	17,000
5. Fishery research	3,200,000	3,359,000	3,335,000	24,000
6. Wildlife research	5,423,400	5,902,000	5,866,000	36,000
7. Fishery services	1,371,000	1,385,000	1,466,000	9,000
8. Wildlife services	2,411,000	2,541,000	2,521,000	20,000
9. River basin studies	1,409,000	1,423,000	1,414,000	9,000
10. Pesticides registration	210,000	212,000	212,000	
Total	36,612,300	37,304,000	37,164,000	230,000

[1] Includes pending pay act supplemental.

A breakdown of the restoration by objects of expenditure follows:

11. 0	Total personnel compensation	$215,000
12. 0	Personnel benefits	15,000
	Total	230,000

The restoration of the $230,000 will provide funds for increased pay costs.

The Bureau is absorbing about 24 percent, or $246,000 of the total annual pay costs resulting from Public Law 89–97 and Public Law 89–301 and to absorb this additional amount of $230,000, or 47 percent of the total costs, would impose a serious restriction on the operations and maintenance program.

In addition to the required pay act cost, the fiscal year 1967 estimate includes the minimum essential increases for only specific purposes, such as operation of new facilities at fish hatcheries, refuges, and research laboratories, with other activities remaining at the same level of funding as the previous year. The estimate already reflects absorption of price level increases for materials and equipment, and the cost of collecting and administering entrance fees on refuges under the Land and Water Conservation Fund Act of 1965.

The additional absorption of pay act costs would necessarily result in curtailment of operations below minimal levels. Production of fish would be decreased; a further increase in the present backlog of deferred maintenance on refuges would result, while demands of recreation are increasing; the full potential in preserving and restoring feeding, resting, and nesting habitats needed by waterfowl would not be realized; full contribution to protecting migratory birds would be jeopardized; essential fish and wildlife research and river basin studies would be delayed; and the Bureau's ability to fulfill cooperative agreements under the fisheries and wildlife services programs would be hampered.

CONSTRUCTION

(House hearings, pt. 2, pp. 100–116, 143–146, 169–170, 175–176)

(Senate hearings, p. 1013)

Appropriation 1966	$18,299,200
Estimate 1967	3,169,000
House allowance	5,130,000
Decrease requested	1,961,000

Amendment requested:

Page 23, line 20 strike out "$5,130,000" and insert in lieu thereof "$3,169,000," a decrease of $1,961,000 in the appropriation, or a reduction to the budget estimate.

HOUSE REPORT

"This item finances the construction of fish hatchery and wildlife refuge facilities and fishery and wildlife research facilities. The amount allowed includes the budgeted program consisting of:

"$84,000 for detailed engineering design and site preparation for replacement of the Eastern Fish Nutrition Laboratory's Research facility; $1,985,000 for development on 26 national wildlife refuges including $200,000 for advance planning; and $1,100,000 for construction of a general-purpose laboratory-office building at the Patuxent Wildlife Research Center, Laurel, Maryland.

"The recommended appropriation also includes $198,000 for initial construction on the Marine Game Fish Laboratory at Port Aransas, Texas; $157,000 for initial construction on the Marine Game Fish Laboratory at Panama City, Florida; and $155,000 for construction of the Central States Fisheries Project, the area office to be located in Indiana.

"The amount also includes additional operating funds in the amount of $50,000 for the hatchery at Norfork, Arkansas; $27,000 for the hatchery at Natchitoches, Louisiana; and $100,000 for the hatchery at Wytheville, Virginia.

"In addition, funds are included for hatchery renovation and expansion as follows: Senecaville, Ohio ($100,000); Jackson, Wyoming ($140,000); Orangeburg County, South Carolina ($100,000); White Sulphur Springs, West Virginia ($200,000); Warm Springs Indian Reservation, Oregon ($100,000); Winthrop, Washington ($54,000); Allegheny Fish Hatchery, Pennsylvania ($90,000); Nashua, New Hampshire ($120,000); Warm Springs, Georgia ($100,000); Quinault Indian Reservation, Washington ($170,000); and $100,000 for the purpose of conducting a feasibility study into the availability of suitable water supplies needed for constructing a Federal fish hatchery in Apache County, Arizona."

JUSTIFICATION

The amendment decreases the allowance made by the House by $1,961,000, or to the budget estimate of $3,169,000.

Activity	Appropriation, 1966	Budget estimate, 1967	House allowance, 1967	Reduction requested
1. Sport fish facilities	$13,704,200	$84,000	$2,045,000	−$1,961,000
2. Wildlife facilities	4,595,000	3,085,000	3,085,000	
Total	18,299,200	3,169,000	5,130,000	−1,961,000

The President's budget for fiscal year 1967 is a well-balanced document. The fiscal program for 1967 was designed to meet three essential requirements. First, and uppermost, was the need for additional funds to carry out stepped-up activities in Vietnam. Second, it had to carry forward urgent domestic programs at the lowest possible cost, while curtailing all lower priority activities. And third, it had to insure that the overall impact on the economy would be noninflationary. The budget submitted to the Congress was carefully tailored to accommodate these constraints.

Although the items added by the Congress would represent reasonable additions to a future Bureau program, they are not considered appropriate by the Department in its contemplated use of resources for fiscal year 1967.

Therefore, in order to keep the budget of the United States within the above criteria, it is requested that the construction appropriation be reduced to $3,169,000, the amount requested in the President's budget for fiscal year 1967.

Appalachian Fish and Wildlife Restoration Projects

(House hearings, pt. 2, pp. 135–142, 178–180, 183–184)

(Senate hearings, p. 1036)

Appropriation 1966	
Estimate	$1,350,000
House allowance	1,000,000
Restoration requested	350,000

(P. 24, line 12)

Amendment requested:

Page 24, line 12, strike out "$1,000,000" and insert in lieu thereof "$1,350,000", the estimate, or an increase of $350,000 in the appropriation.

HOUSE REPORT

"Funds provided under this item are to implement the program of assisting the States in recovering from the damages caused by stripmine operations where the land is exhausted of its mineral resources, and where mining operations have been abandoned, as provided in section 205 of the Appalachian Regional Development Act of 1965, Public Law 89–4.

"The total reduction of $350,000 consists of a decrease of $250,000 below the estimate for payments to States, and $100,000 for planning.

"The committee's action in proposing this reduction should not be construed as an inclination of the committee to retard this program. The reduction is based solely on the belief that since in excess of $1,300,000 of these funds were unobligated as of January 31, 1966, the additional $1,000,000 recommended for fiscal year 1967 should be ample to fund the program at a level consistent with the development of program operations."

JUSTIFICATION

The amendment restores the $350,000 reduction made by the House in the budget estimate. This amount is for the following activities:

Activity	Appropriation, 1966	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Payments to States		$1,000,000	$750,000	$250,000
2. Planning		200,000	100,000	100,000
3. Administration		150,000	150,000	
Total		1,350,000	1,000,000	350,000

A breakdown of the restoration by objects of expenditure follow:

41.0 Grants, subsidies, and contributions, $350,000.

Restoration of the $350,000 reduction made by the House is essential to permit an adequate program of restoring abandoned strip mine areas for fish and wildlife habitat resources.

Of the $350,000 reduction, $250,000 is needed for payments to States. Since September 1965, our staff has been working closely with the States to develop strip mine restoration projects. Sites have been located which will obligate all of the funds available in fiscal year 1966. In addition, projects have already been located which will require $860,000 in Federal funds for payments to States in fiscal year 1967. The locations of these sites are as follows:

In Tennessee, there are three definite sites for strip mine restoration in 1967, all owned by the University of Tennessee. One is in Morgan and Scott Counties on the South Fork of the Cumberland River, which will require an obligation of $135,000 in Federal funds. The second is in Morgan County on the Emory River, which will require an obligation of $30,000 in Federal funds. The third site is in the same county, on the same river and will require an obligation of $135,000 in Federal funds.

Maryland has two definite sites to be restored in fiscal year 1967. One of these is a State-owned site adjacent to the Frostburg College campus in Garrett County requiring an obligation of $120,000 in Federal funds. The other is along Georgias Creek in Allegany County, which is privately owned but the State plans to acquire it with land and water conservation funds. An obligation of $420,000 in Federal funds will be required for restoration of this site.

Pennsylvania has two sites to be restored in fiscal year 1967. One is on State game land 244 in Jefferson County and the other is on State game land 95 in Butler County. Both sites are owned and administered by the Pennsylvania Game Commission. Each will require an obligation of $10,000 in Federal funds.

As planning continues, it is anticipated that the remaining $140,000 for payment to the States, which was requested for fiscal year 1967, will be readily obligated.

The House reduction of $100,000 for the planning activity will severely limit the surveys and studies required to determine the feasibility of areas selected for strip mine reclamation projects. The restoration to be accomplished with funds appropriated thus far, and the work scheduled for 1967, is only a small beginning to a huge task of restoring many thousands of acres of abandoned strip mined lands. These funds cover 100 percent of the cost of planning. Cost sharing by the States will not be required for the planning activity.

GENERAL ADMINISTRATIVE EXPENSES

(House hearings, pt. 2, pp. 116–125)

(Senate hearings, p. 1023)

Appropriation, 1966	$1,492,000
Estimate, 1967	1,564,000
House allowance	1,549,000
Restoration requested	15,000

(P. 24, line 19)

Amendment requested:
Page 24, line 19 strike out "$1,549,000" and insert in lieu thereof, "$1,564,000", the estimate, or an increase of $15,000 in the appropriation.

HOUSE REPORT

"The total recommended decrease of $15,000 consists of $14,288 included in the budget estimate to provide for automatic within-grade promotions and $712 for rounding."

JUSTIFICATION

The amendment restores the $15,000 reduction made by the House in the budget estimate. This amount is for the following activities:

Activity	Appropriation, 1966 [1]	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Departmental expense	$452,000	$503,000	$498,000	$5,000
2. Regional office expense	1,040,000	1,061,000	1,051,000	10,000
	1,492,000	1,564,000	1,549,000	15,000

[1] Includes pending pay act supplemental.

A breakdown of the restoration of objects of expenditure follows:

11.0 Total personnel compensation	$15,000

The restoration of $15,000 will provide funds for automatic within-grade promotions. Personal services and associated benefits account for 91 percent of this appropriation, the remainder providing for other objects of expenditure at a minimal level. Although the amount requested for within-grade salary promotions is only about 1½ percent of the total personnel compensation dollars, it is of significant importance. Little flexibility exists for making program adjustments to absorb even a modest reduction in personnel compensation because of the high proportion of personal services in this appropriation and the relative stability of the staff.

NATIONAL PARK SERVICE

MANAGEMENT AND PROTECTION

(House hearings, pt. 1, pp. 556–602, 668, 693–694)

(Senate hearings, p. 372)

Appropriation 1966	$33,149,000
Estimate	36,177,000
House allowance	35,694,000
Restoration requested	482,900

(P. 26, line 11)

Amendment requested:

Page 26, line 11, strike out "$35,694,000" and insert in lieu thereof, "$36,176,900", an increase of $482,900 in the appropriation.

HOUSE REPORT

"The following table summarizes the increases recommended by the committee and the reductions made in the budget estimate:

"Activity	Budget increases recommended	Reduction below budget estimate
Management of park and other areas:		
Increased pay costs for fiscal year 1966 positions	+$245,100	−$100
Operation of new park areas	+765,000	−165,000
Operation of new facilities and increased visitor workload in existing park areas	+1,812,600	−312,600
Additional park informational publications	+55,300	−5,300
Employees' compensation fund payments	+33,000	
Roosevelt Campobello International Park Commission	+63,000	
Nonrecurring item due to program savings resulting from organizational realinements	−95,000	
Total	+2,879,000	−483,000
Forestry and fire control:		
Increased pay costs for fiscal year 1966 positions	+9,000	
More adequate fire protection service	+82,000	
Total	+91,000	
Park and recreation programs:		
Increased pay costs for fiscal year 1966 positions	+20,100	
Strengthen national park system planning and new area studies	+102,200	
Strengthen registry of national landmarks program	+61,700	
Nonrecurring item due to completion of Ice Age and Greers Ferry Dam studies	−100,000	
Total	+84,000	
Concessions management:		
Increased pay costs for fiscal year 1966 positions	+5,000	
Nonrecurring item due to program savings resulting from organization realinements	−15,000	
Total	−10,000	
Net increase, 1967	+3,044,000	−483,000"

JUSTIFICATION

The amendment restores the following reductions made by the House in the budget estimate for this appropriation:

Operation of new park areas	$165,000
Operation of new facilities and increased visitor workload in existing park areas	312,600
Additional park informational publications	5,300
Total	482,900

The amendment restores the reduction of $482,900 made by the House in the budget estimate for this appropriation. This amount is distributed to activities as follows:

Activity	Appropriation, 1966 [1]	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Management of park and other areas	$27,588,000	$30,451,000	$29,968,000	$482,900
2. Forestry and fire control	1,617,000	1,708,000	1,708,000	
3. Soil and moisture conservation	205,000	206,000	206,000	
4. Park and recreation programs	3,176,000	3,260,000	3,260,000	
5. Concessions management	562,000	552,000	552,000	
Total	33,149,000	36,177,000	35,694,000	482,900

[1] Includes pending pay act supplemental.

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$366,000
12	Personnel benefits	30,000
22	Transportation of things	3,000
23	Rent, communications, and utilities	15,000
24	Printing and reproduction	5,300
25	Other services	10,000
	Services of other agencies	4,000
26	Supplies and materials	29,600
31	Equipment	20,000
	Total	482,900

1. *Management of park and other areas.*—The restoration of $482,900 requested under this activity is for the following:

Operation of new park areas	$165,000
Operation of new facilities and increased visitor workload in existing park areas	312,600
Additional park informational publications	5,300
Total	482,900

NEW PARK AREAS

The House action in reducing the budget request for operations in the 13 new park areas from $765,000 to $600,000 will make it necessary to operate some of them at less than adequate levels. It has been necessary to activate all of these areas on a very limited basis during the 1966 fiscal year, and it will be necessary to provide for increased staffing and expanded operations in the 1967 fiscal year to more fully meet the Service's responsibility in them. The $765,000 requested is the minimum amount needed for the management, protection, and interpretation of these new areas. Funds are not included for full-year salaries of permanent positions in many cases, as it was planned that some new positions would be added to the staffs in the areas only as the visitor and administrative workload generates the need.

It has been found most desirable and necessary to provide some staffing without delay, as new park areas have been authorized, to perform a wide variety of duties, and to gradually expand the staffs as needed. Experience has indicated that the presence of Service personnel is needed, among other things, to establish and to expand public and community relationships; to coordinate land acquisition programs; assist with plans for developing programs to meet visitor needs; etc. It is also essential to have an adequate number of qualified Service representatives assigned to each area on a full-time basis to protect the Government's interests, and also so that vital cooperative relationships with State, Federal, and municipal agencies can be maintained or established on a continuing basis. In many instances, lands and facilities are turned over to the Service soon after an area is authorized. This is particularly true where the areas (Federal lands) are operated under cooperative agreements with other Federal agencies, such as at Amistad, Arbuckle, and Sanford Recreation Areas. In such areas, which are going operations with increasing visitor use, adequate funds and staffing must be provided to manage and protect the Federal investment for which the Service has assumed responsibility. The growing demands placed on the Service in these new areas can only be met by increasing the staffs to provide the minimum services which the visiting public expects, and the total amount of $765,000 is needed for this purpose.

It is respectfully requested that the $165,000 disallowed by the House be restored in order that the operations in some of the new park areas will not have to be held down to less than an adequate level.

OPERATION OF NEW FACILITIES AND INCREASED VISITOR WORKLOAD IN EXISTING PARK AREAS

The increase of $1,812,600 requested in the estimate for the operation of newly constructed or reconstructed facilities and for requirements generated by increased visitor use, which is estimated to increase approximately 13.7 percent in 1967 over 1965 (the last completed calendar year), is needed to meet visitor needs and the related minimum requirements for management, protection, and interpretation of the park areas. The portion of the total request allowed by the House

($1,500,000) will go a long way in meeting these needs, but will not permit full operation of new visitor centers, campgrounds, entrance stations, campfire circles, etc., and will not provide fully for meeting the increase in visitor use workload. These are requirements that must be met if the Service is to fulfill its responsibility for providing visitor services and for protection of park features and facilities. Increased staffing and supporting expense funds are required. It is respectfully requested that the amount of $312,600 disallowed by the House be restored in order that the standard of operation contemplated in the estimate will not have to be lowered.

ADDITIONAL PARK INFORMATIONAL PUBLICATIONS

The House action in reducing the budget request by $5,300 would reduce the Service's free informational publications program by approximately 250,000 units. Additional publications are needed especially for recently authorized park areas such as Fire Island, Assateague Island, Delaware Water Gap, and others. More and more publications are required each year to meet the needs of park visitors, schoolchildren, congressional and other governmental officials, etc. It is respectfully requested that the amount of $5,300 disallowed by the House be restored in order that the minimum requirements for free informational publications can be met.

MAINTENANCE AND REHABILITATION OF PHYSICAL FACILITIES

(House hearings, pt. 1, pp. 602–620, 668, 693) (Senate hearings, p. 407)

Appropriation, 1966	$24,763,000
Estimate	27,022,000
House allowance	26,680,000
Restoration requested	342,000

(P. 26, line 19)

Amendment requested:

Page 26, line 19, strike out "$26,680,000" and insert in lieu thereof "$27,022,000", the estimate, or an increase of $342,000 in the appropriation.

HOUSE REPORT

"The committee has approved the requested increase of $757,600 for roads and trails. The committee has also approved an increase of $1,166,200, for maintenance and rehabilitation of buildings, utilities, and other facilities, a decrease of $342,000 below the amount requested for the operation and maintenance of new facilities. With a base of $14,892,600 available for expenditure in fiscal year 1966, the committee is of the opinion that an increase of $634,300 will provide sufficient funding for this activity in 1967 if the work is performed in the most economical manner possible."

JUSTIFICATION

The amendment restores the following reductions made by the House in the budget estimate for this appropriation. This amount is distributed to activities as follows:

Activity	Appropriation, 1966 [1]	Budget estimate, 1967	House estimate, 1967	Restoration requested
1. Roads and trails	$9,867,000	$10,621,200	$10,621,200	
2. Buildings, utilities, and other facilities	14,896,000	16,400,800	16,058,800	$342,000
Total	24,763,000	27,022,000	26,680,000	342,000

[1] Includes pending pay act supplemental.

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$256,000
12	Personnel benefits	13,000
23	Rent, communications, and utilities	10,000
25	Other services	25,000
	Services of other agencies	5,000
26	Supplies and materials	23,000
31	Equipment	10,000
	Total	342,000

1. *Buildings, utilities, and other facilities.*—Restoration of $342,000 is requested under this activity to provide funds for efficient and economical maintenance and operation of the new facilities being provided in existing park areas.

The House allowance does not make adequate provision for operating and maintaining the many new and improved facilities that will be completed and placed in operation at the beginning of or during the budget year. These facilities must be placed in operation as completed to serve the increasing visitor workload. They must be operated and maintained in a manner that will protect the Government's investment and provide visitor safety and comfort to the fullest extent possible. It is estimated that visitation to the parks will increase in 1967 approximately 13.7 percent over 1965 (the last completed calendar year). The House reduction of $342,000 will, if sustained, make it necessary to lower the standards of operation and maintenance of existing facilities in some of the parks, in order to provide the minimum funds required for operating and maintaining newly constructed or reconstructed facilities.

Office of Saline Water

Salaries and Expenses

(House hearings, pp. 492–579)

(Senate hearings, p. 1282)

Appropriation 1966	$20,000,000
Estimate	28,595,000
House allowance	27,500,000
Restoration requested	1,095,000

(P. 28, line 15)

Amendments requested:

(1) Page 28, line 15, strike out "$27,500,000" and insert in lieu thereof "$28,595,000", the estimate or an increase of $1,095,000 in the appropriation.

(2) Page 28, line 15, strike out "$1,445,000" and insert in lieu thereof "$1,540,000."

HOUSE REPORT

"The amount allowed includes $26,055,000 for research and development and $1,445,000 for administration and coordination."

"The reduction of $1,000,000 in research and development is based on the committee's opinion that program operations will not progress sufficiently in fiscal year 1967 to require the full funding requested in the budget estimate for this purpose. As of January 31, 1966, $15,664,000 of the available funds for fiscal year 1966 were unobligated. The committee's recommendation will provide an additional $26,055,000 in fiscal year 1967 for research and development."

"The reduction of $95,000 in administration and coordination also relates to program operations at a lower rate then was anticipated in the 1967 budget estimate."

JUSTIFICATION

Explanation of amendment (1)

The amendment restores the reduction of $1,095,000 made by the House in the budget estimate. This amount is distributed to activities as follows:

Activity	Appropriation, 1966	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Research and development:				
(a) Contracts and grants (non-Federal)	$18,273,000	$26,705,000	$25,705,000	$1,000,000
(b) Federal laboratories	600,000	350,000	350,000	
2. Administration and coordination	1,127,000	1,540,000	1,445,000	95,000
Total	20,000,000	28,595,000	27,500,000	1,095,000

The restoration is distributed by objects of expenditures as follows:

11	Personnel compensation	$70,000
12	Personnel benefits	5,000
21	Travel and transportation of persons	5,000
23	Rent, communication, and utilities	5,000
25	Other services	1,000,000
26	Supplies and materials	5,000
31	Equipment	5,000
	Total	1,095,000

ACTIVITY 1.—RESEARCH AND DEVELOPMENT

The reduction of $1 million in contracts and grants (non-Federal) within this activity will slow down the expansion of the program for advancing desalting technology and greatly reduce the flexibility in the direction and management of the program. It is the policy of the Office of Saline Water to be extremely cautious and selective in awarding all research and development contracts. Due to this policy the obligation of available funds has been slow, but this does not mean an inability to obligate all currently available funds or that the program is proceeding at a much slower rate than originally planned.

During the first half of fiscal year 1966 the major portion of effort of the OSW technical staff, as well as many OSW consultants, was devoted to review and evaluation of the OSW program in order to determine where and how best to use the funds available for obligation. This procedure, of necessity, delayed obligations since such a study was done by a limited OSW technical staff and required the time of consultants who already had their valuable time committed to other programs. Some of this review work is still in process. The obligational rate for OSW in the latter part of the fiscal year is expected to increase steadily and should result in the obligation or commitment of the funds available in fiscal year 1966.

ACTIVITY 2. ADMINISTRATION AND COORDINATION

The reduction of $95,000 in this activity is doubly disastrous and will seriously affect the efficient management of the program during fiscal year 1967 if it is not restored. As indicated earlier, the OSW staffing level in fiscal year 1966 was a contributing factor to the slow rate of program obligations. As mentioned, program consultants were obtained by OSW to aid the basic OSW technical staff in making its evaluations of the various processes and development programs underway and contemplated by OSW. To reduce the level of support for this activity in fiscal year 1967 will further cripple OSW's ability to carry out the program that has been expanding rapidly over the past several years and is expected to continue to be funded at a higher level in future years.

The publicity resulting from congressional hearings, the enactment of Public Law 89–118 and the first international symposium on water desalination has increased the volume of mail and office visits by technically oriented persons as well as from citizens who are simply seeking additional information concerning the activities of the Office. In addition, the interest of the administration in accelerating and expandiug the U.S. desalting program and the possibility of now obtaining desalted water at a reasonable cost for many areas of the world has made it necessary for OSW to participate in a growing number of water resource study meetings and to provide reports and data concerning the potential utilization of desalted water as a part of regional water development programs.

Because desalination is so closely related to pollution, waste recovery and other, water supply sources, OSW's efforts must also be coordinated with other bureaus and agencies of the Department of the Interior and with HEW, Corps of Engineers, Bureau of Yards and Docks, etc., all of which place additional time demands on the now limited staff.

All of the foregoing activity uses much valuable staff time and decreases the time available to be devoted to the principal operations of the Office, which is to evaluate proposals, award contracts, monitor the results of contract developments and plan additional technical studies. The number of research proposals received has risen sharply. Proposals received during fiscal year 1964 numbered 239 and during fiscal year 1965 numbered 338. It is estimated that the number of proposals that will be received during fiscal year 1966 will exceed 425 and will continue to increase in fiscal year 1967. These proposals all must be reviewed thoroughly despite the fact that only a portion of them will be finally selected for contract action. In addition to the receipt of these unsolicited proposals, OSW is now preparing RFP's for research and engineering work in areas of special interest. This activity necessitates the preparation of technical and procurement documentation that, in many cases, was not prepared previously. As a result of all this activity, meritorious proposals must be assigned priorities to coincide with the availability of funds, contracts must be negotiated, contractors must be visited to assure that they are performing according to the terms of the contract and the technical staff must keep abreast of results being obtained. The continued expansion of the program generates additional work in the administrative areas, such as, contract negotiation and preparation, voucher audit and payment, financial recordkeeping and fund control, personnel matters and the maintenance of overall administrative management of the program.

The proposed reduction in administration and coordination will necessitate a decrease of approximately 25 percent in the requested additional positions. This reduction will put a severe strain on an already overburdened staff and will affect both the technical and administrative functions within OSW. The restoration of $95,000 in administrative funds is therefore required to prevent a further curtailment of the technical and administrative functions listed above and a serious reduction in efficient management and administration of the OSW program.

Explanation of amendment (2)

The amendment increases the limitation on the amount available for administration and coordination from $1,445,000 to $1,540,000. The request for restoration of $95,000 will make possible the required staffing for the efficient management and administration of the expanding program as stated in the previous paragraphs.

Departmental Offices

Office of the Solicitor

Salaries and Expenses

(House hearings, pt. 2, pp. 683–699)

(Senate hearings, p. 769)

Appropriation, 1966	$4,597,000
Estimate, 1967	4,704,000
House allowance	4,650,000
Restoration requested	54,000

(P. 29, line 10)

Amendment requested:

Page 29, line 10, strike out "$4,650,000" and insert in lieu thereof "$4,704,000", the estimate or an increase of $54,000 in the appropriation.

HOUSE REPORT

"The reduction of $54,000 relates to the increase of $65,000 requested in the 1967 budget estimate to permit funding of existing positions on a full year basis in fiscal year 1967. It is the opinion of the committee that this additional cost can be absorbed by delay in filling positions and by filling positions at a lower salary level than for which they were budgeted."

JUSTIFICATION

The amendment restores the reduction of $54,000 made by the House in the budget estimate. This amount is distributed to the following activity:

Activity	Appropriation, 1966	Budget estimate, 1967	House allowance, 1967	Restoration requested
Legal services	$4,597,000	$4,704,000	$4,650,000	$54,000

A breakdown of the restoration by objects of expenditures follows:

11 Personnel compensation $54,000

The amendment, restoring the reduction of $54,000 made by the House in the budget estimate, is considered essential to the financing of 11 positions (7 attorney and 4 clerical) in the already small personnel organization maintained for the legal services of the Department. Absorbing the cost by recruitment delays and by filling positions at lower salary levels, indicated as a possibility in the House report, presupposes leeway that, in truth, does not exist in either of the means cited. In fact, delays in the filling of positions already are being resorted to on an extended basis so that inescapable financial requirements may be met, such as periodic step increases, which in 1967 are estimated at over $113,000, and terminal leave costs, which in the budget year are estimated at $21,890 if the average over the past 3 years is maintained. In addition, it has been the practice of the office for sometime past to effect deserved promotions where grades should correspond with higher work assignments at the expense of the grade lowering of positions as they become vacant. In result, the practice has about yielded the limit of revenue for this type of financing since continuance on any scale is certain to produce the anomaly of a legal staff handicapped by the growing number of junior attorneys and yet expected to carry the rising volume of legal business of the Department, which includes that generated by perhaps some of the most important programs being administered by any Federal agency in current times.

OFFICE OF THE SECRETARY

SALARIES AND EXPENSES

(House hearings, pt. 2, pp. 624–682)

(Senate hearings, p. 49)

Appropriation, 1966	$4,557,200
Estimate, 1967	5,186,000
House allowance	4,984,100
Restoration requested	201,900

(P. 29, line 21)

Amendment requested:

Page 29, line 21, strike out "$4,984,100" and insert in lieu thereof "$5,186,000", the estimate or an increase of $201,900 in the appropriation.

HOUSE REPORT

"The total decrease of $201,900 includes $27,000 for increased pay costs for fiscal year 1966 positions; $20,700 for the increase of one position in the Office of Science Advisor; $52,800 to fill authorized positions on a full year basis; $15,500 for an additional position and related costs in the Office of Information; $60,500 for the establishment of the Office of Program Analysis; $20,400 in the Office of Administrative Management Services for filling authorized positions on a full year basis and other expenses; and $5,000 in General Services for other expenses.

"The committee has noted with interest and approval during the hearings, the increased emphasis the Department of Interior plans to give to the new concept in budget formulation commonly referred to as planning, programing, and budgeting. The activities of the Department of Interior are vast and complex, and they continue to grow. With never enough public money to cover all our

national wants and not always enough to cover our needs, it is urgent that the executive branch, as the formulator of our national budget, take full advantage of every feasible means in the budget formulation process to improve the selection of choices that must necessarily be made. The committee therefore endorses the object of "PPB" concept and will observe with great interest the progress achieved by the Department in this connection. Of course, the President's direction to the agencies to inaugurate this new plan was given only last summer and there has not been opportunity for a full display of how the new plan, when fully operative, might bear upon the form and content of budget justifications and presentations to the committee. Necessarily at this point, therefore, that question must remain open.

"The committee has, however, made a reduction of $60,500 in the funding related to this activity on the basis that this portion of the requested increase of $175,500 can be absorbed."

JUSTIFICATION

The amendment restores the reduction of $201,900 made by the House in the budget estimate. This amount is distributed to activities as follows:

Activity	Appropriation, 1966 [1]	Budget estimate, 1967	House allowance, 1967	Restoration requested
1. Departmental direction	$769,500	$1,120,200	$966,100	$154,100
2. Program direction and coordination	1,518,700	1,510,600	1,502,200	8,400
3. Administrative management services	2,090,200	2,221,900	2,188,500	33,400
4. Commissioner of Fish and Wildlife		148,900	148,300	600
5. General Services	178,800	184,400	179,000	5,400
Total	4,557,200	5,186,000	4,984,100	201,900

[1] Includes pending pay act supplemental.

A breakdown of the restoration by objects of expenditures follows:

11	Personnel compensation	$170,740
12	Personnel benefits	12,960
21	Travel and transportation of persons	5,900
23	Rent, communications, and utilities	5,600
24	Printing and reproduction	1,400
25.2	Services of other agencies	4,000
26	Supplies and materials	1,100
31	Equipment	200
	Total	201,900

The Office of the Secretary is requesting full restoration of the reductions made by the House in the budget for the fiscal year 1967. During the past few years the Office of the Secretary has found itself in an increasingly difficult situation in carrying on the greatly increased workload and new programs with available staff. These new activities together with those that have been in being for a number of years require careful study and positive direction, guidance, and coordination by the Secretary and the staff in the Office of the Secretary. Salary and other costs continue to increase and unless increased funds are provided, it will be necessary to reduce the staff. The increases requested for the fiscal year 1967 provide some help in a few areas where the situation is most critical as well as providing for the new Offices of Program Analysis and the Office for Equal Opportunity. Additional information regarding each of the restorations requested follows:

Pay costs

A restoration of $27,000 is requested for meeting the cost of increased pay costs on currently authorized positions. Without these funds a further reduction in current employment would be required, and would further aggravate the very difficult workload situation which exists in the Office of the Secretary. It is urged, therefore, that the full cost of the pay increase be granted.

Office of the Secretary (Office of the Science Adviser)

A restoration of $20,700 is requested for the Office of the Science Adviser. The Science Adviser and his present staff of three professional personnel are now carrying out a wide array of functions which concern management and coordina-

tion of the Department's $150 million research and development program. However, the press of ongoing, day-to-day activities has precluded adequate progress on two functions which are of high importance over the long run to successful accomplishment of the Department's total mission. The increase of $20,700 for fiscal year 1967 is to help meet the responsibilities of these two functions and further progress on them will not be possible without the increase in funds. These functions are:

(1) Conduct of in-depth review of present research programs in bureaus to insure their appropriateness to the Department's goals and objectives, their high quality and efficiency and to prevent gaps or overlaps in programs.

(2) Provide improved planning capabilities for Interior's Secretariat to make certain that full advantage is taken of research potentials in future natural resources development and conservation.

In summary we feel the science adviser will be severely handicapped in carrying out his most important functions in the future if additional funds are not provided in fiscal year 1967.

Office of the Under Secretary

A reduction of $52,800 was made in funds requested for the Office of the Under Secretary. During the past year the Under Secretary has taken on a greatly expanded workload. This has placed a tremendous burden on the Under Secretary and his small staff. The budget provided for a staff of a deputy, two staff assistants, two executive assistants, and four secretarial or clerical employees. Under the amount provided in the House bill a reduction of three to four positions would be required. In addition to the many and varied duties that are required as Under Secretary, he is responsible also for directing the evaluation and obtaining action and decisions on the planning, programing, and budgeting activities of the Department under the program of the President. The Job Corps program is also his responsibility. Without increased staff, these and other programs cannot receive the attention that is required.

Office of Program Analysis

The Office of Program Analysis has been established in the Office of the Under Secretary to provide the Under Secretary with the staff assistance required for accomplishment of his assigned responsibilities for operation of the departmental planning-programing-budgeting system. Total staffing for the immediate Office of the Under Secretary as proposed in the 1967 budget is 10 positions. In view of the limited size of this staff and its related funding, it would not be possible to absorb any portion of the $60,500 reduction within the Office of the Under Secretary. It therefore would be necessary to make reductions in other secretarial offices to provide for this funding need. The 1967 budget estimate for the Office of the Secretary already has recongized savings of $310,171 as a result of probable salary lapses. Approximately 89 percent of the obligations of the Office of the Secretary are for personnel compensation and benefits so there is virtually no opportunity for savings other than by actual reduction of personnel elsewhere within the Office of the Secretary to meet the funding needs for the Office of Program Analysis. Such reductions could not be made without severely impairing our ability to perform essential duties and services of the Office of the Secretary. It therefore is essential that the reduction of $60,500 for the Office of Program Analysis be restored.

Office of Information

Restoration of $15,500, will aid greatly in meeting ever-mounting requests from the public for conservation material while simultaneously accelerating the Department's program of returning additional thousands of dollars to the general fund of the Treasury through increased sales of better quality publications.

During the past few months, nearly $100,000 has been realized by the General Fund—over and above that normally anticipated—through an aggressive campaign mounted by the Office of Information to promote the sales of publications. Given sufficient staff, the Office can continue more effectively its mission of consolidating publications, improving text and format, and upgrading quality so sales by the Superintendent of Documents will be enhanced. The steadily growing workload, occasioned by increased thousands of inquiries week after week by schoolchildren, teachers, and the general public, has put a severe strain on the small staff, a staff which is half that of two decades ago when interest and concern with conservation had only a relatively small following. The additional tens of thousands of dollars returned to the Treasury in recent months by sales of publications reflects only one area of savings. In the area of consolidation, a centralized

exhibits coordination plan has cut other thousands by combining displays of several bureaus and using these displays on a repeat basis instead of constructing new ones.

The Office believes that the addition of one highly qualified GS–14 will help swell the steady flow of money to the Treasury and repay to the Government several times the investment in salary and personnel benefits.

In recent months, the Office of Information has effected other Department-wide economies through coordination of information services supplied by bureaus and offices, through a more critical review of publications programs and through adoption of modern methods whereby the inquiring public, including those constituents referred to the Department by Members of the Congress, are served more rapidly and satisfactorily.

Office of Budget

Restoration of $14,800 is requested to add one GS–9 budget analyst position, with personnel benefits, together with a small acount for reallocations, within-grade promotions, and operating costs.

The Office of Budget for the Department is staffed with five budget examiners. That office is not only responsible for the general direction of the development, preparation and execution of the Department's budget, including review and processing, but also serves as liaison between the various bureaus and the Department with the Bureau of the Budget and the Appropriation Committees of the House and Senate.

As the workload continues to increase as a result of more intensive planning, cost reduction efforts, and more particularly as the activities of the Department grow in scope and complexity, there is a real need for a budget analyst position at a GS–9 grade level who not only can assist in budget examinations, but at the same time receive the training opportunity to develop into an experienced budget analyst. This position will enable the Office to keep up with the increased workload which has been thrust upon it.

Correspondence control office

Restoration of $5,600 for the addition of one position is requested for the correspondence control office, which handles all incoming mail addressed to the Secretary, Under Secretary, and the Department of the Interior. It sorts this mail into three categories and places under a control system mail which must receive followup action or is considered to be important to the above-named offices.

In addition, all outgoing mail prepared for the signature of the Secretary or Under Secretary is reviewed by this office to determine acceptability of policy, grammatical correctness, and accuracy of typing. The staff of this office also prepares letters of acknowledgment to all congressional letters addressed to the Secretary, and is further charged with the responsibility of insuring that mail sent to the Department from the White House is answered and handled expeditiously and courteously.

This latter action has required the establishment of control procedures involving approximately 30 Bureaus and Offices and is empowered to enforce deadline requirements.

Because of the increased number of programs charged to this Department and because of interest in on-going programs, the mail handled by this office has increased approximately one-third the past year. Nine thousand seven hundred letters addressed to the Secretary were controlled. Approximately 60 congressional letters per week are acknowledged and approximately 250 letters from the White House per week are handled by this office.

General services

Restoration of $5,000 is requested under this activity, this covers general items of service such as printing, telephone, library, and other general costs which it is not practicable to distribute. Certain of these costs are associated with increased positions requested as well as rising rates for certain items. In this area also the office of the Secretary is having considerable difficulty and the increase requested is urgently needed.

DEPARTMENT OF AGRICULTURE,
Washington, D.C., April 11, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate.

DEAR MR. CHAIRMAN: Enclosed are statements in support of the amendments which we request be made in the Forest Service portion of the Department of the Interior and Related Agencies appropriation bill, 1967, as passed by the House.

These proposed amendments would restore the budget estimates, with the exception noted below. The House reductions are particularly serious since the budget estimates would have provided only the bare minimum needed to do an effective job of protecting and managing the national forest resources and our forestry research programs.

The House bill, page 33, line 20, under heading "Forest Roads and Trails (Liquidation of Contract Authorization)" provides $101,230,000 for construction and maintenance of forest development roads and trails. The amount requested was $102,530,000. We are not requesting restoration of the $1,300,000 even though the need for construction and maintenance of forest development roads and trails continues to increase with expanding programs. Increases in receipts, estimated on the basis of information developed after preparation of the budget, are expected to offset this decrease.

We support the Department of Interior recommendations on the land and water conservation fund insofar as they apply to the Forest Service from the standpoint of our allocation.

Representatives of the Department will be glad to furnish any additional information you may need, or to appear before your committee as necessary to further discuss the 1967 budget estimates of the Forest Service.

Sincerely yours,

JOHN A. SCHNITTKER,
Under Secretary.

Enclosures.

FOREST SERVICE

FOREST PROTECTION AND UTILIZATION

FOREST LAND MANAGEMENT

(House hearings, pt. 3, p. 15; Senate hearings, p. 1120)

1966 appropriation (includes pending pay and associated cost supplemental)	$164,453,000
1967 budget estimate	172,856,000
House bill	172,821,000
Restoration requested	35,000

AMENDMENT REQUESTED

Page 32, line 17, strike out "$172,821,000" and insert in lieu thereof "$172,856,000," an increase of $35,000 to restore the budget estimate.

HOUSE REPORT (P. 28)

"Total reductions of $485,000 below the budget estimate include $100,000 for recreation facilities in eastern United States; $200,000 for mapping work in the examination and appraisal of land; $85,000 planning funds for the Missoula Equipment Development Center; and $100,000 for water development projects built by other agencies.

"The amount recommended by the committee also includes the following increases over the budget estimate: $200,000 for water recreation facilities on the Middle Fork of Anderson River, Ind.; $150,000 for improvements on Todd Lake and the Confederate Breastworks in the George Washington National Forest, Va.; $50,000 preplanning funds for the construction of a reservoir on the upper Big River project, Meramec River Basin, Mo.; and $50,000 for engineering and recreational planning for the Lusk Creek project in the Shawnee National Forest, Ill."

JUSTIFICATION OF THE AMENDMENT BY THE DEPARTMENT

The amendment proposed by the Department would eliminate the $450,000 increase and restore the $485,000 reductions in the House bill. These amounts are distributed to subactivities as follows:

Forest protection and utilization

	1966 appropriation	1967 budget estimates	1967 House bill	Restoration or amendment requested
FOREST LAND MANAGEMENT				
National forest protection and management:				
Timber resource management:				
(a) Sales administration and management	$30,809,000	$31,635,000	$31,635,000	
(b) Reforestation and stand improvement	17,360,000	17,430,000	17,430,000	
Recreation-public use	28,604,000	29,876,000	29,926,000	−$50,000 (1)
Wildlife habitat management	3,872,000	3,897,000	3,897,000	
Range resource management:				
(a) Management	5,362,000	5,404,000	5,404,000	
(b) Revegetation	2,810,000	2,820,000	2,820,000	
(c) Improvements	3,379,000	3,395,000	3,395,000	
Soil and water management	5,722,000	6,261,000	6,261,000	
Mineral claims, leases, and special uses	3,976,000	4,004,000	4,004,000	
Land classification, adjustment, and surveys	4,345,000	5,805,000	5,605,000	+200,000 (2)
Forest fire protection	24,454,000	25,120,000	25,120,000	
Structural improvement for fire and general purposes (construction and maintenance)	10,865,000	10,909,000	10,824,000	+85,000 (3)
Payments to employees' compensation fund	669,000	733,000	733,000	
Subtotal	142,227,000	147,289,000	147,054,000	+235,000
Amounts advanced from "Cooperative range improvements"	−700,000	−700,000	−700,000	
Subtotal, national forest protection and management	141,527,000	146,589,000	146,354,000	+235,000
Water resource development related activities	4,770,000	6,416,000	6,616,000	−200,000 (4)
Fighting forest fires	5,000,000	5,000,000	5,000,000	
Insect and disease control:				
White pine blister rust control	3,640,000	3,695,000	3,695,000	
Other pest control	8,535,000	8,676,000	8,676,000	
Subtotal, insect and disease control	12,175,000	12,371,000	12,371,000	
Acquisition of lands, Weeks Act	680,000	2,480,000	2,480,000	
Total, forest land management	[1] 164,152,000	172,856,000	172,821,000	+35,000

[1] Excludes transfer of $301,000 to General Services Administration.

(1) The Department recommends that the reduction of $100,000 for recreation facilities in Eastern United States be restored and the $150,000 increase for improvements on Todd Lake and the Confederate breastworks in the George Washington National Forest, Va., be eliminated. A reduction of $100,000 for outdoor recreation facilities in Eastern United States can only be met by reducing the number of facilities otherwise to be provided for the added number of recreationists that come to the national forests. Experienced increments show that this number will increase 10 percent over a year ago. These people will come to camp, picnic, boat, swim, etc., whether facilities exist or not. Lack of facilities will force them to scatter in unorganized fashion over the forests where they will create problems of sanitation and public safety. If adequate, though simple developed sites can be provided them, they will create less problems from littering, likelihood of the escape of campfires into the forest, traffic safety, personal safety, and unnecessary damage to the soil and vegetation at that place. A few years of additional cost created by scattered, disorganized use on unplanned undeveloped sites along a few miles of road can amount to more than the original cost of a standard planned installation. The recommended increase of $150,000 for improvements at Todd Lake and Confederate breastworks on the George Washington National Forest should be eliminated in view of high priority needs for other projects as reflected in the budget.

(2) The Department recommends that the reduction of $200,000 for mapping work in the examination and appraisal of land made by the House be restored.

A reduction of $200,000 would have serious adverse impacts on many Service programs. There are no other Federal agencies now doing mapping that could take on the mapping job planned by the Forest Service for fiscal year 1967 and furnish the Service with the maps required.

Mapping performed by the Forest Service is in support of the functional program of the Bureau of Land Management.

Resulting maps are used extensively in connection with timber, range, watershed, transportation, and other engineering and resource projects. The decrease for these working tools will result in increased costs to the several activities.

On an annual basis the Forest Service presents its priority needs for topographic surveys to the U.S. Geological Survey in conformity with instructions issued by the Bureau of the Budget. In many instances the Geological Survey is unable to provide the requested surveys within the established time requirements to support the Forest Service program within areas of unilateral requirements.

The Forest Service is one of the agencies recognized as being qualified to produce standard topographic maps. It, therefore, executes its topographic surveys in a manner to assure that the resulting map will meet, as a minimum, the standards of accuracy of the standard topographic map distributed by the Geological Survey. The results of these surveys are employed to further the Forest Service program, but, in addition, they are turned over to the Geological Survey where they are incorporated into the standard topographic coverage of the United States.

The area of Forest Service topographic mapping interests approximates 630,000 square miles. Currently 41 percent of this area is covered with topographic maps of acceptable Forest Service standard. An additional 30 percent of this area is covered with nonacceptable mapping. The anticipated 10-year program for the completion of topographic coverage of acceptable and nonacceptable maps will suffer proportionately to the amount of the appropriation decrease.

During the hearings before the House subcommittee there was considerable discussion of the relationship of the Forest Service mapping program and the mapping program of other Federal agencies. The committee was concerned as to the possibility of duplication of effort by lack of coordination between agencies. This has been a matter of concern to the Forest Service and other government agencies. At present, the General Accounting Office is making a detailed study of the situation.

(3) The Department recommends that the reduction of $85,000 for the Missoula Equipment Development Center made by the House be restored. It is important that planning and design start in fiscal year 1967.

Rapid advances in technology are now underway. Application of these advances to equipment and methods needed in programs of the Forest Service and its cooperators offers great opportunities for improvement and savings.

To efficiently carry out this cost-saving program for the Forest Service and cooperating Federal, State, and private agencies, it is necessary to substantially increase the work of the Center at Missoula.

Present buildings and facilities are inadequate, makeshift, and temporary. The present facilities are at five locations which are separated by as much as 5 miles. Specialized nature of the buildings and facilities needed makes rental of suitable quarters unfeasible. There are no Government or private buildings in the area or at other good locations that are suitable for the purposes.

Excellent land has been acquired for the buildings and test areas needed with the assistance of the Missoula county government. Criteria for the planning of the Center has been prepared. For maximum economy in the nationwide programs of the Forest Service and cooperating agencies, new and expanded facilities for the Equipment Development Center at Missoula, Mont., should be completed by the end of fiscal year 1968.

Experience has shown that costs can be reduced and equipment developed for needed work. For example, a newly developed one-man-operated power fireline trenching tool has demonstrated ability to produce fireline equal to 3 to 10 men with conventional handtools and over $1 million has been saved since 1960 by the development of paper sleeping bags for use of forest firefighters.

(4) The Department recommends restoration of the reduction of $100,000 for water resource development related activities. It also recommends elimination of the $200,000 increase for water recreation facilities on the Middle Fork of Anderson River, Ind.; the $50,000 increase for preplanning funds for the construction of a reservoir on the Upper Big River project, Meramec River Basin in Clark National Forest, Mo.; and the $50,000 increase for engineering and recreational planning for the Lusk Creek project in the Shawnee National Forest, Ill., be eliminated.

The reduction of $100,000 in the planned water resource development related activities item would curtail critically needed development and would further build up the backlog of Forest Service obligations and public needs at water development projects of other agencies. The proposed fiscal year 1967 budget is based on the need to keep pace with the schedule of the construction agencies. The development rate of these agencies is not within Forest Service control. Public use, management and access facilities are urgently needed on National Forest lands at many water development project locations. This work is essential in making the areas suitable and safe for public use and to prevent water pollution. On a priority basis the reduction would be taken as follows: Allegheny Reservoir, $50,000; Flaming Gorge, $25,000; and Monroe Reservoir, $25,000.

The department recommends that the $300,000 added by the House be eliminated because of the status of project development, construction schedules, and the developing pattern of public use for these facilities.

Forest Research

(House hearings, pt. 3, p. 64; Senate hearings, p. 1120)

1966 appropriation (includes pending pay and associated costs supplemental)	$37,374,000
1967 budget estimate	34,435,000
House bill	34,955,000

AMENDMENT REQUESTED

Page 33, line 6, strike out "$34,955,000" and in lieu thereof insert "$34,435,000"—a decrease of $520,000 to restore the budget estimate.

HOUSE REPORT (P. 29)

"Total decreases of $482,000 below the budget estimate include $150,000 for utilization of Appalachian timber; $100,000 for harvesting and transporting Appalachian timber; $182,000 for market research for forest products of Appalachia; and $50,000 for forest recreation research.

"The committee is in accord with operations of the Forest Service to improve the economy in Appalachia. The reductions recommended in this bill result from evidence developed during the hearings that these programs are still slow in getting underway, and in each instance rather sizable sums of funds appropriated for these activities in 1965 still remain unobligated. In the opinion of the committee, the bill as recommended provides sufficient funds in fiscal year 1967 to keep pace with the agency's ability to develop program operations.

"The increases recommended by the committee over the budget estimate include: $72,000 planning for an addition to the forest insect and disease laboratory at Delaware, Ohio; and $450,000 for the construction of a hydrology laboratory at Oxford, Miss.

"The committee is informed final plans for the Olympia Laboratory have not yet been completed. It is understood this is a high priority item with the Forest Service and construction funds will be budgeted as soon as the financial situation permits.

"Also included are planning funds for the following Forest Research Laboratories: Corvallis, Oreg. ($170,000); La Grande, Oreg. ($28,000); Provo, Utah ($37,000); Madison, Wis. ($180,000); Nacogdoches, Tex. ($25,000); Berea, Ky. ($40,000)."

JUSTIFICATION OF THE AMENDMENT BY THE DEPARTMENT

The amendment proposed by the Department would eliminate the increase of $1,002,000 made by the House bill. These amounts are distributed to subactivities

as follows. Also, this amendment would restore the $482,000 reduction in the House bill.

	1966 appropriation	1967 budget estimates	1967 House bill	Restoration or amendment requested
FOREST RESEARCH				
Forest and range management research:				
Timber management research	$8,027,000	$8,085,000	$8,085,000	
Watershed management research	3,280,000	3,303,000	3,303,000	
Range management research	1,258,000	1,267,000	1,267,000	
Wildlife habitat research	730,000	735,000	735,000	
Forest recreation research	516,000	519,000	469,000	+$50,000 (1)
Subtotal, forest and range management research	13,811,000	13,909,000	13,859,000	+50,000
Forest protection research:				
Forest fire research	2,860,000	2,880,000	2,880,000	
Forest insect research	3,856,000	3,883,000	3,883,000	
Forest disease research	2,081,000	2,096,000	2,096,000	
Subtotal, forest protection research	8,797,000	8,859,000	8,859,000	
Forest products and engineering research:				
Forest products utilization research	6,077,000	6,505,000	6,355,000	+150,000 (2)
Forest engineering research	416,000	671,000	571,000	+100,000 (3)
Subtotal, forest products and engineering research	6,493,000	7,176,000	6,926,000	+250,000
Forest resource economics research:				
Forest survey	1,939,000	2,055,000	2,055,000	
Forest products marketing research	1,491,000	1,773,000	1,591,000	+182,000 (4)
Forest economics research	658,000	663,000	663,000	
Subtotal, forest resource economics research	4,088,000	4,491,000	4,309,000	+182,000
Forest research construction	4,183,000		1,002,000	−1,002,000 (5)
Total, forest research	[1] 37,372,000	34,435,000	34,955,000	−520,000

[1] Excludes transfer of $2,000 to General Services Administration.

(1) The Department recommends that the reduction of $50,000 for forest recreation research be restored. The total forest recreation research effort countrywide is small; the Forest Service program is the only major research effort in the entire field. To reduce the program by $50,000 will mean a serious handicap to a very critical area faced with increasing demands and increasing problems. The national forests, other Federal and State forest land agencies, and private landowners are making increasingly larger investments in recreation facilities each year. Recreation research aims to provide guides for both public and private investments and to provide answers on how the quality of recreation resources can be maintained even with heavy concentration of use.

Even such necessary knowledge as how to determine and project the amount of recreational use has not been available to the forest recreation agencies. Research in this area has been highly successful. The research program has also provided much of the necessary knowledge for all agencies charged with administering the Land and Water Conservation Act. Forest Service research under this program has successfully identified those elements needed to insure financially successful private forest recreation ventures on small forest holdings. It is studying the critical problems of the Boundary Waters Canoe Area.

This year the Department of Agriculture will spend nearly $30 million to meet present day recreation demands on national forests. In addition, it is charged with a major responsibility for managing the Nation's wilderness system which involves in large measure forest recreation management of a new and uncharted type. The Forest Service alone is now the largest supplier of winter sports activities in the world, and again the needed information for proper management is nonexistent.

It is entirely conceivable that forest recreation research can produce methods to reduce forest recreation management costs in the Federal sector by 10 to 20 percent. The savings in management costs on just the operation, maintenance, and cleanup of recreational sites on national forests in one year alone would be much greater than the total annual research expenditure for all Forest Service

recreation research. And these findings would apply to forest recreation programs for lands in other public and private ownerships. Thus, reducing by $50,000 would mean that the potential for cost savings is likewise reduced.

(2) The Department recommends that the reduction of $150,000 for forest products utilization research made by the House be restored. Forest products utilization research studies will be seriously handicapped by a budget cut. The situation at Princeton, W. Va., would be extremely critical where utilization research with Appalachia funds is supporting important marketing research. The research there concentrates on improved hardwood use such as the development of more efficient sawing of low-grade hardwoods for pallets; studies to enable wooden highway guardrail posts to compete with other materials through more rapid installation; new concepts and designs for railroad ties to enable retention of Appalachian hardwoods in an expanding market.

Research underway at Madison, Wis.; Columbus, Ohio; and Upper Darby, Pa., would also be curtailed. These investigations are aimed at expanded use of Appalachian hardwoods for sanitary tissue and toweling; development of computer-based systems for relating hardwood lumber grades to product requirements; determination of causes and corrective measures for eliminating stain in standing oak trees; improved hardwood log and tree grades; reduction of deterioration in stored pulp chips; and development of improved pallet designs and fastenings.

(3) The Department recommends that the reduction of $100,000 for forest engineering research made by the House be restored. Research work in Appalachian forest engineering problems has progressed at a rapid rate since June 1965; an excellent staff of engineers has been assembled. Under grants from this program, the University of West Virginia has initiated a wide variety of studies of special benefit to the logging industry of West Virginia and other sections of Appalachia. Progress can be measured by the predicted attendance of some 200 or so engineers and industry representatives at a symposium scheduled in Morgantown this month.

Current work includes research on criteria for use of wheeled skidders in West Virginia; more efficient methods for loggers to select and use forest machines; conveyor systems to reduce logging road requirements; new, more powerful and safer power sources and logging machines for woods work; and better tools to reduce the drudgery and fatigue of woods work.

(4) The Department recommends that the reduction of $182,000 for forest products marketing made by the House be restored. Funds for marketing research are being used for basic studies to evaluate potential markets for timber products that might be produced from the forest resources of the Appalachian area. These include a comprehensive survey of wood use in the Nation's manufacturing industries to determine trends in use and the location of markets for hardwood lumber, plywood, and other wood materials for furniture, pallets, and other fabricated products. Related investigations are underway to appraise market prospects in residential and nonresidential construction for such items as hardwood flooring, paneling, and laminated timbers. Other studies are designed to determine opportunities for expanded use of Appalachian hardwoods in farm construction and in recreational structures.

Plans for future research include the completion of basic studies now under way plus other specific investigations to determine, for example, the feasibility of improved wood floor systems for houses built in areas where wood floors are seldom used, the feasibility of new methods of sound control favoring use of wood in apartment construction, ways of developing markets for wood products in major new programs for the repair and rehabilitation of urgan housing, and opportunities for expanding markets for Appalachian woods in materials handling.

(5) The Department recommends that the increase of $1,002,000 for research construction be eliminated. The projects mentioned in the House report were given consideration at the time of budget formulation.

The House bill provides an increase of $450,000 over the budget for construction of a hydrology laboratory at Oxford, Miss.

The bill also provides increases over the budget totaling $552,000 for planning research facilities at seven locations. These locations are as follows:

	Total cost	Planning funds provided in the House bill
Delaware, Ohio	$1,022,000	$72,000
Corvallis, Oreg	2,670,000	170,000
La Grande, Oreg	378,000	28,000
Provo, Utah	497,000	37,000
Madison, Wis	3,180,000	180,000
Nacogdoches, Tex	360,000	25,000
Berea, Ky	640,000	40,000
Total	8,747,000	552,000

The Department recommends that both the $450,000 increase for construction of the hydrology laboratory and the $552,000 increase for planning research facilities be eliminated. The Department is currently engaged in a comprehensive study of Federal and State needs, including facility needs, for all types of agricultural and forestry research over the next 10 years. It is anticipated that this study will be completed this summer. Pending its completion, the Department recommends that, save in exceptional circumstances, no additional research facilities be planned or constructed.

The House report notes that "final plans for the Olympia Laboratory have not yet been completed * * *." The plans for this laboratory have been completed, except for formal acceptance of the plans by the Forest Service which is anticipated in the near future.

TIMBER DEVELOPMENT ORGANIZATION LOANS AND TECHNICAL ASSISTANCE

(House hearings, pt. 3, p. 102; Senate hearings, p. 1191)

1966 appropriation	
1967 budget estimate	$500,000
House bill	
Restoration requested	500,000

AMENDMENT REQUESTED

Page 35, after line 16, add:

"TIMBER DEVELOPMENT ORGANIZATION LOANS AND TECHNICAL ASSISTANCE

"For loans under the applicable provisions of the Consolidated Farmers Home Administration Act of 1961 (7 U.S.C. 1926 et seq.) and for related expenses and technical forestry assistance, as authorized by section 204 of the Appalachian Regional Development Act of 1965 (79 Stat. 13), $500,000, to remain available until expended."

HOUSE REPORT (P. 30)

"Of the $50,000 for technical assistance and $950,000 for loans and related expenses appropriated in fiscal year 1965, $40,820 and $900,000 remained unobligated as of January 31, 1966. Testimony developed during the hearings indicated that progress in this program will continue at a slow rate. In view of this, it is the opinion of the committee that funds currently available for this program will be sufficient through fiscal year 1967."

JUSTIFICATION OF THE AMENDMENT BY THE DEPARTMENT

The amendment proposed by the Department would restore the $500,000 reduction in the House bill.

The Department recommends restoration of the reduction of $500,000 for Timber Development Organization loans and technical assistance made by the House for the following reasons:

1. The fiscal year 1967 request for TDO technical assistance funds is required to provide for three or four feasibility studies in addition to those to be made with funds now available and to provide other forms of technical assistance in the

formation and operation of Timber Development Organizations. If these funds are not available the Department of Agriculture will not be able to make feasibility studies or provide other needed technical assistance to groups that apply for this assistance. Public interest in TDO's is developing and increased requests for service are expected.

2. The fiscal year 1967 request for additional loans and related expense funds for TDO's is needed to supplement the $900,000 made available by fiscal year 1965 appropriations.

3. Unless this appropriation is restored, Timber Development Organization work will have to be reduced to an ineffective level and be closed down entirely before the end of fiscal year 1967.

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, April 8, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: On April 5, 1966, the House of Representatives acted on H.R. 14215, the Department of the Interior and Related Agencies Appropriation Act for 1967. This act contains appropriations for activities of the Department of Health, Education, and Welfare relating to Indian health and education in the arts and humanities. The House allowed the full budget request for the Office of Education appropriation "Arts and humanities educational activities" but made reductions in the funds proposed for the Public's Health Service's Division of Indian Health.

Although we are not appealing for restoration of the President's budget request, there are several aspects of the House action which I would like to bring to your attention. With regard to the appropriation for "Indian health activities," the House allowed $73,250,000, a reduction of $198,000 from the budget request. Furthermore, the report of the House Committee on Appropriations recommended that $500,000 of the allowance be utilized to initiate a program to eradicate trachoma, an infectious eye disease, among the Indian population. Because the highest priority items in the Indian health budget are improvements in patient care and preventive health activities, we do not propose to reduce staffing in these areas below the level requested by the President for 1967. Instead, we propose to absorb the reduction made by the House and the reprograming required for the trachoma program entirely from budget increases originally requested for equipment, use of outside medical consultants, and minor repair projects. The staffing required for trachoma control (40 positions) will be an addition to the total staffing requested in the 1967 President's budget.

With regard to the appropriation for construction of Indian health facilities, the House allowed $13 million, a reduction of $1,422,000 from the request. However, since the reduction is based solely on possible slippage in the construction program and does not indicate disapproval of any of the proposed projects, we are not appealing for restoration of the deleted funds. The House also added a provision to the language of this appropriation which clarifies the legal basis for the the Department's practice of using the Bureau of Indian Affairs as a contracting agent for Indian health construction pojects. The Department fully supports this addition to the appropriation language.

For your information I have enclosed statements which more fully explain the effect of House action on the two Indian health appropriation accounts.

Sincerely,

WILBUR J. COHEN,
Under Secretary.

PUBLIC HEALTH SERVICE

INDIAN HEALTH ACTIVITIES

Obligations by activity

Activity	1966 appropriation		1967 estimate		1967 House allowance	
	Positions	Amount	Positions	Amount	Positions	Amount
Hospital health services	4,411	$39,323,000	4,647	$42,884,000	4,687	$42,686,000
Contract medical care	20	12,861,000	20	13,942,000	20	13,942,000
Field health services	1,260	13,094,000	1,411	14,792,000	1,411	14,792,000
Administration	153	1,892,000	144	1,830,000	144	1,830,000
Total	5,844	[1] 67,170,000	6,222	73,448,000	6,262	73,250,000

[1] Includes $998,000 proposed supplemental for Public Laws 89-301 and 89-132 pay act increases.

Obligations by object

	1966 appropriation	1967 estimate	1967 House allowance
Total number of permanent positions	5,844	6,222	6,262
Full-time equivalent of other positions	73	73	73
Average number of all employees	5,517	5,905	5,945
11 Total personnel compensation	$37,821,000	$41,059,000	$41,314,000
12 Personnel benefits	3,412,000	3,828,000	3,860,000
21 Travel and transportation of persons	2,135,000	2,208,000	2,319,000
22 Transportation of things	870,000	948,000	953,000
23 Rent, communications, and utilities	2,078,000	2,062,000	2,065,000
24 Printing and reproduction	114,000	116,000	121,000
25 Other services	14,571,000	16,420,000	16,122,000
26 Supplies and materials	5,635,000	5,785,000	5,766,000
31 Equipment	1,431,000	1,932,000	1,640,000
Subtotal	68,067,000	74,358,000	74,160,000
Deduct quarters and subsistence charges	897,000	910,000	910,000
Appropriation	67,170,000	73,448,000	73,250,000

SUMMARY OF CHANGES

Enacted appropriation, 1966	$66,193,000
Proposed supplemental to cover Public Law 89-301 pay act increase	730,000
Proposed supplemental to cover Public Law 89-132 pay act increase	268,000
Transferred to "Office of Surgeon General, salaries and expenses" (42 U.S.C. 226)	−11,000
Transferred to "Operating expenses, Public Building Services" (79 Stat. 531)	−10,000
Total amount available 1966	67,170,000
Appropriation estimate for 1967	73,448,000
Net change requested	6,278,000

	1967 estimate		1967 House allowance	
	Positions	Amount	Positions	Amount
INCREASES				
A. Mandatory items:				
1. Statutory salary (within grade) increases	.....	$458,000	.....	$458,000
2. Annualization of Civil Service Pay Act increase (Public Law 89-301)	.....	357,000	.....	357,000
3. Annualization of Uniformed Services Pay Act increase (Public Law 89-132)	.....	54,000	.....	54,000
4. Social security amendments rate increase (Public Law 89-97)	.....	110,000	.....	110,000
5. Annualization of new positions allowed in 1966	.....	32,000	.....	32,000
6. Price increases for contract medical care hospitalization	.....	622,000	.....	622,000
7. Wage board increases Sept. 15, 1964, through Sept. 15, 1965	.....	174,000	.....	174,000
Subtotal, mandatory items	.....	1,807,000	.....	1,807,000
B. Program increases and decreases:				
1. Hospital health services:				
Increases:				
Increase for additional workload and change in average daily patient load composition	286	1,624,000	286	1,624,000
Increase to initiate Alaska nonbeneficiary program	16	175,000	16	175,000
Increase for consultant services to broaden medical coverage and improve the quality of care	.....	200,000	.....	.....
Increase to initiate Alaska pediatric residency program	2	30,000	2	30,000
Increase to initiate a health records training program	2	45,000	2	45,000
Increase to expand COSTEP extern training program	.....	35,000	.....	35,000
Increase for M. & R. to help overcome backlog	.....	190,000	.....	.....
Increase for equipment	.....	462,000	.....	154,000
Funds to conduct a trachoma control program	.....	.....	40	500,000
Total, hospital health program increase	306	2,761,000	346	2,563,000
Decrease: Transfer of reimbursable common services to Bureau of Indian Affairs	−70	.....	−70	.....
Net program increase, hospital health	236	2,761,000	276	2,563,00
2. Contract medical care: Increase for additional workload	.....	454,000	.....	454,000
3. Field health services: Increase for the preventive health activities of sanitation, public health nursing, health education, and field medical services (includes (1) 9 positions and $70,000 to provide for dental internship and residency program, (2) 3 positions and $30,000 for continuation of preventive medicine residency program)	151	1,377,000	151	1,377,000
4. Administration:				
Program increase	3	28,000	3	28,000
Program decrease: Transfer of construction functions to Office of Surgeon General	−12	−149,000	−12	−149,000
Net program decrease, administration	−9	−121,000	−9	−121,000
Subtotal, program increase	378	4,471,000	418	4,273,000
Total, increases	378	6,278,000	418	6,080,000

EFFECT OF HOUSE ACTION

The House committee allowed $73,250,000, an increase of $6,080,000 over the amount which is estimated to be available in 1966, and a decrease of $198,000 from the 1967 budget request.

The House committee recommended a reduction of $448,000 in the $3,561,000 increase requested for hospital health services of which $250,000 was restored by the committee and earmarked for a trachoma control program. The committee further recommended that an additional $250,000 of the $73,250,000 authorized be used for the trachoma control program, making a sum of $500,000 for this program.

The House committee action of reducing the requested increase in hospital health services by a gross total of $698,000 of which $500,000 is restored to be used for a trachoma control program necessitates the reprograming of funds in the amount of $200,000 (consultant services), $190,000 (maintenance and repair) and $308,000 (equipment).

CONSTRUCTION OF INDIAN HEALTH FACILITIES

Amounts available for obligation

Description	1966 appropriation		1967 budget estimate		1967 House allowance	
	Positions	Amount	Positions	Amount	Positions	Amount
Appropriation or estimate		$14,096,000		$14,422,000		$13,000,000
Unobligated balance brought forward		3,927,285		636,400		636,400
Unobligated balance carried forward		636,400		718,800		622,500
Total obligations		17,386,885		14,339,600		13,013,900

Obligations by objects

	1966 estimate	1967 estimate	1967 House allowance
11 Personnel compensation	$1,874,100	$1,927,400	$1,927,400
12 Personnel benefits	80,665	85,750	85,750
21 Travel and transportation of persons	112,500	121,000	121,000
22 Transportation of things	270,300	253,300	253,300
23 Rent, communications, and utilities	24,000	23,860	23,860
24 Printing and reproduction	11,500	21,360	21,360
25 Other services	1,815,815	979,000	920,000
26 Supplies and materials	231,100	178,000	178,000
31 Equipment	127,185	90,000	90,000
32 Lands and structures	12,839,720	10,659,930	9,393,230
Total obligations	17,386,885	14,339,600	13,013,900

Obligations by activities

Description	1966 estimate		1967 estimate		1967 House allowance	
	Positions	Amount	Positions	Amount	Positions	Amount
Hospitals and clinics		$7,925,212		$2,616,600		$2,552,900
Personnel quarters		1,475,212		3,595,800		3,595,800
Alterations		1,539,933		1,941,200		1,389,200
Construction of Indian sanitation facilities		6,446,528		6,186,000		5,476,000
Total obligations		17,386,885		14,339,600		13,013,900

New obligational authority by activity

Activity	1966	1967 budget request	1967 House allowance
Hospitals and clinics	$7,074,200	$2,393,000	$2,299,000
Personnel quarters	607,600	3,800,000	3,800,000
Alterations	156,200	2,029,000	1,449,000
Construction of Indian sanitation facilities	6,258,000	6,200,000	5,452,000
Appropriation request	14,096,000	14,422,000	13,000,000

SUMMARY OF CHANGES

1966 actual appropriation	$14,096,000
1967 appropriation request	14,422,000
Net change requested	+326,000

Increases	1967 budget request	1967 House allowance
Hospitals and clinics:		
Hospitals:		
Tuba City, Ariz.	$95,000	$95,000
Mescalero, N. Mex.	677,500	627,800
Philadelphia, Miss.	80,000	80,000
Chinle, Ariz.	132,000	132,000
Harlem, Mont.	88,000	88,000
Subtotal, hospitals	1,072,500	1,022,800
Health centers:		
White Shield, N. Dak.	220,000	220,000
Wanblee, S. Dak.	220,000	220,000
Riverside, Calif.	30,000	30,000
Many Farms, Ariz.	30,000	30,000
Chilocco, Okla.	22,000	22,000
Subtotal, centers	522,000	522,000
Health stations:		
Mandaree, N. Dak.	47,200	47,200
Twin Butte, N. Dak.	47,300	47,300
New Town, N. Dak.	47,300	3,000
Queets, Wash.	105,000	105,000
Taholah, Wash.	105,000	105,000
Lower Brule, S. Dak.	47,200	47,200
Cannonball, N. Dak.	41,200	41,200
Big Cypress, Fla.	25,000	25,000
Rock Point, Ariz.	44,100	44,100
Red Lake, Ariz.	44,100	44,100
Rough Rock, Ariz.	44,100	44,100
Lapwai, Idaho	105,000	105,000
Wellpinit, Wash.	96,000	96,000
Subtotal, stations	798,500	754,200
Total, hospitals and clinics	2,393,000	2,299,000
Personnel quarters:		
White Shield, N. Dak. (15)	275,400	275,400
Belcourt, N. Dak. (17)	312,100	312,100
Winnebago, Nebr. (7)	128,500	128,500
Wanblee, S. Dak. (5)	91,800	91,800
Pine Ridge, S. Dak. (14)	257,000	257,000
Fort Yates, N. Dak. (14)	257,000	257,000
Mescalero, N. Mex. (11)	202,000	202,000
Crownpoint, N. Mex. (33)	605,200	605,200
Browning, Mont. (11)	202,000	202,000
Crow Agency, Mont. (15)	275,400	275,400
Poplar, Mont. (9)	165,200	165,200
Lame Deer, Mont. (3)	55,100	55,100
Fort Washakie, Wyo. (7)	128,500	128,500
Rocky Boy, Mont. (4)	73,500	73,500
Peach Springs, Ariz. (4)	73,500	73,500
San Carlos, Ariz. (7)	128,500	128,500
Sells, Ariz. (8)	146,900	146,900
Schurz, Nev. (15)	275,400	275,400
Parker, Ariz. (4)	73,500	73,500
Whiteriver, Ariz. (4)	73,500	73,500
Total, personnel quarters (207)	3,800,000	3,800,000

Increases	1967 budget request	1967 House allowance
Alterations:		
Kotzebue, Alaska	$500,000	$500,000
Sells, Ariz	129,000	129,000
Cherokee, N.C	40,000	40,000
Pine Ridge, S. Dak	26,000	26,000
Red Lake, Minn	62,000	62,000
Talihina, Okla	65,000	65,000
Rosebud, S. Dak	28,000	28,000
Whiteriver, Ariz	27,000	27,000
Anchorage, Alaska	88,000	88,000
Owyhee, Nev	25,000	25,000
Browning, Mont	19,000	19,000
Warm Springs, Oreg	91,000	91,000
Tahlequah, Okla.:		
1. Continuation of alterations	157,800	157,800
2. Plan additional alterations	10,300	10,300
Gallup, N. Mex	15,600	15,600
Rocky Boy, Mont	29,500	29,500
Shonto, Ariz	28,800	28,800
Mount Edgecumbe, Alaska:		
1. Sewage treatment plant	525,000	25,000
2. Incinerator	90,000	10,000
3. Steam line	30,000	30,000
Shiprock, N. Mex	42,000	42,000
Total, alterations	2,029,000	1,449,000
Sanitation facilities (Public Law 86-121)	6,200,000	5,452,000
Total request	14,422,000	13,000,000

EFFECT OF HOUSE ACTION

The House committee allowed $13 million, a decrease of $1,422,000 in the budget estimate of $14,422,000.

The House committee effected a reduction of $1,422,000 on the basis that slippage in the timing of scheduling specific construction projects would permit a reduction of this amount in the estimate.

Although a program has been developed that would enable the awarding of contracts for the 1967 budgeted projects, unforeseen problems could cause slippage in the amount the committee indicated. To the extent that such slippage might occur, the Division of Indian Health would award contracts or complete construction for such projects in 1968. Specific projects where the House action could most likely be applied are identified.

The House committee amended the basic language to provide legal authority for the Bureau of Indian Affairs to act as contracting agent for 1967 and thereafter for the Division of Indian Health by the following provisions:

"Provided, That such expenditures during the current or any subsequent fiscal year may, at the option of the Department of Health, Education, and Welfare, may be made by the Department of the Interior as contracting agent."

Since 1955, when the health activities of the Bureau of Indian Affairs were transferred to the Public Health Service, the PHS has utilized the services of BIA for architectural and engineering administration for most of the construction projects of the Indian health program including the award of contracts for construction of facilities. This arrangement has had the advantage of assuring coordination of BIA and PHS projects, and has served to avoid a duplication of architectural and engineering staff. (The General Services Administration, which performs this type of service for PHS activities other than those of the Indian health program, conducts no operations in most of the remote areas of the West and Alaska where the Indian health program is administered.)

Funds covering both the costs of services performed by BIA and the amounts paid to contractors by BIA for PHS health facilities are transferred by PHS to BIA. The documents effecting these transfers cite as authority the Economy Act (31 U.S.C. 686). Recent discussions of procedures raised a question concerning the scope of the authority conferred by the Economy Act. The Office of the General Counsel pursued the matter in detail and concluded that, in view of the testimony presented to the Congress at various times in support of estimates for appropriations to be expended through BIA for PHS construction projects, it would be reasonable to assume that Congress has impliedly authorized or constructively acquiesced in the continued use by PHS of BIA's services in this

program, including the award of contracts by BIA. It has been suggested, however, that an addition of language to the appropriation act would clarify the authority of the Department of Health, Education, and Welfare to have contracts negotiated on its behalf by the Department of the Interior, as well as to procure professional services from the Department of the Interior.

INDIAN CLAIMS COMMISSION,
Washington, D.C., April 7, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
Senate Office Building,
Washington, D.C.

DEAR CARL: In response to your inquiry of April 6, regarding H.R. 14215, the appropriation bill for the Indian Claims Commission for fiscal year 1967, we ask that the bill be amended on page 40, line 5, to read "$438,000" instead of "$382,000."

With this amount the appropriation will then be in accordance with the budget request made by the President. This extra sum has been deemed necessary by the Commission to carry out the stepped-up program of determining these Indian claims against the U.S. Government.

Many thanks for you assistance in this matter.

Sincerely,

ARTHUR V. WATKINS,
Chief Commissioner.

NATIONAL CAPITAL PLANNING COMMISSION,
Washington, D.C., April 12, 1966.

Hon. CARL HAYDEN, *Chairman, Committee on Appropriations, U.S. Senate, Washington, D.C.*

DEAR SENATOR HAYDEN: The House of Representatives approved the bill H.R. 14215 making an appropriation for the National Capital Planning Commission for the fiscal year 1967 in the amount of $1,005,000 for salaries and expenses. This represents a $139,000 decrease from the $1,144,000 requested. In addition to $6,100,000 requested for land acquisition to complete the George Washington Memorial Parkway in Prince Georges County, Md., and Fairfax County, Va, was deleted.

The National Capital Planning Commission respectfully requests the restoration of $50,000 for the first year of a 2-year nonrecurring study for the development of a program for the preservation of architectural and historical landmarks in the District of Columbia. Much concern has been expressed in the past over the loss of many of Washington's most famous and cherished landmarks. In fiscal year 1964 the Planning Commission and the Commission of Fine Arts established a Joint Committee on Landmarks composed of architects, historians, and other experts in the field. This Committee of volunteer citizens has undertaken an initial study of the landmarks problem and developed a preliminary list of notable buildings and sites which are deemed worthy of retaining. The funds requested would permit the refinement of this list, the development of preservation techniques and methods, and the preparation of necessary legislation—now nonexistent for our Nation's Capital—to achieve such preservation.

Amendatory language to accomplish this restoration is as follows:

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATION BILL, 1967—H.R. 14215

SALARIES AND EXPENSES

On page 40, line 14, strike out "$1,005,000" and insert in lieu thereof $1,055,000."

As we indicated in our letter to you of March 30, 1966, the completion of the George Washington Memorial Parkway in Prince Georges County, Md., is of vital concern to the Commission. We would like to secure as much of the shoreline of the Potomac River as possible in public ownership for scenic, conservation, and park purposes. The legislation enacted by the General Assembly of Maryland authorizing the Prince Georges County commissioners to issue bonds to

match Federal appropriations for the parkway would not preclude acquisition in accordance with the plans for the parkway agreed to by this Commission, the county commissioners, the Maryland-National Capital Park and Planning Commission, and the Department of the Interior, except with respect to the section of the parkway below Broad Creek. The Commission respectfully requests the appropriation of moneys for the purchase of land at least for that portion of the parkway between the District of Columbia line and Broad Creek.

Although the Commission also believes that the appropriation of land acquisition funds for the Fairfax County, Va., portion of the George Washington Memorial Parkway is desirable, we are now studying with the Fairfax County authorities the most appropriate program for land and scenic easement acquisition. This study will not be completed in time for your further consideration at this session of the Congress. Therefore, our request for restoration of land acquisition funds is limited to the portion of the George Washington Memorial Parkway in Prince Georges County, Md.

Amendatory language to accomplish this restoration is as follows:

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATION BILL, 1967—H.R. 14215

On page 40, after line 14, insert:

"LAND ACQUISITION, NATIONAL CAPITAL PARK, PARKWAY, AND PLAYGROUND SYSTEM

"For necessary expenses for the National Capital Planning Commission for land for the park, parkway, and playground system of the National Capital, for the purpose of section 1(a) of the Act of May 29, 1930 (46 Stat. 482), as amended, $2,900,000, to remain available until expended."

Your favorable consideration of our requests will be greatly appreciated.

Sincerely yours,

ELIZABETH ROWE
Mrs. JAMES H. ROWE, JR.,
Chairman.

NATIONAL CAPITAL TRANSPORTATION AGENCY,
OFFICE OF THE ADMINISTRATOR,
Washington, April 12, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Your letter, dated April 6, 1966, requested that you be advised of any desired amendments to legislation approved by the House of Representatives making appropriations to the National Capital Transportation Agency for fiscal year 1967 (H.R. 14215).

In setting forth its reasons for recommending a reduction of $8 million as the Federal share of the $12 million requested for the procurement of tunnel liner in mid-fiscal year 1967 under the appropriation "Construction, Rail Rapid Transit System," the committee also provided a means of relief for the Agency in case these funds are needed. The committee sttted that "in the event the committee has underestimated the ability of the administrators of this program to proceed, the committee would be inclined to give favorable consideration to a supplemental estimate for 1967 for this purpose or to approve a reprograming of available funds to commence procurement of the tunnel liners in fiscal year 1967."

This statement by the House Appropriations Committee appears to offer a satisfactory solution should a problem develop. If need arises for the funds in question the supplemental approach will probably be chosen since we expect to be committing funds for other aspects of the Agency program in phase with our original estimates. One area of concern, however, lies in the time usually required to process a supplemental request, often of such length that the process might itself produce delay in carrying out the Agency's program.

Although there is this potential for delay, no amendments are recommended to the legislation as passed by the House of Representatives if the Senate is otherwise agreeable to the amounts recommended by the House, and would afford the same latitude with regard to a supplemental or reprograming request.

Similarly, no amendments are recommended with respect to the appropriation "Salaries and expenses, NCTA."

Sincerely yours,

WARREN D. QUENSTEDT,
Acting Administrator.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES,
Washington, D.C.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: This is in reply to your letters of April 6, 1966, requesting any suggestions we may have with regard to amendment of H.R. 14215, making appropriations for the National Endowment for the Arts and the National Endowment for the Humanities for fiscal year 1967. In response to your requests, we are enclosing suggested amendments to the bill, together with materials summarizing the action taken by the House of Representatives. In addition, each Chairman is enclosing a separate letter explaining the particular needs of his Endowment. We hope this material will be helpful. If you desire anything further, please let us know.

Sincerely yours,

ROGER L. STEVENS,
Chairman, National Endowment for the Arts.

HENRY ALLEN MOE,
Chairman, National Endowment for the Humanities.

Recommended amendments to H.R. 14215, National Foundation on the Arts and the Humanities

Estimate, 1967	$13,930,000
House allowance	7,000,000
Restoration requested	6,930,000

Amendments requested:

Page 41, lines 13 and 14, delete everything after the word "expended," and substitute therefor "$13,930,000, of which $5,000,000 shall be available for carrying out section 5(c), $5,000,000 for carrying out section 7(c) and $2,750,000 for carrying out section 5(h) of * * *"

The effect of this amendment would be to restore the total appropriation to the amount requested in the President's budget.

Section 5(c) provides for grants in aid to individuals and organizations by the Arts Endowment. Section 7(c) defines the basic authority for support of activities by the Humanities Endowment. Section 5(h) is concerned with grants to State arts agencies by the Arts Endowment. After deducting these three items, totaling $12,750,000, the remaining $1,180,000 applies to administration of the agency.

Pertinent to the above are the following paragraphs from House Report No. 1405:

"The Committee recommends an appropriation of $7,000,000, a reduction of $6,930,000 below the budget estimate, for the grant-in-aid programs authorized in the National Foundation on the Arts and the Humanities Act of 1965 (P.L. 89–209, approved September 29, 1965).

"Of the total amount, $4,000,000 is provided the Endowment for the Arts under Section 5(c) of the Act; and $2,000,000 is provided the Endowment for the Arts under Section 5(h) of the Act for grants to States.

"Appropriations made under Public Law 89–209 provided $2,000,000 for the Endowment for the Arts and $3,000,000 for the Endowment for the Humanities under Section 11(b) of the Act. None of these funds has been obligated to date by the Endowment for the Arts and none of the appropriation to the Endowment for the Humanities for this purpose has been obligated.

"A total of $1,000,000 has been recommended for administrative expenses, a reduction of $180,000 below the budget request.

"Although the budget estimate contained a request for the appropriation of $5,000,000 to the Endowment for the Humanities under Section 7(c) of the Act, no funds are provided in this Bill for this activity. At the time of the hearings on this appropriation item, the Council on the Humanities had not met. The

witness for the request was able to give the Committee no specific information whatsoever as to what the request of $5,000,000 would be used for. Therefore, the Committee has passed over this item of the request without prejudice with the understanding that it may be taken up at a later date by the Senate."

Figures pertinent to Foundation's appeal

Activity	Appropriation, 1966	1967 budget request	House allowance	Restoration requested
1. National endowment for the arts: Grants-in-aid for the encouragement and support of national progress in the arts	$2,500,000	$5,000,000	$4,000,000	$1,000,000
2. National endowment for the humanities: Grants-in-aid for the encouragement and support of national progress in the humanities	2,500,000	5,000,000	[1] 0	5,000,000
3. Aid to State arts agencies by the national endowment for the arts	[2] 0	2,750,000	2,000,000	750,000
4. Administration	700,000	[3] 1,180,000	1,000,000	180,000
Total	5,700,000	13,930,000	7,000,000	6,930,000

[1] See last paragraph of quote from committee report.
[2] Funds not authorized until fiscal year 1967.
[3] Based on annualization of administrative expenses for the first full fiscal year of operation of the Foundation.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES,
Washington, D.C., April 11, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: In answer to your kind letter of April 6, 1966, to me as chairman of the National Endowment for the Arts, and pursuant to passage on that day by the House of Representatives of the Department of the Interior and Related Agencies Appropriations Act, 1967, which includes an appropriation for the National Foundation on the Arts and the Humanities, we are respectfully appealing for a restoration of funding for the endowment to the amounts recommended in the President's budget for 1967 and in accord with authorization by the Congress. These amounts are:

$5 million for the National Endowment for the Arts to carry out the basic grants-in-aid program under section 5(c) of Public Law 89-209 establishing the Foundation.

$2.75 million for assistance to State arts agencies under section 5(h) of the Public Law.

And, $1,180,000 for administration of the Foundation by both the arts endowment and the humanities endowment.

As you know, action taken by the House of Representatives cut the arts endowment's grants-in-aid program under section 5(c) of the Public Law from $5 million to $4 million and the program to assist State arts agencies from $2.75 million to $2 million. Also, $180,000 was cut from the administrative budget for the Foundation, making administrative funding $1 million rather than $1,180,000.

Dr. Henry Allen Moe, chairman of the National Endowment for the Humanities, is writing you with regard to the needs of that endowment and its recommended and authorized funds. I fully concur in the views he expresses concerning those needs, and shall address this appeal to the needs of the arts endowment.

As you know, the endowment originally submitted a justification totaling more than $5 million to carry out the purposes of section 5(c) in the hopes that gifts would be made to the endowment which could be matched by Federal funds under the provisions of section 11(b) and 10(a)(2) of the Public Law; and subsequently a $5 million budget adjustment, for the purposes of section 5(c), was submitted at the request of your committee.

In addition, the House Appropriations Committee requested that the arts endowment provide a further listing of cuts to the $4 million recommended by the House Appropriations Committee to carry out the basic grants-in-aid program, under section 5(c).

We are enclosing a copy of a letter addressed to the Honorable Winfield K. Denton, chairman of the House Appropriations Subcommittee on Interior and Related Agencies, showing how this cut of $1 million could be effected.

We believe it is of greatest importance that the newly established National Endowment for the Arts be allowed to proceed with the full $5 million amount recommended by the President in this regard and authorized by the Congress and are taking this opportunity of describing how the cut of $1 million, by the House of Representatives, would affect our basic program.

We shall describe these item by item, together with the endowment's justification.

1. *Regional dance program (eliminated) $250,000.*—At this time we would respectfully recommend restoration of this amount of funding to cover in part the arts council challenge grants project described in the endowment's justification (for $450,000) and indicated as being deferred in our presentation to the Senate subcommittee. We believe that this activity—the local arts council incentive project, described on page 17 of our justification—could be begun initially on a pilot basis for $250,000, and that this amount of money would serve to benefit immensely the development of the arts at a community level, and particularly those local arts councils which have demonstrated their ability to serve their communities well, and which conduct united campaigns for the support of local arts agencies. These councils are simply not able to keep pace with the growing demands made on them. A successful campaign, which reaches 100 percent of its goal, often means that a total community endeavor is stabilized rather than expanded. Challenge grants, matching sums raised by a local arts council over and above its goal, and based on that council's previous responsible performance and record, would allow a community endeavor to advance to meet the needs of an ever-growing audience. $250,000 would mean aid to up to 15 local councils, and would be in basic accord with a major purpose of the Public Law, which is to stimulate additional private giving to the arts.

2. *Leave grants for photographers (eliminated) $100,000.*—The art of photography is one of the major art forms defined in Public Law 89-209. This project, strongly endorsed by leading photographers throughout the country, is the only one for this art form included in our program for the next fiscal year, and we therefore feel it is of great importance for the balanced program which we are trying to implement for all the art forms defined in the public law.

3. *Playwrights' experimental theater project (cut) $200,000.*—This program is already being implemented for the present fiscal year, and we plan to continue it during the next fiscal year. It is aimed at correcting the lack of new plays and new playwrights. In the United States, as well as abroad, this is the most serious deficiency facing the theater today. The project is designed to stimulate new opportunities for quality in the production of plays, and to afford new employment opportunities for participants in these productions. We also believe it is essential that this project be allowed to serve as many communities as possible, and that economies in administration can be effected—in terms of staff organization and the utilization of our panel of experts in the theater—if the full amount submitted in our justification for this project ($425,000) be restored.

4. *Artmobiles (additional cut) $100,000.*—To initiate this project, which involves bringing excellence in the arts to as many communities as possible, an original $700,000 was presented in our budget justification, so that 10 of these mobile art galleries could be provided and purchased at the most economic cost per unit. We have already indicated a 50-percent cut in this project, to $350,000. We feel that this amount is marginal in terms of demonstrating the effectiveness of this project on a pilot basis. Therefore, we are requesting that this $100,000 be restored by Senate action.

5. *Environmental design center (cut) $170,000.*—This project involves architecture and allied arts together with industrial design, which are defined under Public Law 89-209 as within the endowment's purview. The project is the only one approved by the Council in this field. We believe that this project would have most meaningful benefits to the Nation as a whole and that it involves one of the most beneficial activities we can undertake. The $500,000 included in our justification for this project would seem minimal in terms of our national needs and we believe it should be fully funded.

6. *Exhibition to aid painters and sculptors (cut) $80,000.*—This project involves assistance and encouragement to artists on a nationwide basis and has particular relevance to young artists of talent whose work can be immensely benefited both in terms of recognition and in terms of financial support. We believe that as many artists as possible should be allowed to participate in this program and therefore

believe it should be fully funded pursuant with our justification, so that all the regions involved can be adequately served.

7. *Artists in residence in high schools (eliminated) $100,000.*—We believe, again, that this project would be of special benefit to our young people and that they should have an opportunity to learn at first hand of the values and benefits of the arts before they reach a level of higher education. Many students have already made up their minds on their future careers before they reach a college or university. Many others will not seek out the values of the arts in higher education unless they are exposed to these values at an earlier age. We therefore believe that this program would have immense benefits for our younger people and that it should be fully funded.

The endowment is directed by the Congress in Public Law 89-209 to support 20 major categories of the arts. We believe that to limit our funding below the amount authorized for our basic program would seriously hinder our abilities and our opportunity to render this most needed support.

AID TO THE STATES

As we have pointed out in our hearing before the Senate subcommittee, the provisions of the public law, under section 5(h), which make each State eligible for a maximum of $50,000 beginning next July 1, have been most enthusiastically received. In all 55 entities are defined as States in the public law, including the District of Columbia and the territories.

We have set May 1, 1966, as the target date for the receipt of applications from the States for our support. As pointed out in our testimony before the House and Senate subcommittees, we held a conference for State arts agency representatives in Chicago in January, so that the new public law could be fully discussed and its advantages explained. Virtually all States sent representatives to that meeting at their own expense. At this writing, virtually all have now furnished us with information on how they are prepared to apply for assistance. Much of this information has become available within the past few days, and thus subsequent to our testimony before the House and Senate. We believe that this information is most pertinent to our appeal.

Latest information shows that of the 55 jurisdictions involved, 41 are ready to apply for their full $50,000 authorized amount on a matching basis, 2 others for amounts in excess of $40,000, and 8 others for the one-time, nonmatching study grant authorized in the public law to allow those States to develop a meaningful State arts program.

The breakdown is as follows:

	Number of States	Amount
Number of States applying for $50,000	41	$2,050,000
Number of States applying for $47,000	1	47,000
Number of States applying for $43,000	1	43,000
Number of States applying for $25,000	8	200,000
Total	51	2,340,000

It is likely that the States unreported at this time will also be prepared to apply for Federal support in the near future.

The provisions of the public law require that the funds appropriated for the States be equally allotted among the 55 entities. If the House cut of $750,000 remains, this would reduce allocations to all States to $36,363.63, or nearly 30 percent below the expectations of the great majority. On the other hand, if the full authorization is made available during fiscal 1967, and not fully expended, necessary adjustments could be made at a later time. May we also point out that State funding depends on the planning of State legislatures and that these plans very often do not coincide with appropriations made by the Federal Government. Therefore, we feel it is highly desirable to plan in terms of units of $50,000, so that State legislatures can efficiently make their plans before Federal action is taken. For these reasons, we respectfully urge restoration of the $750,000 cut by House action.

ADMINISTRATION

With respect to the cut of $180,000 in administrative funds, may we respectfully point out that the Foundation staff for the two endowments has already been cut from an originally recommended and approved 100 positions to 75

positions. We have made every possible effort to adjust to this 25-percent cut in the agency's staffing, and believe we can operate effectively within these limits. However, both endowments feel strongly that the cut of $180,000 made by the House of Representatives would seriously affect our ability to operate with a competent staff and to conduct our programs in accord with the purposes of the public law and the wishes of the Congress.

We believe we have effected all possible economies in the other items in our administrative budget, that the funding involved is now minimal in terms of our needs, and that a qualified staff is key to the proper functioning of our agency.

We greatly appreciate the opportunity of making our suggestions.

Very truly yours,

ROGER L. STEVENS, *Chairman.*

APRIL 4, 1966.

Hon. WINFIELD K. DENTON,
Chairman, House Appropriations Subcommittee on Interior and Related Agencies, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: At the request of the Senate Appropriations Committee, the information of which was furnished to you, we listed the projects which we considered having lesser priorities among the projects described in our justification for the 1966–67 budget, so that the total amount for projects in our justification would come to $5 million.

These included:

	Amounts cut
Regional opera companies: We would cut this amount of $500,000 to $300,000, by $200,000	$200,000
Artmobiles: We would cut this amount in half to $350,000	350,000
Inter-American cultural program: We would cut this $500,000 allocation to $235,000	265,000
Product Design Center: We would defer action on this center for another year, concentrating on the one for environmental design—$250,000	250,000
Youth orchestras: $500,000—the full amount. (Although we believe this is a highly desirable project, if we must cut, we believe we can support it in another year.)	500,000
Arts councils challenge grants: Again, this would seem a very worthwhile project and much needed, but we believe in terms of cuts, it can be deferred. The full amount—$450,000	450,000
Total	2,015,000

In addition, I understand you would like to know what further cuts or eliminations we could make in our program, should we have available only $4 million.

I would feel the following changes in our justification schedule could be effected:

Regional dance program—eliminated	$250,000
Leave grants for photographers—eliminated	100,000
Playwright experimental project—cut	200,000
Artmobiles—additional cut	100,000
Environmental Design Center—cut	170,000
Exhibition to aid painters and sculptors—cut	80,000
Artists in residence in high schools—eliminated	100,000
Total	1,000,000

Very truly yours,

ROGER L. STEVENS, *Chairman.*

APRIL 11, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: Pursuant to instructions in your kind letter of April 6, 1966, asking for our suggestion of amendments to the bill passed by the House of Representatives on that day, including appropriations for the Department of the Interior and related agencies for the fiscal year ending June 30, 1967, H.R. 14215, which includes an appropriation for the National Foundation on the Arts and the

Humanities, we are respectfully appealing for inclusion of funding for the National Endowment for the Humanities in the amount recommended in the President's budget for 1967 and in accord with authorization by the Congress.

These amounts involve $5 million for the National Endowment for the Humanities to carry out the purposes authorized under section 7(c) of Public Law 89–209, establishing the Foundation, and $1,180,000 requested in the President's budget for administration of the Foundation by both the Arts Endowment and the Humanities Endowment.

As you are aware, the House of Representatives made no appropriation for funding of section 7(c) of the National Foundation on the Arts and the Humanities Act of 1965 in H.R. 14215 because, as House Report No. 1405 states on page 36:

> "At the time of the hearings on this appropriation item, the Council on the Humanities had not met. The witness for the request was able to give the committee no specific information whatsoever as to what the request of $5 million would be used for. Therefore the committee has passed over this item of the request without prejudice with the understanding that it may be taken up at a later date by the Senate."

However, since the hearings referred to in the report, the National Council on the Humanities has met, and we have referred justifications for the 12 programs to be funded by the appropriation of $5 million for the purposes of section 7(c) of Public Law 89–209 to you with my letter addressed to you under date of March 7, 1966. I am enclosing with this letter a copy of that budget justification.

The total of $7 million in H.R. 14215 for the expenses of the National Foundation on the Arts and the Humanities included $1 million for the salaries and administrative expenses for the Foundation. This represents a cut of $180,000 from the amount in the President's budget for 1967. We respectfully request that this money be restored. At the request of the Bureau of the Budget, the Foundation will have 75 positions instead of the 100 originally planned. Thus the two endowments share staffs for purposes of grants processing, administration, and legal counsel. But by their nature the two endowments also require staffs of unusual qualifications including scholarly background in order to carry out their purposes. For that reason, we very much need our full budget request and respectfully ask the full appropriation of $1,180,000 for these purposes.

Mr. Roger L. Stevens, chairman of the National Endowment for the Arts, is writing you with respect to the needs of that endowment and its recommended and authorized funds. We fully concur with the views he expresses concerning these needs and are addressing this appeal to the needs of the humanities endowment. We feel that the symbolic importance, and the expected effects on the culture of the Nation, of the National Foundation on the Arts and the Humanities is so great at this time that any diminution of the funds available for either endowment will have effects far beyond any consideration of the amounts involved.

In advance of any guidelines or open announcement inviting applications the humanities endowment has received 113 completed proposals, requesting a total of $10,631,000, from universities, museums, learned societies, and independent scholars. In addition, we have advised delay, pending appropriations, of well over 300 "inquiries," many proposeing significant and meritorious humanities projects, from 44 States. It is clear that the hopes and expectations aroused by the establishment of the National Foundation on the Arts and the Humanities are very large indeed. Even with the full appropriation authorized in the act, many worthy projects must be turned down.

With respect, I am,

Very sincerely yours,

HENRY ALLEN MOE, *Chairman.*

MARCH 7, 1966.

NATIONAL ENDOWMENT FOR THE HUMANITIES

JUSTIFICATION

Appropriation request for the fiscal year 1967

1. (A) For the development principally of younger American humanistic teacher-scholars and educational-museum personnel, at an average cost of $7,500 a year: 100 such persons, men and women $750,000

   (B) For approximately 200 stipends to young humanistic scholar-teachers for studies and research during the summer months 300,000

   If such persons need on an average $1,500 each to free themselves from the necessity of teaching during the summer months, 200 of them may be provided for with $300,000. If they require more than an average of $1,500—only a lesser number may be assisted. Experience will have to teach us what the average needed sum ought to be.

   These summer stipends will be granted on the well-known footing that, especially in the small colleges, there are a large number of young scholars who need the summer months to complete manuscripts upon which their futures as scholars and teachers will depend.

   This is a category in which the imbalance between support for the scientist and the humanist is most visible and where great impact for the development of humanistic teaching and scholarship can be made with a relatively small amount of money per person.

   N.B.—The persons in categories (A) and (B) are to be selected on a nationwide basis from all parts of the country, taking particular care that the personnel from the smaller, more obscure institutions shall not be overlooked nor neglected.

   There are 1,524 degree-granting colleges and universities in the United States and it is reasonable to expect that at least one faculty member from each of these institutions will apply for these fellowships.

2. For the assistance of mature persons, American men and women, who in President Johnson's charge to the Humanities Council on March 3d, will have "a crucial role to play—not only in enriching scholarship, but in enriching life for all men—scholars and laymen." The Humanities Council was of opinion that 50 such persons will be discovered in fiscal 1967, selected from among at least 1,000 applicants. Allied experience of other foundations provides a sound basis for so estimating the number of applications that will be received. If the average grant to such men and women be $15,000, which the Council deemed reasonable, and which is in line with stipends granted for comparable projects by other institutions, the program would cost 750,000

3. (A) For assisting the publication of papers of great Americans—the Founding Fathers and other statesmen 300,000

   (B) To the above-indicated categories, the Council added, for assistance toward the publication of papers of great American scientists and philosophers 50,000

4. For assisting the preparation of definitive editions of great American authors 350,000

   A great body of significant American literature is not available in accurate and reliable editions and some not at all. Even giants of American letters are poorly represented in collected editions of their works.

Appropriation request for the fiscal year 1967—Continued

N.B.—The Humanities Council, in reference to categories 3 and 4 above, approved Advisory Panels consisting of Council members and other highly qualified persons of national reputation who will "ride herd" on the proposals received, evaluate the importance of each project, negotiate with printers and publishers, audit costs and report to the Council before any grants are approved.

5. For assisting humanistic archeological-historical excavations and studies $100,000

These would be chosen to elucidate understanding of our origins as a people, and of the American heritage of freedom. They will be chosen, too, not only to gather objects found in the diggings, but also to illumine the ways of life of our ancestors; they would also be tailored to be training grounds for future young American archeologist-historians. In particular, they will not neglect the great civilizations already existing in the Americas when the white men arrived. For example, the Indian civilizations of the Mississippi River and Ohio River valleys are greatly in need of study.

This is a vast field of relatively untouched knowledge, with room for the work of many persons and agencies. For example, we already are in touch with the Smithsonian Institution to the end that there shall be no duplication of their archeological studies.

An advisory panel was approved by the humanities council to insure that the programs in this area recommended to the council will meet President Johnson's test of relevance for the American scholar to "find his destiny in solving men's problems, not merely in cataloging them."

6. For assisting the publication of works of scholarship and other first-rate manuscripts relevant to the purposes of the statute, "that the world leadership which has come to the United States * * * must be solidly founded upon worldwide respect and admiration for the Nation's high qualities as a leader in the realm of ideas and the spirit" 150,000

Whenever possible, such manuscripts ought to be published as commercial propositions, and most of them are; but there are some which have difficult and expensive problems of typsetting and extremely limited sales possibilities, to make their publication commercially feasible; yet some of the most important are in this category. An advisory panel was authorized by the humanities council to deal with matters of publication: quality of manuscript, reasonableness of sums asked for subventioning, sales distribution, etc. The advisory panel will report to the council before any manuscripts are approved for subventioning.

7. For the assistance of computer-oriented humanistic research 350,000

Computers and data processing equipment are relatively new tools which may be used for the service of humanistic scholars. Much must be learned concerning the best way to use them; and the Council was convinced of the potential importance of computer-oriented humanistic research.

Proposals already before the Council in this area include: assistance toward a regional center for computer research in the humanities to train scholars with computer techniques and to assist such scholars in their studies, to establish a journal intended to keep humanistic scholars who are using computer techniques in touch with each other for mutual education, and to carry on language analysis.

Proposals of this kind are pioneering ventures deemed important by humanistic scholars, and, as such, merit support by this pioneering endowment.

Appropriation request for the fiscal year 1967—Continued

Before proceeding to make grants in the field, the advice of staff members of the National Science Foundation will be obtained; and the Humanities Council authorized the appointment of an Advisory Panel, consisting both of scientists and humanists to evaluate and make sense out of the proposals received. In accordance with the endowment's general policies, no grants will be authorized until the Council has evaluated the Advisory Panel's recommendations.

Studies in any complex field today require the use of computers; and it was the Council's opinion that $350,000 is a minimum sum with which to get started in this important field.

8. Assistance to programs to insure progress and acceleration of progress in humanistic studies $750, 000

The Council noted that the duty of promoting humanistic studies runs through all parts of the statute. The Council noted also that large sums have been appropriated to the Office of Education for promoting some aspects of such studies. Hence, there has been established a liaison between the endowment and the Office of Education, whose representative was present at the Council's meeting, to the end that the endowment and OE should supplement each other and reinforce programs of mutual concern.

There was a long discussion of viable ideas in the many fields of humanistic education, and they were all remanded for further consideration to an Advisory Panel consisting of 16 members of the Council and Miss Kathryn Bloom of the Office of Education. This Advisory Panel will hold meetings prior to the next meeting of the Council and will recommend programs to the Council. In view of the importance of these areas of the endowment's responsibilities, their relevance at the grassroots throughout the Nation, it was the strong opinion of the Council that the sum of $750,000 suggested would be on the slim side for fiscal 1967.

9. For the development of the educational functions of humanistic museums and historical societies 750, 000

There are approximately 3,700 such institutions all over the United States, in small towns as well as in large; their annual visitors run well over 75,000,000; their membership is in the hundreds of thousands. They are, therefore, not small change in the total American educational enterprise; and, in developing understanding and appreciation of the United States—our history, our culture, or hopes for the future—they are not surpassed by any other group of educational enterprises.

Some of the smaller of these institutions, in out-of-the-way places, are among the best—in terms of quality of the objects they own and exhibit, in terms of their usefulness in presenting American culture in understandable ways to a large lay public. Many of them do, indeed, illustrate what President Johnson said in his charge to the National Council on the Humanities "* * * every great endeavor depends more on daring than on dollars; more on brainpower than on budgets."

For a very large percentage of these institutions, throughout the length and breadth of our land, have only the tiniest budgets. But they have dedication and devotion and many of their staffs serve for a pittance or gratis.

Appropriation request for the fiscal year 1967—Continued

What they need, all along the line, is more knowledge: knowledge how to conserve their collections, to catalog them, to shape up significant exhibitions and to prepare catalogs for these exhibitions, to increase their scholarly knowledge. Relatively simple, relatively inexpensive programs may be set up to give their devoted personnel the training they need. The Humanities Council hopes for funds to make a start on these training programs and the members agreed that $750,000 would provide for a modest start on what clearly must be a long-term enterprise.

To assist in the planning of such activities a large Advisory Panel was approved, including both members of the Council and personnel from humanistic museums across the country, east and west, north and south.

10. Educational radio and television $100,000

The sum suggested is, of course, much too small for significant progress in the field of educational radio and television; and it is set up only on the basis of making studies to define the Endowment's best future role and to provide funds possibly for one relatively small pilot program in educational radio-television.

Fortunately, several members of the Council have had experience in and have thought deeply about the possibilities of service in this area of education and they will constitute the nucleus of our Advisory Panel. Other members of such a panel were suggested by members of the Council and they will be asked.

It is an area in which quick results should not be anticipated. And, importantly, the cooperation of other Federal agencies should be enlisted—for advice, practical help, and for emphasis on public-welfare considerations.

11. For extensions of the "talking books" program currently administered by the Library of Congress under title 2 of the United States Code, sec. 135a 100,000

That statute restricts the provisions for talking books to "blind residents of the United States." But there are many persons besides blinded persons who cannot read books. They include many wounded veterans, quadriplegics, and some percentage of persons who are mentally ill—persons whose brains are good, whose aspirations are high; but are physically unable to read. We hope to make provisions for their education through making "talking books" available to them.

Studies, in depth, of the possibilities of such a program must be made; but preliminary studies by the endowment's staff indicate a great humanistic cultural need. Having received the Council's mandate to go ahead, studies in depth will be made and will be reported to the Council for the Council's possible approval in future.

The sum of $100,000 is recommended so that if a good pilot program can be shaped up, the endowment may proceed to finance it.

12. For progress in American historical studies, both for the scholarly and lay publics 200,000

The sum of $200,000 would be much too small in this context were it not for the fact that the thread of concern for American history runs all through the suggested allocations. For example, among the 50 grants suggested in item 2, above, no doubt some will be for studies in American history. The sum of $200,000 in this place reflects the hope and expectation that first-rate scholars and interpreters with first-rate projects concerned with American institutions will turn up and that with moneys within this category it will be possible to finance them.

Total recommended allocations, as above indicated, and requested appropriation 5,000,000

SMITHSONIAN INSTITUTION,
Washington, D.C., April 11, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: The Smithsonian Institution requests amendments to H.R. 14215, a bill "Making appropriations for the Department of the Interior and related agencies for the fiscal year ending June 30, 1967, and for other purposes." These amendments would increase the amount of the "Salaries and expenses" appropriation from $22,523,000 to $23,437,000, and the "Archeological Research and Excavation (special foreign currency program)" appropriation from $2,316,000 to $5,700,000.

Justifications of these amendments are set forth on the enclosed statements.

Sincerely yours,

S. DILLON RIPLEY, *Secretary.*

SMITHSONIAN INSTITUTION

"SALARIES AND EXPENSES," FISCAL YEAR 1967

Change of amount

On page 43, line 3, change $22,523,000 to $23,437,000.

The justifications for this change in amount appear on the following pages.

U.S. NATIONAL MUSEUM

Agency request	$186,000
House allowance	93,000
Appeal	93,000

Restoration of $93,000 is requested for the exhibits and conservation programs of the U.S. National Museum and for increased shipping activities in the Smithsonian Institution.

Of the above amount, $49,000 is required to maintain the exhibits of the National Museum in attractive and effective appearance. Funds are required because of the great number of exhibit halls in two of the largest museums in the world with unprecedented crowds of visitors numbering in the millions. The exhibits of the National Museum are the standard of excellence in the museum world. In recognition of this, museum representatives from more than 50 foreign countries and nearly every State in the Union have visited the Office of Exhibits for consultation, advice, and help with their exhibits problems.

$9,000 is requested for additional staff for the Conservation Research Laboratory established to conduct analysis, examine, treat, restore, and preserve museum collections and to perform research in the science and techniques of conservation. Many of the over 59 million historic and scientific objects in the national collections are irreplaceable and all are significant to the heritage of our scientific, historic, and artistic accomplishments. The additional funds are required so that the U.S. National Museum can fulfill its obligation to expedite preservation of the national collections, and to assist and advise other museums and institutions of learning in these procedures.

The balance of the funds requested to be restored, $35,000, is needed for the Office of the Registrar which provides transportation and mail services for the entire Institution and also secures visas and passports in connection with official foreign travel. The accelerated activities of the research staff, the National Armed Forces Museum Advisory Board, the National Collection of Fine Arts, and the National Portrait Gallery have increased the need for additional transportation and mail services, and the increasing number of official trips to foreign countries have added to the workload of obtaining visas and passports.

MUSEUM OF HISTORY AND TECHNOLOGY

Agency request	$123,000
House allowance	60,000
Appeal	63,000

Restoration of $63,000 is requested for the Museum of History and Technology to meet increasing demands on the staff to study, evaluate, and report on the effects of science and technology upon our industry and culture. Specialized areas of museum scholarship in which gaps exist in our staffing and for which additional curators and technicians are required include the history of nuclear energy, medical history, the history of electronics, and American studies.

Funds are also needed to continue the installation of the original exhibits in the new Museum of History and Technology, to document the collections, to authenticate the educational exhibits, and to develop the best techniques for informing most effectively the 5 million visitors who come to the museum each year.

MUSEUM OF NATURAL HISTORY

Agency request	$628,000
House allowance	400,000
Appeal	228,000

Restoration of $228,000 is requested for the Museum of Natural History which is the national institution for systematic biology, anthropology, and mineralogy. The increase falls into two interrelated categories: the maintenance of the unique national collections for which the museum is responsible, and the minimal essential expansion of scientific capability to permit a limited contribution to vital national and international scientific programs.

Because of the increasing importance of natural history studies and the inadequacy of the museum's staffing, enormous backlogs of uncataloged specimens have accumulated in collections vitally needed for scientific investigations conducted throughout the scientific community. Information demands from all levels of the American public, from schools and universities, and from local, State, and Federal agencies continue to increase at a rate that cannot be adequately serviced by existing staffing. Hundreds of scientists, largely from the United States, visit this museum each year to study its valuable reference collections. To properly provide for the researches of these visitors and to make possible the work of its own staff, the museum must have the appropriate tools.

Furthermore, many of the professional scientists are the only specialists in groups of organisms in the Nation or in the free world. Nevertheless, continuing inadequacy of technical support requires a considerable portion of their time to be devoted to routine nonprofessional activities. The recommendations of the Civil Service Commission and numerous outside consultants and boards of review have urged the Smithsonian to expand supporting staff in order to enable the professional staff to make more essential contributions. Restoration of $125,000 is required if minimal progress toward these objectives is to be made.

The museum is also a center for basic research in the chemical and the physical structures of rocks, gems, and meteorites. Accelerated interest in extraterrestrial studies is exhibited by increased research upon meteorites, one of the largest and most important collections of which is in the U.S. National Museum.

The museum is increasingly looked to for leadership in environmental biology—the interaction of all kinds of organisms, including man, with each other and with their surrounding environment.

The scope and purpose of the oceanography program, which is strongly supported by the administration, have been developed with the approval of the Interagency Committee on Oceanography. Their recommendations are designed to eliminate a crippling disparity between physical and biological oceanography. The Smithsonian's program continues as a critical ingredient in the national oceanography effort and centers on the professional capabilities of the museum in the systematics of marine plants and animals. For adequate support to well serve the increasing national demands placed on these programs, restoration of $103,000 is required.

FREER GALLERY OF ART

Agency request	$6,000
House allowance	3,000
Appeal	3,000

Restoration of $3,000 is requested for the Freer Gallery of Art to provide sufficient funds to employ one secretary for the conservation laboratory. This laboratory has responsibility for the analysis and preservation of valuable objects of art.

INTERNATIONAL ACTIVITIES

Agency request	$28,000
House allowance	0
Appeal	28,000

Restoration of $28,000 is requested for the Institution's international activities program which focuses on the Smithsonian's traditional commitments to basic research in the sciences and humanities.

The Office of International Activities requires additional funds for the administration of a complex foreign currency grant program in excess of $2 million de-

signed to contribute to knowledge of ancient civilizations; to preserve and restore archeological sites and ancient monuments; to promote the studies in systematics, ecology, and marine biology; and to assist in the planning of educational museums in developing nations. The existing staff of five persons with a base appropriation of $72,000 is responsible for a grant program in the amount of $1,300,000. The addition of one employee and a total of $16,000 is urgently needed to administer a substantially increased program of grants.

The management of the foreign currency program is complex. It involves strong and continuing contact with American universities and museums in order to make known the research opportunities in the excess countries, the in-house and outside advisory council review of project proposals, the drafting of grant-contracts, and general supervision and reporting on all research projects and expeditions.

The International Exchange Service is responsible for the national and international exchange of official documents and scientific literary publications with libraries and institutions of learning. The funds requested are needed to add to the limited staff of 11 positions with an allotment of $114,000, 1 shipping clerk and 1 machine operator. These workers are necessary to handle the increased volume of requests for exchange of publications. Even greater demand for these services is anticipated.

ADMINISTRATIVE SUPPORT

Agency request	$899,000
House allowance	400,000
Appeal	499,000

The sum of $499,000 additional is required for administrative support in the Office of the Secretary and the administrative divisions (Publications, Fiscal, Library, Museum Service, Personnel, Photographic Services, Supply, Automatic Data Processing, and Information). The responsibilities of the offices charged with executive direction of the Smithsonian and with providing administrative support for the program bureaus increase directly with the increase in the scope of operations.

The requested increase in the "Salaries and expenses" appropriation is $4,682,000, a program increase of 25 percent. The commensurate increase in administrative support is $613,000. This is needed to provide administrative services for the increase in activities throughout the Institution.

In addition to the workload increase, $271,000 is needed for the application of automatic data processing to the work of the Institution. This will provide an economical means of performing a diversity of work not now being accomplished: data storage and retrieval, payroll preparation, scientific analysis and computation accounting, library accessions lists, and property inventory.

The Institution has obtained consulting services in order to assure the greatest effectiveness and economy in the application of automatic data processing to its needs.

The tremendous advances already accomplished throughout the Government through the application of automatic data processing underscores the importance of initiating a processing center of modest proportions at the Smithsonian.

The need for the restoration of the cut is further justified by the inadequacy of the amount in the base for the Office of the Secretary, Editorial and Publications, and the Library.

The requested increase for the Office of the Secretary is needed to keep pace with the enlarged activities of the Institution. Critical appraisal of the Institution's programs requires the assistance of consultants and senior staff assistants to increase the effectiveness of the executive direction of the Institution.

The inadequacy of funding for Editorial and Publications results from the problem of keeping pace with the increase in the number of contributing scholars and scientists which has risen 50 percent in the past 5 years. Much of the accomplishments of these gifted workers depend on the publication of the results of their studies and research. Publishing costs similarly have increased 50 percent in the past 5 years and have offset the modest increase in funds available during the years. The amount of the appeal is essentially to overcome backlogs, to meet the known workload, and to meet increased costs.

Current surveys by professional users of the Library have established conclusively that the Library is inadequate in every service: acquisitions, cataloging, reference, circulation, and translation. Funding the Library has not kept pace with the increase in the professional staff and in the number of publications required for the expanded programs. More than one-half of the total holding of 500,000 volumes is uncataloged. It is urgent to make a start on the backlog

of uncataloged books as the initial phase of a long-range recataloging program and to assist the productivity of the professional staff, by increasing the reference and circulation services.

SMITHSONIAN INSTITUTION

"ARCHEOLOGICAL RESEARCH AND EXCAVATION (SPECIAL FOREIGN CURRENCY PROGRAM)," FISCAL YEAR 1967

Change in amount

On page 43, line 13, change $2,316,000 to $5,700,000.

The justifications for this change in amount appear on the following pages.

MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

Agency request	$5, 700, 000
House allowance	2, 316, 000
Appeal	3, 384, 000

Restoration is requested of $3,384,000 for museum programs and related research (special foreign currency program). This valuable source of research support places no additional burden on the American taxpayer, at a time when the administration and the Congress itself have shown mounting concern over the need for greater and more creative uses of U.S.-owned excess currencies, before they might lose value to us through inflation.

Funds for systematic and environmental biology would permit establishment of a proposed marine biology collecting facility in Tunisia, which would greatly accelerate the vital work of the Smithsonian Oceanographic Sorting Center here in Washington. The concept of this facility has already been well received by the Government of Tunisia and thoroughly endorsed by our Embassy there. We would also be able to conduct studies in marine biology in India and to create new observation stations for the Smithsonian Astrophysical Observatory in Ceylon or Poland, to mention a few examples.

Restoration of funds for systematic and environmental biology is urgently requested in order to finance the Smithsonian's capability to accommodate project proposals in the biological sciences from other institutions in a national program of support to basic scientific research. The American Institute of Biological Sciences, the National Science Foundation, the National Academy of Sciences, and many of our leading universities have expressed the greatest interest in our special foreign currency program and look to us for support in systematic and environmental biology.

Although American museums are among the best in the world in design and in exhibit techniques, we need more research on how to make our museums more effective teaching instruments at all levels of education. Funds requested for museum sciences would further progress toward this goal with minimal burden on the American public. Much of what could be learned through this program abroad would have direct value to American museums trying to establish pioneer programs in education and vocational guidance, especially among the culturally disadvantaged sectors of our society.

The total restoration of the House cut is requested on the basis that it is fully responsive to the administration's request as expressed in a letter dated January 28, 1966, addressed to Senator Hayden by the Director of the Budget. It is stated in that letter that the 1967 budget recommends the use of foreign currencies for specified programs which would be of benefit to the United States. The letter states further that these currencies would not otherwise be used and their use for the proposed programs would provide goods or services for U.S. use at no cost to the American taxpayer.

CONSTRUCTION AND IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK

Agency request	$1, 589, 000
House allowance	1, 589, 000
Appeal	As noted

(NOTE.—The House report states that a portion of the $150,000 for planning funds for a public service building should not be used to plan facilities including a lecture hall and demonstration laboratories. The purpose of this appeal is to obtain the support of the Senate for the planning of the facilities at this time.)

Inclusion of the planning for a public educational and service building is expressly authorized in the National Zoological Park's founding statute, which includes the purpose of "the advancement of science and instruction and recrea-

tion of the people." This public service building is therefore an essential part of the 12-year capital improvement program since the purpose of the program is to provide facilities not only for the proper exhibition and housing of animals but also for the instruction and recreation of the people.

The educational potential of the public service building will greatly enhance the value of the National Zoological Park. It will make possible the presentation of lectures, educational films and slides, laboratory demonstrations relating to the animals of the zoo, and similar programs for increased knowledge and understanding of zoology.

NATIONAL GALLERY OF ART,
Washington, D.C., April 11, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. HAYDEN. I appreciate your letter of April 7, 1966, giving us an opportunity to propose amendments to H.R. 14215. This bill includes the 1967 appropriation for "Salaries and Expenses, National Gallery of Art," as approved by the House of Representatives on April 6, 1966.

We respectfully request that H.R. 14215 be amended as follows.

Page 45, line 11, "$2,694,000," change to, "$2,765,000."

The requested change will restore the full $71,000 reduction made by the House of Representatives in our 1967 budget estimate. With reference to this item, the Committee on Appropriations, House of Representatives Report No. 1045, page 39, states:

"The reduction of $71,000 below the budget estimate recommended by the committee consists of $24,170 for three positions in the Office of Information; $37,075 to fund the Index of American Design; and $9,755 for miscellaneous administrative expenses."

The three new positions for the proposed office of information, two new positions for the Index of American Design, and the Index of American Design pilot project are justified on pages 8 through 13 of our 1967 budget submission. There is an urgent necessity for the new information office positions if the gallery is to fulfill its nationwide obligations to the general public and educational organizations in this era of widespread interest in the arts, and particularly in the gallery's programs.

In the past 9 years the number of exhibition rooms open to the public has increased by 10 percent, very significant additions have been made to the collections, an extension service which reached almost 1 million people last year has been instituted, and attendance (1965 over 1957) has risen by 33 percent. Our budget estimate for 1967 proposed 15 new positions for a total of 349 full-time permanent positions. Ten years ago, in 1957, the Congress approved 327 such positions. Thus, in a 10-year period of unusual growth, the net increase of 22 in full-time positions would be less than 7 percent. Furthermore, 15 of these positions were for guards. Therefore, if the five new positions which the House did not approve are restored, we will have added only seven positions to our substantive program overa a 10-year period. We believe that this is a record of efficient management which merits your favorable consideration of our present request.

Respectfully yours,

JOHN WALKER, *Director.*

CORREGIDOR-BATAAN MEMORIAL COMMISSION,
Washington, D.C., April 6, 1966.

Senator CARL HAYDEN,
Chairman, Senate Appropriations Committee,
New Senate Office Building, Washington, D.C.

DEAR SENATOR HAYDEN: The following information is sent in answer to your letter of April 6, 1966.

This Commission's request for $35,000 for its operating expenses to May 6, 1967, approved by the Bureau of the Budget, was reduced to $25,000 by the House Appropriations Committee. This amount will not provide funds sufficient to operate even at the present fiscal year 1966 level. Pay increases granted by the Congress, authorized civil service grade increases, and terminal leave requirements exceed the $25,000 figure by approximately $1,600.

The $10,000 reduction was accomplished by denying an increase for travel ($3,000), and an increase for personnel compensation ($7,000) to provide for a part-time employee. The increase in travel is needed to send one staff member to Manila to confer with the Philippine National Shrines Commission in July 1966 and January 1967. The July trip has already been delayed for 12 months due to a lack of funds occasioned by the reduction of our fiscal year 1966 budget. The planned completion of construction of the Pacific War Memorial in 1967 requires the early initiation of discussions with the cognizant Philippine officials who have taken office recently under the administration of President Marcos.

The increase in personnel will enable the part-time employment of a historical researcher to review the historical accuracy of the documentary film of the Pacific war, and the location of the historical markers to be placed on Corregidor Island. Both of these items are provided for in current legislation.

In view of the foregoing, it is urged that H.R. 14215, page 45, line 16, be amended by changing "$25,000" to read "$35,000."

We are keenly aware of the desire of the Congress to reduce, or defer, requests for funds for the coming fiscal year. But it is submitted that the reduction made by the House Appropriations Committee will hamper unduly the carrying out of the Commission's responsibilities, under legislation passed by the Congress, during the final year of the Commission's existence.

It is respectfully requested that the Senate Appropriations Committee approve the sum of $35,000 as requested. This sum is a very modest one and represents the Commission's policy of operating on a basis of the strictest economy. We venture to say that there is no other Federal agency which operates on such an austere basis.

Sincerely yours,

EMMET O'NEAL, *Chairman*

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