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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR 1971

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

NINETY-FIRST CONGRESS

SECOND SESSION

SUBCOMMITTEE ON DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES

JULIA BUTLER HANSEN, Washington, *Chairman*

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JOHN O. MARSH, JR., Virginia
JOHN J. FLYNT, JR., Georgia
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BEN REIFEL, South Dakota
JOSEPH M. McDADE, Pennsylvania
WENDELL WYATT, Oregon

GEORGE E. EVANS, *Staff Assistant*

[1] Assigned to Subcommittee, February 20, 1970.

PART 4

RELATED AGENCIES:

- American Revolution Bicentennial Commission
- Commission of Fine Arts
- Federal Field Committee for Development Planning in Alaska
- Forest Service
- Indian Claims Commission
- Indian Health Services and Facilities
- National Capital Planning Commission
- National Council on Indian Opportunity
- National Foundation on the Arts and the Humanities
- National Gallery of Art
- Public Land Law Review Commission
- Smithsonian Institution

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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1971

MONDAY, MARCH 23, 1970.

FOREST SERVICE

WITNESSES

T. K. COWDEN, ASSISTANT SECRETARY OF AGRICULTURE
E. P. CLIFF, CHIEF, FOREST SERVICE
M. M. NELSON, DEPUTY CHIEF, FOREST SERVICE
E. W. SCHULTZ, DEPUTY CHIEF, FOREST SERVICE
E. M. BACON, DEPUTY CHIEF, FOREST SERVICE
R. K. ARNOLD, DEPUTY CHIEF, FOREST SERVICE
R. F. DROEGE, ASSOCIATE DEPUTY CHIEF, FOREST SERVICE
B. H. PAYNE, ASSOCIATE DEPUTY CHIEF, FOREST SERVICE
CHARLES L. GRANT, DIRECTOR OF FINANCE, DEPARTMENT OF AGRICULTURE

GENERAL STATEMENTS

Mrs. HANSEN. The committee will come to order.

This morning we have the U.S. Forest Service and the principle witness is Mr. Cliff, Chief of the Forest Service. We are also pleased to welcome Assistant Secretary Cowden.

Mr. REIFEL. Off the record.

(Discussion off the record.)

Mrs. HANSEN. The committee opens the Forest Service hearings this year with some very grave problems. One of the timber counties in my own district last week sent an appeal from the mayor and the city council. The unemployment rate is 14.5 percent. In 1960 at the height of the last recession the unemployment rate was only 13.7 percent. This problem also affects other areas where timber is the basic ingredient of the economy. There seems to be no hope in sight. We not only have unemployment but we have increasing inflation and high interest rates. It is in a great mood of seriousness that this committee looks at the difficulties of the Forest Service.

The second consideration is the urgent need to restore the environment that has been increasingly receiving less and less attention. I think when I take this bill to the floor this year I am not going to say it is a good bill. I may say it is the best that can be done under the circumstances and that it is probably a poor bill for the country because it does not reflect the country's needs. With those rather gloomy opening remarks I am going to call on Assistant Secretary

Cowden to insert his formal statement in the record and summarize it for us.

Mr. COWDEN. Thank you, Madam Chairman. It is brief.

(Mr. Cowden's statement follows:)

STATEMENT OF THOMAS K. COWDEN, ASSISTANT SECRETARY, U.S. DEPARTMENT OF AGRICULTURE

Madam Chairman and members of the committee. We appreciate the opportunity to come before this committee, to meet with you and to review our forestry programs.

We are very much aware of the importance to the Nation of the resources that come from the one-third of the total land area of the United States which is forested. We feel it is important that the nonfarm rural lands, both publicly owned and privately owned, be brought into such a condition that they may make a full contribution to the rural economy and provide the variety of resources the Nation needs, both now and in the future.

We are greatly aware that there is a prospective tight supply of forest products needed for housing. At the same time there are increasing demands on forest lands for watersheds, for outdoor recreation, for wildlife and fish habitat and for environmental protection and enhancement.

Forests and forestry are also major factors in the economic and social life of rural America, and as such represent a vital part of the President's and Department's total effort in Rural Areas Development.

It would be possible to make a justification for increases for almost all of the forestry programs of the Department. In view of the overall urgency of holding expenditures within the limits that have been agreed to, we are requesting increases for only the highest priority items.

Chief Cliff and his staff will make the major presentation.

AMERICAN NEEDS

Mrs. HANSEN. Mr. Secretary, which do you consider more important, the American landscape or Laos?

Mr. COWDEN. I consider peace, the avoidance of major conflicts, very important because without that we would have trouble in many other things.

Mrs. HANSEN. Do you feel that the United States can continue to take a major section of its budget and devote it to war of various kinds around the world and still have the necessary funds to save the environment of this country?

Mr. COWDEN. I think in the position we find ourselves the alternatives are very undesirable. We find ourselves in war in Vietnam and this is part of it, and every effort is being made to get out of the war, and war is undesirable.

Mrs. HANSEN. Yet the American people are the people that are going to pay the price.

Mr. COWDEN. No doubt about it wars are very undesirable. We should do everything we can to avoid them.

Mrs. HANSEN. This committee is very disturbed about the lack of funds available to manage our own lands.

Mr. COWDEN. Madam Chairman, I don't believe there is any disagreement between us on the importance of control of our environment and resources.

We would like to have more money to spend on these items, ourselves.

Mrs. HANSEN. It is mandatory that you have enough funds if you are going to keep pace with the demands of America, and as we go

through the budget we will soon reveal the difference between your ability to do things and the actual requirements. Yet your funds have been frozen or they have been cut. At the same time I can go through the Foreign Operations budget and I can show you dollars provided for similar activities all over the world.

I have a great disdain for the Bureau of the Budget's priorities. There isn't any President on earth that can keep track of what they are doing.

We have had many great speeches on environment, but the only thing that is going to cure our environment is to provide the necessary funds.

Thank you, Mr. Secretary.

Mr. COWDEN. Thank you, Madam Chairman.

Mrs. HANSEN. Mr. Cliff.

Mr. CLIFF. Thank you, Madam Chairman. I have a prepared statement. I would like to have it inserted in the record.

Mrs. HANSEN. Please do, and summarize it for us.

(Mr. Cliff's statement follows:)

STATEMENT OF EDWARD P. CLIFF, CHIEF, FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE

Madam Chairman, it is a pleasure for me to highlight for you some of our accomplishments and other items which may be of particular interest to the Committee. But first, I would like to introduce to you a new member of my staff. He is Dr. R. Keith Arnold, who is now Deputy Chief in charge of Forest Research, replacing Dr. George M. Jemison who retired last year. I know you will find him to be exceptionally capable in this new assignment.

Last year was marked by many record accomplishments. Public use of the resources of the National Forest System hit new highs. Forestry research opened new doors to help reduce costs of managing all forest lands and make better use of all forest resources. Our cooperative forestry activities with States and private landowners were strengthened and expanded. Our programs stimulated the type of long-term economic growth vital to so many rural areas.

The financing you provided enabled us to make some very significant accomplishments during the past fiscal year.

CASH RECEIPTS

Cash receipts from the sale and use of national forest system resources amounted to a record $321.3 million in fiscal year 1969. This is an increase of $103 million over the preceding year, which also was a record year. For fiscal year 1970 receipts are estimated at $352 million and for 1971 $387 million. You would be interested to know that the total receipts from national forest activities are accelerating rapidly. We reached the first billion dollars in receipts in 1958—taking 53 years. The second billion came in 1966—8 years. The third billion came in 1970—4 years—and this was reached only last month. As you know 25 percent of these receipts are returned to States and counties for school and road purposes.

TIMBER CUT AND SOLD

During fiscal year 1969, 11.8 billion board feet of timber were cut and 18.9 billion board feet of timber were sold in 23,418 sales. This figure includes one very large long term sale in Alaska. More than 20,000 of these sales were of a size that small timber operators could bid on them. Timber receipts were at a record level of about $306 million—an increase of $101 million over the previous year. For fiscal year 1971 timber receipts are estimated at about $371 million.

OUTDOOR RECREATION

Outdoor recreation is still one of our fastest growing activities. In calendar year 1969, 162.8 million visitor-days of use were tallied on national forest

system lands. Camping and picnicking accounted for about 49 million visitor-days. Recreation travel accounted for about 48 million visitor-days, and hunting and fishing were next in popularity with a total of about 29 million visitor-days. It is estimated that recreation use on national forest system lands in fiscal year 1971 will increase about 11 percent over the 1969 level.

FIRE CONTROL

The 1969 fire season was normal until early August, when drought and record high temperatures combined to create extreme fire danger conditions in the Western United States. In many of these areas precipitation was 10 percent less than normal. It was the driest August in 80 years at Walla Walla, Wash. In addition, it was one of the hottest Augusts on record. Yet, during the 1969 fire season, highly effective initial attack forces held damage down. Of the 9,946 fires occurring in 1969, 53 percent were man-caused and 47 percent were lightning-caused. A total of 95,707 acres were burned. The 1968 fire season, which had less severe burning conditions and fewer fires, saw 212,420 acres burned.

NATURAL DISASTERS

The Forest Service was involved in disastrous storms in California, Minnesota, Mississipi, and Virginia during the past year. We are using $2.5 million of funds resulting from construction program cutbacks for restoration of facilities damaged by the California floods, Minnesota tornadoes, and Hurricane Camille. We also used funds made available by the Department of Transportation to restore the monumental damage done to the road system in California by the floods of 1968 and 1969. This reprograming obviated the need for a supplemental appropriation request for these purposes.

FOREST ROADS AND TRAILS

We appreciate the efforts and foresight of this committee in recognizing the need to provide greater emphasis in the construction of timber access roads in fiscal year 1970. This has allowed us to move forward and provide an important first step in constructing major access roads to meet the objectives of increasing timber supplies over the years ahead. Further, this program permits much more than the immediate cutting of timber. As a part of timber management, other benefits accrue such as future salvage of material which would otherwise be lost. Thinning and other silvicultural practices can be achieved to speed up healthier and faster growing stands. Since these roads are major access roads, all of them will provide broad multiple use benefits such as new access for hunters, fishermen, fire control, and general administration, and access to some new recreation areas.

FORESTRY RESEARCH

The budget estimates contain a few increases for research. These increases are aimed at enhancing the environment and increasing short-run supplies of timber. The largest of the increases is for the forest survey. Acceleration and intensification of this effort will enable public policy makers, State and local planners, and industry to judge more accurately the adequacy of forestry programs and to identify the location, species, and quality of timber available now and in the future. The increase for forest economics research will provide a better foundation for allocation of public and private resources to the production of timber and to other benefits accruing from forest land.

Also included are small increases for timber management, utilization and engineering research, all aimed at increasing timber supplies or stretching those already on hand. In addition, we are proposing a modest boost for developing methods for protection of soil and water in areas of steep, erosive slopes. All of this research has both timber and environmental objectives—we must learn more about protecting soil and water in these areas if we are to fully use the timber resources already there.

As evidence of the interest of this committee, we have completed additions to laboratories at Delaware, Ohio, and Madison, Wis. These will provide room for 43 scientists plus their supporting staffs. Such modern laboratories provide

opportunities to accelerate environmental-related research that heretofore was impossible because facilities were lacking. These facilities will contribute specially to our search for substitutes for pesticides, our efforts to reclaim wood fiber from municipal rubbish and our studies to eliminate the noxious effluents from pulp and paper mills.

As with other forestry programs, we also feel the pinch of rising research costs. Although better laboratories and support services for scientists have been provided, we have to report that we have not made the hoped for progress on the long-range program for forestry research.

STATE AND PRIVATE FORESTRY

During the 1960's, public interest in privately owned forest lands reached new heights and the role of these resources in the development of rural America was reemphasized. It was a period that culminated in defining the tasks ahead, and the accomplishments during the last year of the decade are encouraging.

During 1969, special emphasis was placed on developing and refining biological and silvicultural pest control measures to replace hard pesticides. Increased effort on detection and biological evaluation of insect outbreaks reduced the use of chemicals to those areas where other controls could not be used.

The acreage burned has shown a slow decrease, although the number of man-caused fires has increased. The incidence of disaster fires is of increasing concern. In recent years disaster fires have comprised less than 1 percent of the number of fires yet burned 35 percent of the non-Federal protected area.

Cooperative work with the States in the program titled "Forest Management and Processing" is showing progress. There are now the equivalent of 825 full-time State-employed service foresters and 44 forest product utilization specialists.

The service foresters work with private landowners to assist them in better management, harvesting and marketing. Their effort is to increase softwood timber supplies and also to give increased attention to all the multiple use values of those lands.

We are especially heartened by the good reception of our men working as forest utilization specialists. Examples of the use of these services in locating new industries in rural areas, in reducing waste by using hitherto nonmerchantable material, and in reducing costs to the producer and consumer are apparent from the Pacific Northwest across the country.

We have been working to reduce the lag between the time research results become known and are put into practice. A current example is the use of improved plant material for which information was released by our scientists this past month. Schedules are now made to produce and distribute 600,000 superior cottonwood cuttings by the fall of 1971 with commercial planting programed to begin in the winter of 1972–73, all based on genetic research that has just been completed only in recent weeks.

FIRE PAY

The Forest Service has been paying regular rates of pay (that is without premium) for overtime work related to forest fire suppression activities under the permissive authority granted in title 7 U.S.C. 2226 (Agriculture Appropriation Act of 1952). We are the only Federal agency currently paying regular rates of pay to regular employees for overtime work. We are using this opportunity to let you know we plan to change our policy regarding the payment of premium overtime pay for firefighting. Beginning April 5, 1970, the Forest Service intends to pay premium overtime for all regular employees for fire suppression activities. This will bring the Forest Service into alignment with other bureaus, such as the Bureau of Land Management, having similar firefighting activities. The estimated increased cost, based on today's salary levels, for an average fire year will range between $2 and $3 million. We are making some additional simplifications in the administration of fire pay which will partially offset this cost.

Thank you for this opportunity to make these introductory comments. We will be pleased to answer any questions that you may have.

INTRODUCTION OF R. KEITH ARNOLD

Mr. CLIFF. In my review I will interject a few items that are not in the prepared statement, if it is permissible.

Mrs. HANSEN. Yes that will be fine.

Mr. CLIFF. First, I would like to introduce to you a new member of the staff. He is Dr. R. Keith Arnold, sitting at the end of the table.

Mrs. HANSEN. Good morning.

Mr. CLIFF. He is in charge of Forest Research, replacing Dr. George M. Jemison who retired last year.

Mrs. HANSEN. We are very sorry Dr. Jemison is not with us, but we are very happy to have Dr. Arnold.

Mr. CLIFF. Our loss is Oregon's gain. Dr. Jemison is a Professor at Oregon State University and making a real contribution.

Mrs. HANSEN. That is where you froze funds for the laboratory?

Mr. WYATT. Let the record show that Dr. Arnold didn't do that and neither did the chief.

Mrs. HANSEN. I didn't sign the reprograming that would enable you to use the Corvallis Oregon Laboratory funds for pay costs. I want that laboratory built.

Mr. CLIFF. I don't know where that leads us.

Mrs. HANSEN. I don't, either. You figure a way out. We are just a little tired of Congress funding projects that we feel necessary and then those projects are the first ones to be put in the "permafrost division."

Mr. CLIFF. I assume that we will be getting into a discussion of the reprograming, Madam Chairman.

Mrs. HANSEN. I am sure we will.

GENERAL REMARKS

Mr. CLIFF. Last year was marked by many record accomplishments. Public use of the resources of the National Forest System hit new highs. Forestry research made notable progress in many fields and we made some progress, small but I think quite important, in our State and private forestry activities.

Of the activities involved in national forest system management, we have proposed modest increases in timber sale administration in the amount of $5,260,000, reforestation and timber stand improvement in the amount of $2,877,000, $1.5 million for insect and disease control, and $14,430,000 in the forest road and trail program, plus $3,086,000 in the 10-percent fund road and trail category. These are priority needs in raising the short term and long term sustainable timber harvest on the national forest lands.

We have also proposed an increase for range improvements in the amount of $650,000 because of the need in areas of low income and critical unemployment. We propose an increase for recreation-public use of $3,132,000, and $539,000 for fire and general purpose improvements to upgrade the water and waste treatment systems in keeping with the administration's policy that the Federal Government provide

leadership in the effort to control pollution and enhance the quality of water resources.

Mrs. HANSEN. Mr. Cliff, you are decreasing your water resource development and related activities by $3,391,000. Your leadership is going to be a little slow.

Mr. NELSON. That part is for recreation improvements, of which we have very little in the budget.

Mr. CLIFF. That is an offsetting decrease which would go against the construction of campground facilities and not the water pollution abatement.

Mrs. HANSEN. Off the record.

(Discussion off the record.)

CASH RECEIPTS

Mr. CLIFF. Cash receipts from the sale of national forest resources amounted to a record $321.3 million in fiscal year 1969. This is an increase of $103 million over the preceding year. For fiscal year 1970 we estimate receipts will be at $352 million and for 1971, $387 million. These national forest receipts have been accelerating rapidly, as I am sure you are aware. We reached the first billion dollars in 1958 after 53 years. The second billion came in 1966 after 8 years. The third billion came in 1970 after 4 years. This was reached only last month.

During the fiscal year 1969, 11.8 billion board feet of timber were cut on the national forest, and 18.9 billion were sold in 23,418 sales. This included a long-term sale in Alaska. Timber receipts were at a record high. They make up the bulk of our receipts. They amounted to $306 million last year, an increase of $101 million over the preceding year. We estimate that the timber receipts will be at $371 million in fiscal 1971.

Outdoor recreation is still one of our fastest growing activities. In calendar year 1969, 163 million visitor days of use were tallied on the national forest system lands.

INCREASE IN RECREATION

Mrs. HANSEN. What percentage increase is this?

Mr. CLIFF. That is an increase of about 3 percent, and that is a statistical increase. We have been in the process of improving our sampling and reporting. I think the actual increase was higher than that. It doesn't show in the statistics.

Mr. NELSON. In places where we had statistically sound measurements of use, such as our developed areas, there has been a 7-percent increase per year of recreation visits.

Mr. CLIFF. In fiscal 1971 we expect an increase of 7 to 8 percent in our total recreation use.

Mrs. HANSEN. To what do you attribute this?

Mr. CLIFF. There are a number of factors—increased population, increased mobility, and people are expressing a desire to get out of the cities and into the national environment of the forest and the countryside. We have sustained a fairly uniform increase, in recreation use since World War II, which has really been phenomenal. Use increased

much faster than the rate of population. I think Mr. Nelson has a chart illustrating this.

Mr. NELSON. I planned to show the chart when we discuss the line item of recreation because it shows both trends in use and funds to take care of use. We could show it now if you prefer.

Mrs. HANSEN. Please do.

Mr. NELSON. The top line on the chart shows what has happened in the last 5 years, starting with 1966 as zero. The top line shows recreation use at developed sites. It indicates that such use has increased at the average rate of 7 percent each year. During the 5-year period, recreation use has climbed 35 percent.

The bottom line illustrates what has happened to the funds for development of such sites. Again with zero as the starting point in 1966, funds have gone down each year. In 1971 we will have 90 percent less funds available for the development of new sites or adding new capacity at old sites on the national forests than we had 5 years ago. Whereas use is up 35 percent, our funds to provide developments for such use is 90 percent less than it was 5 years ago.

Mr. CLIFF. Shall I proceed?

Mrs. HANSEN. Yes, please do.

FIRE RECORD

Mr. CLIFF. My statement contains the paragraph telling about the improvement in our fire record this last year. We did have a much improved fire record, particularly in acreage burned.

Mrs. HANSEN. Is this attributable to a more sophisticated type of fire prevention and to your quicker response to fires?

Mr. CLIFF. I think that has been a major factor, Madam Chairman. We have continued to give emphasis to fire prevention because we are having more use of the forests for all kinds of purposes. The nationwide record over the past 20 years shows a very marked decline in the number of man-caused fires in the national forests. The use of improved technology in fighting fires and the use of trained crews accounts for the reduction in the acreage burned. The research that has been done in forest fire control is paying off in improved performance.

USE OF JOB CORPS ENROLLEES

Mrs. HANSEN. Has the use of the Job Corps improved your performance?

Mr. CLIFF. It has some, but we have not used the Job Corps men on fire suppression to the extent that we used the CCC enrollees in the 1930's. In the national forests we have only 20 Job Corps conservation center camps scattered over the entire Nation. There is an impact in those 20 places, but it is not a major impact when you look at the national total. However, it has been helpful. The Job Corps men have improved roads and trails which are available for fire suppression work.

Mrs. HANSEN. Isn't the improvement of your roads and trails a basic ingredient in your fire prevention and firefighting ability?

Mr. CLIFF. That is correct.

Mr. NELSON. In 1969 the civilian conservation centers did work benefiting fire control such as hazard-reduction work on 203 acres. They did fire suppression work in the amount of $71,000 and presuppression training work at about $15,000. That is directly in fire control and, as you have mentioned already, there are roads, trails, and other items that all contribute toward better fire protection.

Mrs. HANSEN. Didn't you close Job Corps camps in many of your areas?

Mr. CLIFF. Yes; that happened last year. We closed 25 camps last year. We still have 20 conservation centers that the Forest Service manages.

NATURAL DISASTERS

The Forest Service was involved in disastrous storms in California, Minnesota, Mississippi, and Virginia during the past year.

Mrs. HANSEN. It is strange that the Budget Bureau wasn't able to control that.

Mr. CLIFF. We were involved in some of the rehabilitation cleanup work after the storms. We are using $2.5 million of funds resulting from the construction program cutbacks for the restoration of facilities damaged by the California floods and other disasters.

Mrs. HANSEN. Your cutbacks. What do you mean?

Mr. CLIFF. These are the frozen items we use to reprogram $2.5 million.

Mrs. HANSEN. What was the $2.5 million used for?

Mr. CLIFF. That amount was used on these disaster areas.

Mrs. HANSEN. Have you used the funds already?

Mr. CLIFF. Yes, madam.

Mrs. HANSEN. How could you use the funds appropriated for the Corvallis Laboratory?

Mr. NELSON. That lab research fund wasn't reprogramed for any of those disaster purposes, Mrs. Hansen. It shows up on the table that was sent up to the committees as being reprogramed for the Pay Act cost.

ROAD FUNDS REPROGRAMED

Mrs. HANSEN. What funds were included in the reprograming?

Mr. NELSON. There were some road funds included.

Mrs. HANSEN. Unneeded roads?

Mr. NELSON. Not unneeded; from those roads planned for construction but which were frozen due to the——

Mrs. HANSEN. In spite of the fact that roads contribute to the prevention of fires?

Mr. NELSON. We were required to cut back, or freeze, 75 percent of road construction that did not contribute directly to timber or which had not already been contracted in September when the directive was issued.

Mrs. HANSEN. Where were those roads?

Mr. NELSON. I have a list of them.

Mrs. HANSEN. Insert the information in the record.

Mr. NELSON. I will be glad to do that.

(The information follows:)

FOREST SERVICE ROADS AND TRAILS PLANNED FOR CONSTRUCTION IN FISCAL YEAR 1970 BUT DEFERRED AS A RESULT OF EXECUTIVE DIRECTIVE ORDERING A 75-PERCENT CUTBACK ON THIS TYPE OF CONSTRUCTION

State	Forest	Project name	Cost
Montana	Couer d'Alene	Lookout	$40,000
Do	Custer	Eastside	102,000
Do	Kootenai	Big Creek CG	55,000
Do	Helena	Aspin CG	12,000
Nebraska	Central Plain Forestry Office	Fred Johnson	56,400
Do	do	Slope Stabilization	9,400
Colorado	Gunnison	Coal Creek Bridge	39,200
Wyoming	Medicine Bow	Encampment Ranger	5,000
Colorado	Rio Grande	South Fork CG	25,000
Do	Routt	Muddy Pass Lake Park	3,000
Do	do	Granite PG	2,300
Do	San Juan	West Fork	10,200
Do	do	Mavresso CG	3,900
Do	do	West Dolore CG	6,500
Do	do	Burro Bridge CG	3,300
Do	do	West Fork CG	5,800
Do	do	Wolf Creek CG	4,700
Do	do	Lost Fork CG	2,600
Wyoming	Shoshone	Sand Creek Bridge	12,000
Do	do	Dickinson Creek Bridge	12,000
Do	do	Roaring Fork	20,000
Do	do	Worthen CG	12,000
Colorado	San Isabel	Matchless Marina	26,000
Do	do	Maid of Erin PG	4,000
Wyoming	Shoshone	South Fork Trail	47,700
New Mexico	Gila	Dipping Vat	63,000
Arizona	Coronado	Rucker Canyon	4,000
Wyoming	Ashley	Fire Hold CG	106,500
Utah	Dixie	Te-Ha CG	50,000
Nevada	Humboldt	Lamoille Canyon	286,500
Oregon	Deschutes	Metclius River	56,300
Do	do	Lava Island	47,000
Do	do	Jim Egan	25,000
Do	do	Wickiup Camp	4,500
Do	do	Lava Butte	17,300
Do	do	Crane Prairie	1,500
Do	do	Phil Brogan Trail	12,000
Do	Malheur	Strawberry Basin	1,900
Do	do	Strawberry Lake	900
Do	Siskiyou	Grayback CG	4,000
Do	do	Vulcan Lake	4,500
Do	do	Illinois River	2,300
Do	do	do	4,000
Do	Wallowa-Whitman	North Gumboat	400
Do	Winema	Spring Creek	4,100
Washington	Mt. Baker	Bay View CG	100,000
Do	do	Boardman Lake	10,000
Do	Okanogan	Klip Chuck CG	29,500
Washington	Snoqualmie	Cascade Crest	10,000
Arkansas	Ouachita	Ridge Mountain	15,000
Do	Ozark	Hector RS	4,396
Do	do	Mt. Burg AS	3,654
Do	do	Clarksville AS	3,950
Do	do	Big Spring Road	35,500
Florida	Florida	Juniper Spring	15,000
Georgia	Georgia	Toccoa RS	2,000
Kentucky	Daniel Boone	Cave Run	225,500
Louisiana	Kisatchie	Johnson Road	14,000
Do	do	Caney AS	9,200
Mississippi	Mississippi	Harrison Exp. Road	5,000
Do	Mississippi	Cypress Creek Rd	9,000
Tennessee	Cherokee	Oswald Vista	3,000
Texas	Texas	Sandy Creek	78,000
Do	do	Alberta	78,000
Virginia	Jefferson	Beartree Gap	51,800
Missouri	Mark Twain	Bay Nothing	52,000
Michigan	Ottawa	Snap Jack Long Lake	23,000
Do	do	Clark Lake CG	76,000
Illinois	Shawnee	Levee	28,000
Do	do	Dutchman	24,000
Minnesota	Superior	Crane Lake Spur	59,000
Alaska	North Tongass	Harbor Mountain	13,000
Do	do	Wilson Cove	5,000
Do	do	Situk	5,000
Total, forest roads and trails			2,203,200

FOREST LAND MANAGEMENT FUNDS WITHHELD

Mr. CLIFF. The construction funds that were withheld amounted to $5,904,100. Of this, $2,840,900 was for forest land management activities.

Mrs. HANSEN. Why were those funds placed in reserve?

Mr. CLIFF. That was mainly in construction projects such as campgrounds and administrative buildings.

Mrs. HANSEN. Didn't you testify before this committee that the designated campgrounds are a basic ingredient of fire prevention?

Mr. CLIFF. Yes, ma'am.

Mrs. HANSEN. How can they justify placing these funds in reserve?

FOREST RESEARCH FUNDS WITHHELD

Mr. CLIFF. There was $860,000 in forest research, and this was laboratory construction.

Mrs. HANSEN. Which laboratories?

Mr. CLIFF. I will have Dr. Arnold respond to that. He will list the laboratories that were held up on construction.

Mr. ARNOLD. Those are the two laboratories at Corvallis, Oreg., and Nacogdoches, Tex., for $860,000.

FOREST ROADS AND TRAILS FUNDS WITHHELD

Mr. CLIFF. Forest road and trail funds that were held up amounted to $2,203,200. This consisted of roads which made no direct contribution to timber, but primarily were for recreation.

Mr. CLIFF. $2,466,000 was reprogramed for rehabilitation and restoration of roads, buildings, and improvements damaged by Hurricane Camille and other natural disasters and $320,200 for completion of unfinished projects underway at the time of the closure of civilian conservation centers.

Mrs. HANSEN. Such as?

Mr. NELSON. That was all reprogramed road money. It was to complete six road projects that were underway when the centers were closed.

Mr. CLIFF. It is proposed to apply $1,639,900 against 1970 Pay Act costs. We also propose to proceed with direct Federal construction of two water pollution abatement projects previously deferred in the amount of $148,000. There will be $1,330,000 of road funds which will be reserved for future release. The total of these deferrals amounts to $5,904,100.

COMMITTEE DISAPPROVAL OF PROPOSED REPROGRAMING

Mrs. HANSEN. I sent you a letter on March 18 disapproving the reprograming of the $500,000 for the Corvallis Laboratory.

TIMBER ROAD FUNDS

Mr. CLIFF. We appreciate the efforts and foresight of this committee in recognizing the need to provide greater emphasis in the construction of timber access roads in fiscal 1970. This has allowed us to move for-

ward on important roads which will, in turn, enable us to more adequately manage our timber resources. This budget contains requests for additional road funds to further advance this program.

Mrs. HANSEN. Will these funds be placed in reserve?

Mr. CLIFF. I hope that doesn't happen, Madam Chairman. The timber road funds were not frozen this year.

FORESTRY RESEARCH

The budget estimates contain a few increases for research and these increases are aimed at enhancing the environment and increasing short-run supplies of timber. The largest of the increases is for the forest survey. Acceleration and intensification of this effort will enable public policymakers, State and industry people to judge more accurately the adequacy of forestry programs, and identify the places and the kinds of work that need to be done in the future.

The increase for forest economics research will provide a better foundation for allocation of public and private resources to the production of timber and other benefits from forest lands.

Also included are small increases for timber management, timber utilization, and engineering research, all aimed at increasing timber supplies or stretching those already on hand. In addition, we are proposing a modest boost for development methods of protection of soil and water in areas of steep erosive slopes. All of this research has both timber and environmental objectives.

As evidence of the interest of this committee, we have completed additions to laboratories at Delaware, Ohio, and Madison, Wis. These will provide room for additional scientists and supporting staffs to work on the important timber-oriented programs. These facilities will contribute to our search for substitutes for pesticides and reclaim wood fiber from municipal rubbish, and our studies to eliminate the noxious effluents from pulp and paper mills.

STATE AND PRIVATE FORESTRY

In the State and private forestry fields we are proposing increases for two items—$820,000 for cooperation in forest management and processing and $180,000 for general forest assistance. These increases reflect emphasis on some of the actions that can, and should, be taken now to increase production of softwood timber on private forest lands. The budget also includes a decrease of $2 million in cooperation in fire control funds.

THE THIRD FOREST

During the past decade, and especially the past several years, there has been increased public interest in privately owned forest land management. In the South the industry and the forest landowner associations have completed a study which they call The Third Forest. They have concluded that there needs to be a much stepped-up effort in private forest land management if we are going to meet our future timber needs.

During 1969 special emphasis was placed on developing and refining biological and silvicultural pest control measures to replace hard

pesticides. Increased effort on detection and biological evaluation of insect outbreaks reduced the use of chemicals to those areas where other controls could not be used.

FOREST PEST CONTROL

This budget includes a request for $1.5 million increase in forest pest control. The purpose is to purchase a supply of Zectran which we propose to use as a substitute for DDT in spruce budworm control.

Mrs. HANSEN. On March 3 Mr. Ketcham, of Washington, D.C., Director of Pest Control, U.S. Forest Service, told a conference in Seattle what would happen if chemical bug killers were not used. He said in his address that, "measurement of such pesticides as DDT must be more precise." Is that correct?

Mr. CLIFF. Yes. Mr. Ketcham is the Director of our Division of Forest Pest Control. He is an exceedingly competent individual and I am sure the statement he made is correct. Cooperative work with the States in forest management and utilization and processing is showing progress.

STATE COOPERATIVE WORK

Mrs. HANSEN. Why then did you reduce the Clarke-McNary funds? Congress increased those funds last year at the direct request of the States. I notice in your justifications that State contributions are increasing while Federal funds are not.

Mr. CLIFF. That is true. The States and the private cooperators are putting up about five times as much money as the Federal Government in this program and the Congress did add $2 million to this fund last year.

Mrs. HANSEN. We had hoped this would be the first step.

Mr. CLIFF. It was reduced when the budget was prepared this year.

Mrs. HANSEN. Who reduced it?

Mr. CLIFF. Well, this was a decision that was made in the Bureau of the Budget.

Mrs. HANSEN. Thank you. I want it plainly understood that this committee and the Congress responded to the States request because they are faced with costs that they cannot possibly absorb.

Mr. CLIFF. This has been one of our objectives. The authorization for this fund is $20 million.

Mrs. HANSEN. That is right.

Mr. CLIFF. The appropriation level is about $14 million, so we are not using the full authorization yet.

Mrs. HANSEN. Why do you think Congress authorized a $20 million level, if it didn't intend the funds to be spent? The Federal Government should return some of the tax funds to the States in the form of grants. This is one responsibility that the Federal Government should assume, and yet it doesn't.

CUTBACK MADE BY DEPARTMENT OF AGRICULTURE

Mr. CLIFF. One of my colleagues has just reminded me that this $2 million cut in the Clarke-McNary item was made by the Department

of Agriculture, not by the Budget Bureau. As I remember, when this was being discussed——

Mrs. HANSEN. Have they cut cotton subsidies?

Mr. CLIFF. I couldn't answer that. When this was being discussed the Department was working under instructions to start with the level of the administration's budget before the add-ons were made, and this was one of the add-ons.

Mrs. HANSEN. We understand.

Mr. CLIFF. They did allow us to submit this in two ways: One, with no increase, and then they authorized us to indicate what we needed. We recommended including the full authorization, and when the budget was finally shaped up that was the fund that was cut back to the level of the year before last.

Mrs. HANSEN. You can't make statements about helping the States to meet their needs and then fail to appropriate the necessary funds.

Mr. CLIFF. I would point out, Madam Chairman, that this budget does include a million-dollar increase for State and private forestry activities.

Mrs. HANSEN. I know.

Mr. CLIFF. It was decided that increases in forest management assistance and general forestry assistance would have much more impact on an immediate increase in timber production than would an increase in fire control.

Mrs. HANSEN. I just received a letter from the Governor of West Virginia about the necessity to have more funds for fire control because of the ever-rising costs.

PAY OF FIREFIGHTERS

Mr. CLIFF. Madam Chairman, I would like to complete my statement by talking briefly about firefighters' pay.

Mrs. HANSEN. It is certainly an appropriate subject.

Mr. CLIFF. The Forest Service has been paying regular rates of pay, that is, without premium, for overtime work related to forest fire suppression activities under the permissive authority granted in 7 U.S.C. 2226, the Agriculture Appropriation Act of 1952. We are the only Federal agency currently paying regular rates of pay to regular employees for overtime work. We are using this opportunity to let you know we plan to change our policy regarding the payment of premium overtime pay for firefighting. Beginning April 5, 1970, the Forest Service intends to pay premium overtime for all regular employees for fire suppression activities. This will bring the Forest Service into alinement with other bureaus, such as the Bureau of Land Management, having similar firefighting activities. The estimated increased cost, based on today's salary levels, for an average fire year will range between $2 million and $3 million. We are making some additional simplifications in the administration of fire pay which will partially offset this cost.

I wanted to specially advise you of this because we have finally decided that we should pay the premium rate for overtime as other bureaus have been doing for a number of years, and this will result in increased cost.

Mrs. HANSEN. What additional cost will result?

Mr. CLIFF. We expect it will increase our firefighting costs by $2 million to $3 million. This will, in turn, be reflected in the supplemental request for making up the firefighting cost deficit.

Mrs. HANSEN. Mr. Cliff, what is the total acreage under the U.S. Forest Service management?

Mr. CLIFF. It is nearly 187 million acres.

Mrs. HANSEN. How many acres are watershed?

Mr. CLIFF. It is all important as watershed.

Mrs. HANSEN. How many acres of forest lands are privately owned?

Mr. CLIFF. I would be glad to enter this in the record. I can give you some rough figures.

Mrs. HANSEN. Please do.

Mr. CLIFF. There are slightly over a half billion acres of commercial forest land in the United States. About 73 percent of this is in private ownership.

(The information follows:)

Private forest land statistics

	Million acres
Nonindustrial ownership	300
Forest industry ownership	65

ACREAGE IN STATE AND PRIVATE OWNERSHIP

Mrs. HANSEN. How many acres?

Mr. CLIFF. About 360 million acres is privately owned.

Mrs. HANSEN. How many acres are in State ownership?

Mr. CLIFF. About 28 million acres in State, county, and municipal.

Mrs. HANSEN. I am quoting from the Longview, Washington Daily News: "The largest capital investment program in the history of the forest products industry is being undertaken with more than $1 billion in capital spending scheduled in the next 4 years." Compare that with what you spend.

REFORESTATION

How many acres of national forest lands need reforestation?

Mr. CLIFF. About 4.8 million acres need to be reforested or need to have the stands reenforced by planting.

Mrs. HANSEN. What percent is that?

Mr. CLIFF. It is about 5 percent of the commercial forest land in the national forest system.

NONCOMMERCIAL FORESTS

Mrs. HANSEN. What is the total acreage of your noncommercial forests?

Mr. CLIFF. Of the 187 million acres that we administer, about 96 million is classified as commercial forest. The balance is made up of grassland and noncommercial forest and land above timberline, land that is not producing commercial stands of timber but are important for other purposes, including watershed protection.

RECREATION

Mrs. HANSEN. How many acres are usable for recreation?

Mr. CLIFF. Virtually all of it is usable for some kind of recreation, for either extensive or intensive recreation use. It is open for fishing and hunting, mountain climbing, hiking and horseback riding. Virtually the entire acreage has some utility for outdoor recreation or outdoor enjoyment of scenic values.

TIMBER SUPPLY

Mrs. HANSEN. Two years ago there was a crisis in the availability of timber. What is the market condition today?

Mr. CLIFF. As you and other members of the committee will recall, Madam Chairman, the market really made a spectacular rise in late 1968 and early 1969. This was the result of the anticipated increase in the housing program and other factors, such as the unfavorable weather that restricted log production in certain parts of the country. Anyway, a year ago when we were sitting in this room we were going through this spiral of inflation of lumber and plywood prices which brought on a demand for making more timber available to the market, primarily from existing stands in the national forests.

However, the housing boom slowed down primarily as a result of tight money.

LEVEL OF HOUSING CONSTRUCTION

Mrs. HANSEN. What is the level of housing construction at the present time?

Mr. CLIFF. For 1969, I understand it was about 1,500,000 starts, exclusive of the mobile homes. With the mobile homes, there was about 1,900,000 units added. The past few months the rate of housing is down to a rate of about 1,200,000 starts.

Mrs. HANSEN. How many housing starts are necessary annually?

Mr. CLIFF. The Department of Housing and Urban Development and the Congress, when it passed the Housing Act of 1968, estimated that we would need to construct in this country an average of 2.4 million new housing units during the next 10-year period. This means that we would have to construct up to 3 million housing units during some years to obtain the average of 2.4 million housing units. There is no question that there is a big pent-up demand for new homes in this country. The housing industry is suffering from tight money, the high-interest rates, and the difficulty of getting credit.

I am sure that when these problems are solved there will be——

Mrs. HANSEN. When will the problems be solved?

Mr. CLIFF. I wish I knew, Madam Chairman.

Mrs. HANSEN. Inflation continues to become a greater problem, Mr. Cliff. Costs are going up and and up. Housing starts have been curtailed. There is now a genuine depression in the timber areas of this country.

Mr. CLIFF. Yes, ma'am.

Mrs. HANSEN. Isn't it true that you never know when you are going

to have a fire season. You never know when you are going to have a season that curtails employment.

Mr. CLIFF. That is very true. This accounted for part of our timber shortage situation.

Mrs. HANSEN. The economy in these areas is sagging. Every homeowner is faced with high construction costs.

What is happening to all the timber that is produced? You are going to use 12.9 billion board feet in 1970.

Mr. CLIFF. Yes, ma'am. We are selling timber right along.

TIMBER PRICES

Mrs. HANSEN. What are the timber prices this year compared to the prices last year?

Mr. NELSON. Mrs. Hansen, at the end of 1969, our last quarter, the average appraised stumpage price was $20.87 and the bid price was $30.42 per thousand. During 1969 the market went very high. Our average appraised price in one quarter reached $49.26. The high peak for average bid price was $72.23. At the end of 1969 both the bid price of $30.42 and the appraised price of $20.87 were about where they were before the big rise that started late in 1968.

Mrs. HANSEN. Isn't this going to have a direct effect on your payments to the counties?

Mr. CLIFF. The counties get 25 percent of the receipts and if receipts are down it would have an effect.

Mrs. HANSEN. This would in turn affect school revenues.

TIMBER SALES PROGRAM

Mr. CLIFF. Could I tell you how our sales program is coming along? I am quite proud of the record we have made so far. You, and I am sure Congressman Wyatt, will remember that a year ago one of the complaints of the timber industry was that we did not make our sales evenly over the year. They pleaded for us to make a more even distribution of our timber sale offerings through the entire year rather than let them peak up at the end of the fiscal year. We have been making a very determined effort to do this. Although it is going to take several years to get complete uniformity of distribution, as of the close of last week, we had sold over 50 percent of our scheduled sale program. This is a very distinct improvement over the distribution of sales last year.

In the northern Rocky Mountains region they had sold 89.6 percent, and in your Pacific coast region, Madam Chairman, and in Congressman Wyatt's district, it is 46.9 percent of the scheduled sales program, but countrywide it is over half.

Mr. WYATT. Madam Chairman, may I interrupt at this point?

Mrs. HANSEN. Surely.

Mr. WYATT. I would like to commend the Chief and his staff for the excellent progress made in this direction, and I think we understand it will take time to get the so-called even flow program into full operation.

I would like to ask Mr. Nelson this question at this time. He was quoting stumpage figures. What has been the history of the stumpage, Mr. Nelson, as far as Douglas-fir is concerned, which we in the Northwest are principally concerned with, starting with early last spring? I ask you this question because it is my understanding that stumpage prices stayed up, and that they are even getting higher in recent sales, which would tend to run contrary to the national averages that you have used.

STUMPAGE PRICES

Mr. NELSON. Unless Mr. Payne has something else on this, I think our appraised prices in the Northwest are down, but the margin between the bid and appraised price has started to again increase.

Mr. WYATT. The stumpage has stayed up pretty well, hasn't it? Wasn't really the drop, a drop in lumber and plywood prices, much more so than in stumpage?

Mr. PAYNE. You are correct. Appraised rates for stumpage did drop during 1969. However, both appraised and bid rates for Douglas-fir by the last quarter of 1969 were still slightly higher than in prior years.

AVERAGE CONTRACT

Mrs. HANSEN. How long can they keep this timber after a sale?

Mr. NELSON. That depends on the contract terms in each individual sale.

Mrs. HANSEN. What is the length of your average contract?

Mr. CLIFF. The average contract is about 3 years.

DOUGLAS-FIR PRICES

Mr. WYATT. Just to press this one step further, I just received a copy of a letter to the President of the United States, copy to me, in which this man is pleading for some sort of negotiated sale to the small timber owner, and he points out this has to do with Douglas-fir, that his stumpage in a November 1969 purchase averaged $70.76, and the Forest Service, in the March 31, 1970, sale of Douglas-fir went for $90.40, and he in effect says they have a choice of closing the shop and selling or just going out of business completely. I just want the record to show that with respect to the Douglas-fir stumpage prices as of now.

Mr. NELSON. We won't of course know, without knowing the conditions of the particular sales. Each sale is appraised separately. The amount of roads that are available, the amount of roads that the purchaser might have to build, the hauling distance, and the quality of the stumpage itself—all of these have an effect on the appraised price.

Mr. WYATT. I understand this particular sale in March was apparently in the Estacada, Oreg., area, Mr. Nelson. I am not really asking for any explanation.

Mr. NELSON. We can supply for the record the Douglas-fir prices.

Mrs. HANSEN. Insert in the record the Douglas-fir prices since 1965.

(The information follows:)

DOUGLAS FIR APPRAISED AND BID PRICES—REGION 6, WEST SIDE (OREGON AND WASHINGTON)

Calendar year and quarter	Volume (M b.f.)	Appraised	Bid
1965	1,902,514	$21.40	$42.75
1966	1,966,040	27.01	50.10
1967	1,794,626	24.28	41.89
1968	2,013,197	34.28	61.63
1969:			
1st	152,929	59.24	121.91
2d	794,062	69.37	93.30
3d	152,596	57.65	66.83
4th	687,327	41.28	65.43
Total	1,786,914	56.70	82.77

Mrs. HANSEN. This committee discussed 8 years ago the possibilities of leveling off the unemployment rate. As you are well aware, a sizable part of the country is dependent upon the forest products industry for their survival.

Mr. CLIFF. That is very true in many sections.

Mrs. HANSEN. The forest products industry is in an economic depression. In Mr. Wyatt's State of Oregon a month ago there were 24 mills closed. Yet apparently the sales of timber are increasing.

SECURITIES AND PAYMENT BONDS

Does your agency plan any substantial changes in the practice regarding securities and payment bonds for national forest timber?

Mr. CLIFF. As you remember, Madam Chairman, the Senate Committee on Appropriations gave instructions in its report on the appropriation bill to continue payment bonds as they had been applied, until the end of this fiscal year, and in the meantime requested us to work with the industry on a solution to this problem. We have complied with these instructions. We have not changed the payment bond procedure that was in effect. We had proposed some modifications to reduce the amount of time for delay of payment while logs were held before they were put through the sawmills. Primarily this would have affected the storage of logs at the plant site after they were removed from the national forest. This met some resistance from the industry, and we have postponed——

Mrs. HANSEN. Wasn't it based upon the fact that at that time you had unfavorable market conditions?

Mr. CLIFF. I think the payment bond procedure has been beneficial to the producers, because it enables them to log the timber, remove it from the forest, and hold it as much as 6 months or more without paying for it, and then they pay for it only after it is scaled.

Typically in your State, and in Congressman Wyatt's district, the operators do not hold their timber that long. They pay for it after it is removed from the forest and scaled, and the lapse of time is only about a month or 6 weeks.

In California, and parts of the pine region primarily, the practice of storing these logs in the mill yard for months has grown. Many

operators pile up logs for use during the winter months when logging is difficult and pay for them only as they are scaled and removed from the log decks. Payment is thus deferred for a number of months.

We had several objections to this procedure, including the risk of loss of Government property. Deferred payment means the Government is not getting its money for some time after the property has been removed. We did propose some changes which were objected to. The Senate committee instructed us to defer these changes, and to try to work out an agreeable solution with the industry.

AUDIT OF PAYMENT BOND SYSTEM

We have complied with this. The Secretary of Agriculture, in reviewing this problem, instructed the Office of Inspector General to make an audit of this payment bond system to determine any inequities, the risk of loss, and otherwise determine just how it is working. This audit is now going on, and the people of the Office of the Inspector general, have had numerous consultations and visits with the timber producers.

The audit is not completed. We expect it will be completed within the next month or 6 weeks, at which time we will renew our negotiations with the industry.

I can't tell you with any degree of certainty whether or not we will propose changes in the payment bond procedure. We will await the outcome of this inspector general's audit before we make any further moves.

Mrs. HANSEN. The committee would appreciate notification of any changes.

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

Mrs. HANSEN. Mr. Wyatt.

Mr. WYATT. Could I ask a couple of questions of the Chief at this point?

PRESENT PAYMENT BOND PROCEDURES

Approximately how long, Chief, has the present practice been in effect in connection with payment bonds?

Mr. CLIFF. It started about 15 years ago as I remember. Prior to that, the timber had to be paid for in advance before it was severed from the stump. This meant that in some operating areas, where they fell a lot of timber before they put their logging crews in to log it, as they do in your two States, the operators had quite a bit of money invested in stumpage before they could even have a chance to move it from the woods. We agreed with the industry to accept payment bonds or Government security to guarantee payment. Thus the purchasers could avoid using their working capital to pay for the stumpage in advance. This was the first step. At the time we didn't intend that we would have a long period of deferment of payments but rather that operators would pay for logs just as soon as they were removed from the national forest.

This practice though, when it was applied in the regions, grew from a rather strict application to one which extended to moving the logs and decking them in private mill yards, storing them over winter, and

then making payment when they were moved from the log decks and scaled.

This was a development that was not contemplated in the beginning. I was in on the negotiations at the beginning and I know what was planned. We gradually grew into the present situation. The great majority of our purchasers that use payment bonds pay for timber after scaling on a monthly basis. They are billed on a monthly basis just like I am billed for my electric light bill, and this we think is a good, businesslike way of doing it. We get the scale records, and then we add them up each month, and bill the purchasers.

This is different from the deferred scaling at the mill yard. This is what we have had some difficulty in reconciling. We intend to continue the payment bond procedure. The only question at issue is how long we should defer the payment, and under what circumstances.

Mr. WYATT. At the time that the original payment bond program was entered into, the quantity of timber involved, and the dollars of timber involved was considerably different from what it is now.

Mr. CLIFF. Yes, that is true.

LOSS TO GOVERNMENT FROM BONDS

Mr. WYATT. I wonder if you would provide for the record any information you have as to loss to the Government, we will say during the past 3 years by reason of this payment bond method.

Mr. CLIFF. Yes, we will be glad to do it. We have had some difficulty in collecting on these bonds in the case of default. The loss to the Government has not been great. We still have some outstanding accounts that haven't been settled. Volumewise it isn't very great, but we have had to work very hard to make collections where there have been defaults. Some bonding companies resist prompt payment and it puts us in the position of being a debt collector. We don't think we should be in that position.

Mr. WYATT. Any information you can furnish at this point in the record as to actual loss as far as the Government is concerned, say, in the last 3 years, I think, would be helpful to the committee.

Mr. CLIFF. The losses dollarwise are not very great. The loss in manpower and time consumed is quite significant.

Mr. WYATT. I would ask you to include that too, if you would.

Mr. CLIFF. Yes.

(The information follows:)

Following are examples of delays encountered in collecting moneys due the Government which presumably were adequately covered by payment bonds:

Date claim made	Date claim paid	Elapsed time	Amount of claim	Amount of bond
March 1967	June 1967	4 months [1]	$5,086	$25,000
March 1967	June 1967	4 months [1]	13,249	25,000
July 1965	December 1965	5 months	5,964	24,000
November 1966	May 1968	18 months [2]	108,843	240,000
February 1967	June 1967	3 months	46,648	200,000
January 1967	May 1968	16 months [2]	74,313	190,000
May 1965	July 1967	2 years 2 months	10,971	12,000
September 1966	March 1967	7 months	14,000	14,000
January 1967	March 1967	3 months	2,053	3,000

[1] This claim was paid by the purchaser after reorganizing.
[2] This claim has been paid by purchaser.

At this date, all but $88,664 owed the Government has been paid. Part of this outstanding debt is several years old. The amounts listed do not include losses to the Government in the form of interest foregone when logs are stored for deferred measurement when payment bonds are used.

Forest officers at several levels and representatives of the Office of the General Counsel have been involved in the extra negotiations and extra work involved in collections due and supposedly guaranteed by payment bonds. We estimate that during the past 3 years this has involved an extra manpower cost equivalent to active 36 to 48 man-months of time.

DISCRIMINATION AGAINST SMALLER OPERATORS

Mr. NELSON. There is one other factor in this payment bond matter. Many of the smaller operators are not able to get payment bonds from the bonding companies. There is a tendency for discrimination against some of the operators that aren't able to get such bonds.

Mr. CLIFF. About 75 percent of our purchasers do not use payment bonds. It is usually the larger, the better financed operators that are using the payment bond procedure. This is not entirely true, but the smaller operators are not using them as a class.

Mr. WYATT. Thank you, Chief.

SUPPLY AND DEMAND OF TIMBER

Mrs. HANSEN. You say on page 2 of your justifications—

The area within national forests 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 economic distress. Proper management, development, and utilization of these lands are important factors in the permanent improvement of these local economies. Millions of people who live in and near the national forests are supported in whole or in part through the economic development arising from the forests and their resources. These resources offer the most favorable basis for developing prosperous and vigorous local economies and communities.

With that as a prelude, will you please provide this committee with a copy of the estimates regarding supply and demand of timber which were furnished to the President's Task Force on Lumber.

Mr. CLIFF. Yes; we will be glad to do so.

(The information follows:)

The estimates requested comprise a large part of a report prepared for the working group of the President's Task Force on Lumber and Plywood. Copy of that report is attached.

POSSIBILITIES FOR MEETING FUTURE DEMANDS FOR SOFTWOOD TIMBER IN THE UNITED STATES

PREPARED BY FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE, FOR WORKING GROUP OF THE CABINET FORCE ON LUMBER, AUGUST 1, 1969, REVISED SEPTEMBER 29, 1969

POSSIBILITIES FOR MEETING FUTURE DEMANDS FOR SOFTWOOD TIMBER IN THE UNITED STATES

Introduction

Major increases in prices of softwood lumber and plywood in 1968 and early 1969 clearly indicated changing relationships between timber supplies and demands in the United States. Plywood prices more than doubled in this period while lumber prices rose about 60 percent. Subsequently, prices dropped rapidly to approximately the level of January 1968.

A number of short-run factors undoubtedly contributed substantially to the unprecedented rise and subsequent sharp drop in softwood lumber and plywood prices. Nevertheless, longer run expectations of a major housing program and other large increases in demands for lumber and other construction materials also added to the upward pressure on lumber and plywood prices. At the same time limitations on supply of softwood timber have become increasingly evident.

This report has been prepared by the Forest Service for the Working Group of the Cabinet Task Force on Lumber to indicate some of the actions that might be taken to alleviate the future long-range timber supply-demand-price problems that are in prospect. Information is presented on (a) potential long-run trends in demands for softwood lumber, plywood, and other timber products under alternative price assumptions, (b) supplies of softwood timber that might be

made available under different price levels and management inputs, and (c) forestry program alternatives to provide increased supplies of softwood timber for housing and other purposes and dampen prospective increases in timber prices. Most of the material presented in this report has been drawn from a more comprehensive program being prepared by the Forest Service for development of U.S. forests and related resources.

Basic assumptions underlying demand projections

Future demands for timber products will of course depend upon many factors such as rate of growth in population, economic activity, public policies that affect housing construction and other markets for wood products, relative prices of timber products and competing materials, and technological developments.

Projections of population used in this report rise to 308 million people by the year 2000--an increase of about 50 percent over the present population (table 1). Gross national product (in 1958 prices) is projected to rise by 4.3 percent per year--somewhat above the 3.9 percent average annual rate since World War II. Projected GNP thus reaches $2,700 billion by 2000--nearly four times the 1968 level. Disposable personal income, an important determinant of demand for some softwood timber products, is expected to follow the same general trend, nearly quadrupling by 2000. Expenditures for nonresidential construction have been projected to nearly quadruple by the year 2000 from the 1968 level of $40.3 billion.

Table 1.--Measures of population and economic growth, 1968-2000

Year	Population	Households	Gross national product (1958 dollars)		Dwelling units built	Expenditures for new nonresidential construction (1957-59 dollars)
			Total	Per capita		
	Millions	Millions	Billion dollars	Dollars	Thousands	Billion dollars
1968	201.2	60.4	707.6	3,517	1,833	40.3
	PROJECTIONS					
1970	206.0	62.4	769.7	3,740	1,955	43.8
1980	235.2	74.7	1,172.7	4,990	2,785	66.4
1990	270.8	86.9	1,786.7	6,600	2,930	100.9
2000	307.8	98.7	2,722.0	8,840	3,510	153.3

Sources: Population, U.S. Department of Commerce, Bureau of the Census. Population estimates and projections, Cur. Pop. Rpts. Ser. P-25. 1968, No. 424, 1970-2000, No. 381.

Households, 1968-80, Ibid. No. 394.

Gross national product, 1968, Council of Economic advisers. Economic indicators.

Number of dwelling units, 1968, Forest Service estimate based on reports by the U.S. Department of Commerce, Bureau of the Census. Housing starts, Construct. Rpts. Ser. C20, and the U.S. Department of Commerce, Business and Defense Services Administration. Construction review, Monthly Indus. Rpt.

Expenditures for new nonresidential construction, 1968, U.S. Department of Commerce, Bureau of the Census. Value of new construction put in place, Construct. Rpts. Ser. C30.

Projections (except population and households, 1970-80), U.S. Department of Agriculture, Forest Service.

Residential construction--the Nation's largest market for softwood timber products--is projected to rise from 1.8 million units in 1968 to 2.8 million units by 1980, and 3.5 million units by the year 2000 (table 2).

The price assumptions used in developing projections of potential demands were as follows:

1. Relative prices of softwood lumber and plywood approximating the first quarter of 1968. This was about 10 percent above the average 1962-67 level.

2. Relative prices of softwood lumber and plywood approximating prices of the second half of 1968, i.e., about 30 percent above the 1962-67 average and 27 percent above the first quarter of 1968.

3. Relative prices of softwood lumber and plywood increasing from the second half 1968 level by 1 percent per year. Under this assumption prices by 1978 would average 140 percent of the 1962-67 level. This latter assumption would approximate an extrapolation of past price history, as illustrated in figure 1.

4. Relative prices of pulp, paper, and miscellaneous timber products continuing at the 1968 level.

Table 2.--Projected annual requirements for dwelling units, 1968-2000

[Thousand units]

Fiscal years	Total	Units required					Total	Kinds of units[1]			
		Household formations[2]	Vacancies[3]	Replacements[4]				Housing starts			Mobile and modular homes
				Total	Conventional units	Mobile homes		Total	1-2 unit	Multi-unit	
1968	1,833	--	--	--	--	--	1,833	1,548	954	594	285
PROJECTIONS											
1970	1,955	1,020	215	720	620	100	1,955	1,605	900	705	350
1980	2,785	1,325	340	1,120	870	250	2,785	2,230	1,385	845	555
1990	2,930	1,060	390	1,480	1,130	350	2,930	2,480	1,860	620	450
2000	3,510	1,335	425	1,750	1,330	420	3,510	2,890	1,860	1,030	620
10-YEAR AVERAGE											
1970-79	2,410	1,200	320	900	724	166	2,410	1,954	1,138	816	456
1980-89	2,895	1,243	364	1,288	985	303	2,895	2,381	1,651	730	514
1990-99	3,154	1,157	401	1,596	1,220	376	3,154	2,645	1,839	806	509

[1] Projections of kinds of units were derived from projections of population by age class and expectations about the housing type propensity of each age class.

[2] Projections of households are the Series 2 projections published by the Bureau of the Census (Series P-25, No. 394, June 6, 1968).

[3] In estimating vacancies, it was assumed that (1) the vacancy rate in units for rent or sale would rise from 2.2 percent in 1969 to 3.8 percent in the 1990's, and (2) the vacancy rate in units not for rent or sale would rise from 6.6 percent in 1969 to 11.2 percent in 2000. This latter category includes seasonal and/or second homes. The construction of these kinds of units is expected to grow rapidly in the decades ahead.

[4] In estimating replacements, it was assumed that the replacement rate of conventional units would rise from about 1 percent in 1969 to 1.2 percent in 2000. The rate for mobile homes was assumed to be a constant 5 percent.

Source: U.S. Department of Agriculture, Forest Service.

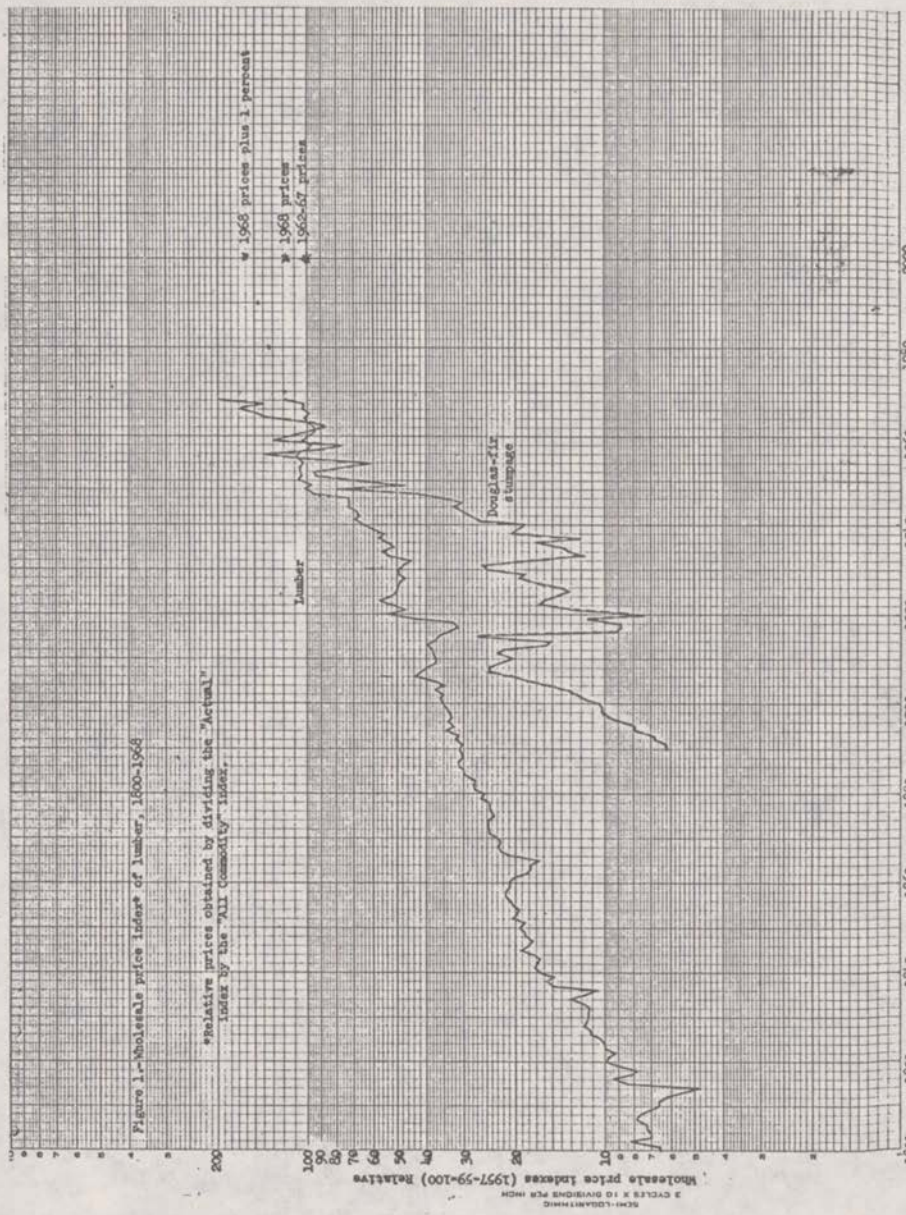

Figure 1.--Wholesale price index* of lumber, 1600-1968

*Relative prices obtained by dividing the "Actual" index by the "All Commodity" index.

The effect of these alternative prices on the demand for softwood lumber and plywood is largely a matter of judgment for there is very little information to indicate the price elasticity of demand for these products in various markets. For this report, it was assumed that the coefficient of price elasticity of demand at the 1968 price level would be 0.1 in 1970, 0.4 in 1980, and 0.5 in 1990 and 2000.[1/] The increase in the size of the coefficient is a reflection of the time needed to bring about price induced technological and institutional changes. The same coefficients were used in estimating effects of the third assumption of 1968 prices plus 1 percent annual increase.

Projected softwood timber demands

Projected demands for softwood lumber and plywood under the given basic assumptions are shown in table 3. Projected demands assuming the 1962-67 price level rise to about 82 billion board feet in 2000--nearly double the 42 billion board feet consumed in 1968. Assuming 1968 prices, demands are projected to 70 billion board feet in 2000, some 67 percent above 1968. With 1968 prices increasing at 1 percent per year, projected demands in 2000 amount to 52 billion board feet--25 percent more than in 1968.

Imports and exports are also likely to vary with changes in prices. Under the lowest price assumption, imports are projected

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[1/] A coefficient of price elasticity of demand of 0.5 means that for every 1 percent increase in price, there will be a 0.5 percent decrease in demand.

Table 3.--Summary of consumption, imports, exports, and domestic production of softwood timber products by selected years and alternative price levels

Item	1967	1968	Projections			
			1970	1980	1990	2000
	- - - - - Billion board feet, lumber tally - - - - -					
Lumber and plywood:						
Consumption:						
1962-67 prices	37.8	--	43.6	58.7	72.4	82.4
1968 prices 1/	--	41.9	42.3	51.7	61.5	70.0
1968 prices plus 1 percent annual increase 2/	--	--	42.2	48.4	51.8	52.3
Imports:						
1962-67 prices	4.8	--	6.4	7.5	9.5	10.0
1968 prices 1/	--	5.8	7.0	9.8	10.5	11.0
1968 prices plus 1 percent annual increase 2/	--	--	7.0	10.8	11.5	12.0
Exports:						
1962-67 prices	3.3	--	4.5	5.5	5.0	4.5
1968 prices 1/	--	4.1	4.0	3.5	3.0	2.5
1968 prices plus 1 percent annual increase 2/	--	--	3.9	3.2	2.5	2.0
U.S. production:						
1962-67 prices	36.4	--	41.7	56.7	67.9	76.9
1968 prices 1/	--	40.2	39.3	45.4	54.0	61.5
1968 prices plus 1 percent annual increase 2/	--	--	39.1	40.8	42.8	42.3

See footnotes at end of table.

Table 3.--Summary of consumption, imports, exports, and domestic production of softwood timber products by selected years and alternative price levels--Continued

Item	1967	1968	Projections			
			1970	1980	1990	2000
	- - Billion board feet, International 1/4" log rule - -					
Lumber and plywood (continued):						
U.S. roundwood demand:						
1962-67 prices	36.0	--	40.4	54.5	64.8	72.5
1968 prices 1/	--	39.3	38.1	43.6	51.5	58.0
1968 prices plus 1 percent annual increase 2/	--	--	37.9	39.2	40.8	39.9
Pulpwood and miscellaneous products						
U.S. roundwood demand:						
1962-67 prices	8.1	--	9.0	13.0	18.0	22.0
1968 prices 1/	--	8.4	8.7	11.4	15.3	18.7
1968 prices plus 1 percent annual increase 2/	--	--	8.6	10.7	12.9	14.0
U.S. total roundwood demand:						
1962-67 prices	44.1	--	49.4	67.5	82.8	94.5
1968 prices 1/	--	47.7	46.8	55.0	66.8	76.7
1968 prices plus 1 percent annual increase 2/	--	--	46.5	49.9	53.7	53.9

See footnotes next page.

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Table 3.--Summary of consumption, imports, exports, and domestic production of softwood timber products by selected years and alternative price levels--continued

1/ The "1968" prices used in this table were 30 percent above the 1962-67 averages. This approximated the average increase in the last half of 1968. Relative prices in the second half of 1968 were 27 percent above the 1962-67 average for softwood lumber, 29 percent for softwood plywood, and 5 percent for hardwood lumber.

2/ The assumed percentage increases over 1962-67 average prices are as follows: 1970 - 33 percent, 1980 - 48 percent, 1990 - 63 percent, and 2000 - 80 percent.

NOTE: The projections in 1962-67 prices in this table were derived from a detailed analysis of lumber and plywood demands in major end uses such as new residential construction, maintenance and repair, manufacturing and shipping. These projections are based on an implicit assumption that the trends in technology and in institutional changes during the 1962-67 period would continue through the projection period.

The base projections derived under the 1962-67 price assumption were adjusted to show the effect of the alternative prices on demand. In making the adjustments, it was assumed the coefficients of price elasticity of demand, given 1968 prices, would be 0.1 in 1970, 0.4 in 1980, and 0.5 in 1990 and 2000. The increase in the size of the coefficient is a reflection of the time needed to bring about all price induced technological and institutional changes. The same coefficients, adjusted for the timing of the price increases, were used in estimating the effect of the third price assumption on demand, i.e., 1968 prices plus 1 percent annual increase. These coefficients were largely a matter of judgment because there is very little quantitative information on the price elasticity of demand for softwood lumber and plywood in the various markets.

to rise from 5.8 billion board feet in 1968 to 10 billion board feet in 2000. Under the two higher price levels, imports in 2000 are projected at 11 billion board feet and 12 billion board feet respectively. Projected exports in 2000 range from 4.5 billion board feet under the lowest price assumption to 2.0 billion board feet under the highest assumption. This latter volume is about half the 4.1 billion board feet exported in 1968.

When imports are subtracted from demands and exports added, the projected demands for U.S. produced softwood lumber and plywood in 2000 range from 42.3 billion board feet, under the high price assumption to 76.9 billion board feet under the low price assumption.

The roundwood requirements associated with these estimates of product demand will be influenced by future application of improved technology. It is estimated, for example, that by 1980 lumber yields from a given volume of logs will increase about 5 percent. Total volumes of roundwood required to meet lumber and plywood demands in 1980, for example, range from about 39 to 54.5 billion board feet, International 1/4-inch log rule.

In addition to demands for softwood lumber and plywood, substantial demands can be expected for softwood roundwood of saw-log size for the manufacture of woodpulp in particular and for miscellaneous products such as poles, piling, and mine timbers. The projected roundwood demand for these uses is projected to rise from 8.4 billion board feet in 1968 to from 14.0 to 22.0 billion board

feet in 2000, depending on prices prevailing for lumber and plywood and resulting competition for and prices of standing timber.

U.S. total demands for softwood roundwood--the sum of demands for softwood lumber, plywood, pulpwood, and miscellaneous products --are summarized in the tabulation below:

Prices	1968	1970	1980	1990	2000
	(Billion bd. ft., International 1/4-inch log rule)				
1962-67	--	49.4	67.5	82.8	94.5
1968	47.7	46.8	55.0	66.8	76.7
1968 + 1 percent	--	46.5	49.9	53.7	53.9

These figures show the volume of roundwood that would need to be harvested from domestic forests to meet projected demands under the various price assumptions. The projected increases in demand in 1980, for example, range from 2.2 billion board feet to 19.8 billion board feet above 1968. By 2000 potential increases in demand range from 6.2 to 46.8 billion board feet above 1968.

Basic assumptions underlying supply projections

Future supplies of softwood sawtimber will largely depend on the area of land available for commercial timber production, trends in timber removals, and the intensity of forest management.

In developing supply projections it has been assumed that the area of commercial forest land in the United States would not change significantly over the projection period. This would mean continued timber production on some 510 million acres of commercial forest land distributed by ownership as follows:

Ownership	Million acres
National Forests	96.9
Other ownerships:	
Federal.....	15.8
State & County	29.2
Industry.....	65.6
Farm	140.9
Miscellaneous.	161.8
Total.....	413.3
All ownerships..	510.2

Because of growing pressures for diversion of forest lands for recreation and various other uses, it is likely that commercial forest land areas will in fact decline over the next few decades. To this extent supply projections described below will tend to overstate future timber availability.

The National Forest lands support somewhat more than half of the total inventory of softwood sawtimber in the United States. In 1968 they supplied about 30 percent of the current harvest of softwood sawtimber and about 19 percent of the softwood sawtimber growth, as indicated by the following tabulation:

Ownership	Inventory	Removals	Net growth
	- - - (Billion board feet) - - -		
National Forest	1,064	14.5	7.0
Other	939	33.3	29.2
Total	2,003	47.8	36.2

Projections of softwood sawtimber "supply" have been developed on the following basis:

1. On the National Forests it was assumed that timber harvests will approximate the sustainable yield capacity of

the land under the indicated intensity of management and under the constraints of multiple-use management.

2. On non-National Forest lands in the eastern United States prospective supplies were assumed equal to 90 percent of the projected net growth in 1970, increasing to 100 percent of the projected net growth in the year 2000. On non-National Forest lands in the West supply was estimated by a straight-line projection from the actual timber harvest in 1968 to the level of projected growth on these lands in the year 2000.

Alternative levels of forest management were assumed in developing the timber supply projections including:

1. Continuation of the recent upward trend in federally-financed forest management and related forestry research activities, plus similar increases in forest management by forest industry and other non-National Forest owners. This would mean a 69 percent increase in funds for timber production activities on National Forests between 1970 and 1978, a 13 percent increase in Forest Service Cooperative activities on State and private lands, and a 59 percent increase in Forest Service research.

2. A marked acceleration in the funding of Forest Service programs, including an increase of 109 percent for timber production on the National Forests, a 554 percent increase for federally-supported cooperative activities on State and private lands, and a 180 percent increase for research.

These management assumptions thus provide for increases in Federal expenditures by the Forest Service relating to timber production as follows:

Program	FY 1970 budget	1978 Proposals	
		With continued trends	With accelerated management
	Million dollars		
National Forests	230	388	480
Private & State lands	28	35	183
Forestry Research ...	41	65	115
Total.....	299	488	778

Detailed estimates of accelerated program costs by activity and year are shown, later in the report, in table 5 for National Forest management, in table 6 for Federal programs relating to the State and private lands, and in table 7 for forestry research. Accompanying notes describe in some detail the nature of forestry activities to be financed under these accelerated programs. The increased timber supplies from National Forests resulting from these accelerated programs would return stumpage value to the U.S. Treasury in excess of the indicated expenditures, as shown in table 5.

Finally, effects of different price levels on the future availability of timber supplies were estimated, using the same three price levels as specified for the demand projections. The higher the price of timber products the more timber is likely to be obtained by closer and better utilization, including increased salvage and thinnings and harvesting of more remote and poorer stands of timber.

Projected timber supplies

Prospective supplies of softwood sawtimber from U.S. forests are summarized in table 4 and figure 2. Assuming continuation of recent trends in forest management at 1968 price levels, for example, supplies of softwood sawtimber by 1980 would amount to an estimated 55.3 billion board feet--an increase of approximately 7.8 billion board feet above the 1968 log harvest.[2/] Increases over the 1968 harvest level, by ownership, would be as shown by the following tabulation:

Management level	National Forests	Other ownership	Total
Recent trends in management	+3.5	+4.3	+7.8
Accelerated management	+7.4	+8.8	+16.2

With the acceleration of management levels assumed in this report and 1968 price levels, it is estimated that timber supplies by 1980 might be as much as 63.7 billion board feet, or 16.2 billion board feet more than the 1968 log harvest. More than half of the expected increase in log supplies would be from National Forest lands and the remainder from other ownerships.

[2/] Part of this increase in "supply" is a result of the discovery and application of improved technology in harvesting, processing, and utilizing timber products over and above that assumed in the estimates of demands for roundwood shown earlier in this report. Under the assumption of accelerated research and management programs, projections of demand for roundwood should be further reduced, but for simplicity both increases in log supply and increased product yields through better technology are included as part of these prospective increases in supplies.

Table 4.--Prospective supplies of softwood sawtimber from U.S. forests with alternative management and price levels, 1967-2000

(Billion board feet, International 1/4-inch log rule)

Item	1968 log production	Projected supply			
		1970	1980	1990	2000
1. National Forests:					
Recent trends in management:					
1962-67 prices	--	14.0	16.5	19.5	21.0
1968 prices	13.8	14.0	17.3	20.5	22.0
1968 prices plus 1 percent annually	--	14.0	17.7	21.0	23.0
Accelerated management:					
1962-67 prices	--	14.0	20.0	--	--
1968 prices	--	14.0	21.2	--	--
1968 prices plus 1 percent annually	--	14.0	22.0	--	--
2. Other forest lands:					
Recent trends in management:					
1962-67 prices	--	34.6	37.0	38.0	39.0
1968 prices	33.7	35.6	38.0	39.0	40.0
1968 prices plus 1 percent annually	--	35.6	39.0	40.0	41.0
Accelerated management:					
1962-67 prices	--	34.6	41.5	--	--
1968 prices	--	35.6	42.5	--	--
1968 prices plus 1 percent annually	--	35.6	43.5	--	--
3. Total all lands:					
Recent trends in management:					
1962-67 prices	--	48.6	53.5	57.5	60.0
1968 prices	47.5	49.6	55.3	59.5	62.0
1968 prices plus 1 percent annually	--	49.6	56.7	61.0	64.0
Accelerated management:					
1962-67 prices	--	48.6	61.5	--	--
1968 prices	--	49.6	63.7	--	--
1968 prices plus 1 percent annually	--	49.6	65.5	--	--

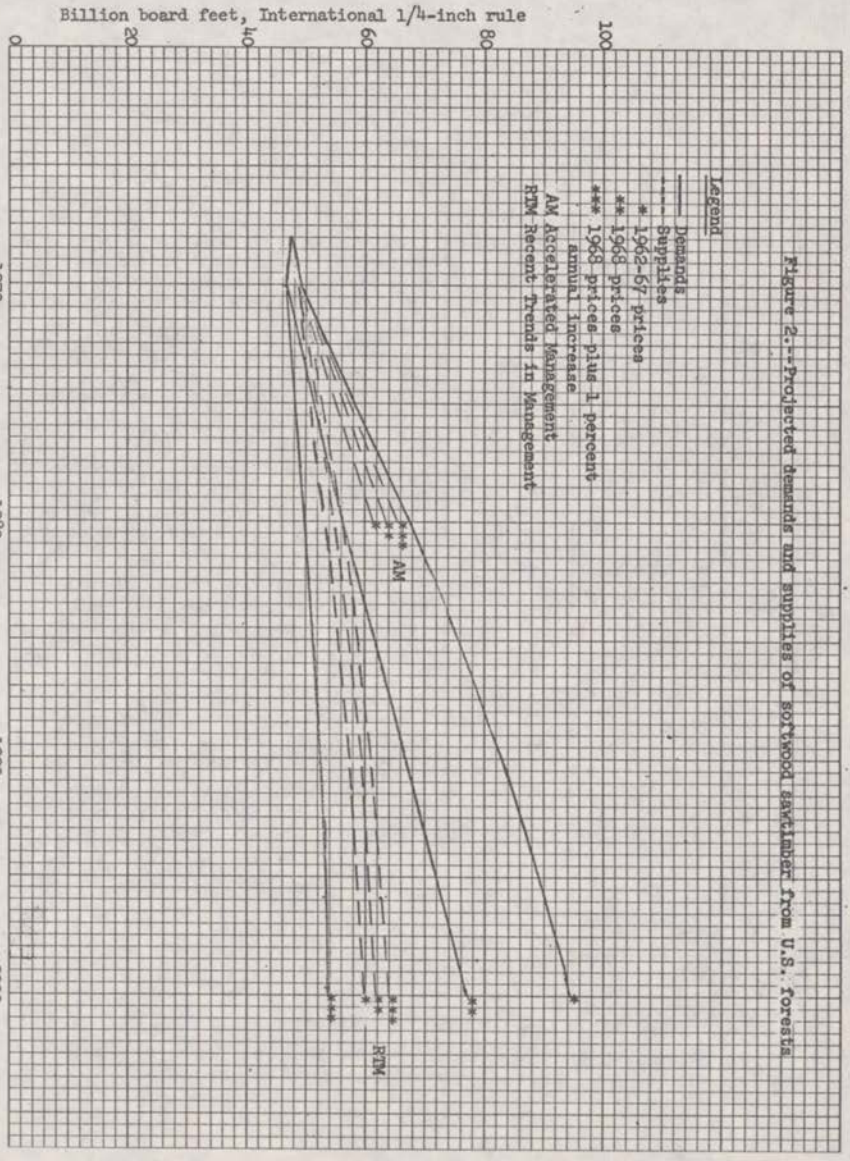


Figure 2.--Projected demands and supplies of softwood sawtimber from U.S. forests.

These projections of softwood sawtimber supplies and demands, illustrated in figure 2, indicate that if forest management is intensified only in line with recent trends a balance between supplies and demands could be achieved only with substantial increases in prices. Up to 1980 supply and demand would be roughly in balance with the 1968 price level, but beyond that year supplies fall increasingly short of the projected demand even at this relatively high level of prices.

With accelerated management, projected demands could be met at prices about half way between those prevailing in the 1962-67 period and the late 1968 price level. Adoption of the accelerated management program outlined in this report would thus provide most of the potential timber demands over the next couple of decades at least without a significant increase in prices of timber products due to supply.

Proposed accelerated management program for the 1970's

The program proposed for National Forest lands--summarized in table 5--includes the following items:

Timber planning and harvest

Accelerate management and development of the timber-producing capacity of the National Forests on approximately 97 million acres of commercial forest lands, with full consideration of multiple-use impacts and relationships. Includes preparation and administration of timber management plans and sales of (1) the current regulated allowable cut of 13.7 billion board feet, (2) the unregulated cut, (3) thinning and salvage materials, and (4) the increasing allowable cut resulting from annual investments in reforestation, timber stand improvement, research developments, and other activities.

Table 5.--Estimated Federal cost of accelerated timber management program on the National Forests, 1971-80

(Million dollars)

Program area	FY 1970 budget	Increases over FY 1970, by year					
		1st	2nd	3rd	4th	5th	8th
Timber planning & harvest	44.7	13	23	27	32	38	53
Reforestation & timber-stand improvement ...	16.0	16	28	46	59	58	58
Forest roads & trails..	100.0	35	70	105	105	105	105
Resource protection from fire & pests ...	61.0	13	14	14	15	15	14
Mitigating impacts & related other costs..	8.0	13	16	17	18	19	20
Total	229.7	90	150	209	229	234	250
Estimated Value of Timber Harvests	298	16	47	78	108	150	439

Forest roads and trails

Maintain and construct an adequate system of forest development roads necessary to accomplish long-term objectives of minimum hauling costs, minimum maintenance, and full protection of soil, water, fish, wildlife, esthetic, and other resources. This program will make accessible large volumes of timber for regular sales program; reduce costs of administering, protecting, and developing the National Forests; allow harvest of timber through thinning and salvage; increase prices received from sale of timber by increasing the number of bidders who can compete successfully because of reduced road construction and hauling costs and risks; and supplement timber purchaser construction, thereby reducing costs associated with timber purchaser construction and reconstruction with appropriated funds.

Resource protection from fire and pests

Accelerate fire protection on commercial forest and related lands through programs to reduce the combined regular and emergency fire-fighting costs to the minimum level consistent with management objectives. The commercial forest acres saved from burning would be increased by an estimated 30,000 acres at the end of 10 years.

Provide annual systematic detection surveys of insect and disease problems in timber stands being protected and managed. Provide insect and disease prevention guidelines for incorporation into management plans to assure attainment of the highest allowable cut possible for each working circle.

Mitigating impacts and related other costs

Provide water, air, wildlife, soil, and other data needed to assure protection of other resource values in timber harvesting operations, road layout, and other activities. Provide specialists to coordinate National Forest actions with States and other groups to assure protection of resource values. Develop improved programs for coordination of timber management with other activities. Work with other groups such as sportsmen in coordinating timber harvest with other programs. This will permit National Forest timber harvesting operations to meet standards imposed by the Water Quality Act of 1965; the Clean Water Restoration Act of 1966, the Air Quality Acts of 1965 and 1967; and related Executive Orders. Includes some unrecognized costs associated with the present level of timber management.

Establish and maintain property lines to protect Government property, including timber, from trespass and to facilitate the sale of timber.

Provide field offices, dwellings, barracks, service and storage buildings, fire lookouts, airstrips, heliports, and radio and telephone communications.

The program proposed for acceleration of forestry activities on State and private lands--summarized in table 6--includes the following items:

Technical assistance

Provides assistance largely through State Forestry Agencies for forest management planning and development, harvesting and processing of forest products, and economic and feasibility studies. Improves management and increases yield of timber from 4-1/2 million nonindustry private forests consistent with other values. Helps to increase the level of softwood lumber and veneer 5 billion board feet above 1970 level.

Tree planting and seeding

Provides technical and financial support to the States and forest owners. More than 70 million acres of non-Federal forest lands are suitable for planting to supply the Nation's long-term timber and other forest needs. Afforest 10 million acres during the next decade through incentive arrangements in the form of loans and cost sharing. This would require more than doubling the current annual rate of planting on State and private lands and substantial increases in the production of forest tree planting stock and seed.

Resource protection from fire and pests

Cooperate with States to provide protection to 397 million acres of non-Federal commercial forest lands. Accelerates protection commensurate with forest land management objectives.

Cost sharing

Provides incentive cost sharing to establish needed forest practices for development of forest land on private forest holding which comprise 72 percent of the Nation's commercial forest land. A large portion of this land is growing timber at less than 50 percent of its capability.

Table 6.--Estimated Forest Service costs of accelerated State and Private Forestry Program, 1971-80 (Million dollars)

Program	FY 1970 budget	Increases over FY 1970, by year					
		1st 1/	2nd	3rd	4th	5th	8th
Technical assistance	5.8	5	7	10	13	16	22
Tree planting and seeding 2/.....	1.3	16	31	45	55	56	62
Protection from fire and pests	16.9	6	11	15	20	24	36
Cost sharing 3/	3.9	15	18	24	31	38	45
Total	27.9	42	67	9	119	13	155

1/ Increases needed to meet 1978 goals for increasing and extending supplies of timber. Limitations on budget requests would make the budget increase for FY 1971 less than this level.

2/ Includes a new program, Trees for Cropland, which is still under consideration in USDA. Funds for this were not requested in the FY 1971 budget proposal. Part of these costs will be repaid to the Federal Government via the loan provisions of the program.

3/ Funds for other USDA agencies.

The program proposed for forestry research--summarized in table 7--includes the following items:

Resource development research

Develop knowledge and technology for guidelines, resource management decisions and practices that can reduce costs of timber production, and increase yields of timber and other goods and services. Develop better techniques for thinning stands, improving stand composition, and managing forest land following harvest of mature trees in order to accelerate timber yields. Develop superior trees to increase growth in plantations and reduce loss to insects and diseases. Develop practical applications of forest fertilizers based upon research on tree nutrition, moisture supply, soil characteristics, and cultivation procedures.

Resource protection research

Develop ways of reducing the number of occurrences and the magnitude of destruction of forest resources and of wood in use by fire, insects and other destructive agents; find better ways to predict the time and location of resource destructive situations; and develop ways to reduce the cost of controlling destructive agents.

Manufacturing and use research

Provide new technology for extending supplies of wood materials and reduce costs of harvesting, manufacturing, and processing wood products.

Resource analyses and economics research

Provide up-to-date information on forest resources and productive capacity, current production of forests and forest products, and projected timber supplies and demands. Develop marketing and economic technology for guiding forest resource development, manufacturing, and marketing activities. Determine ways to stimulate millions of nonindustrial forest owners to make investments required to grow larger crops of timber.

Table 7.--Estimated Federal cost of accelerated research program, 1971-80[1/]

(Million dollars)

Program area	FY 1970 budget	Increases over FY 1970, by year					
		1st	2nd	3rd	4th	5th	8th
Resource development	16.7	7	12	16	18	22	34
Resource protection	10.7	4	9	11	12	16	25
Manufacturing and use	8.5	3	5	6	7	8	9
Resource analyses and economics	5.1	2	3	4	5	6	6
Total	41.0	16	29	37	41	51	74

[1/] Excludes laboratory construction

[2/] Increase needed by the Forest Service to meet 1978 goals for increasing and extending supplies of timber. Limitations on Agency and Department requests would make the budget increases for F.Y. 1971 less than this level.

LOG EXPORTS

Mrs. HANSEN. What are your current problems and what is your current situation on log exports? It seems strange that Japan has a viable housing program while the U.S. housing program is not meeting current needs. The United States is exporting logs to Australia, Italy, and Vietnam.

Mr. CLIFF. Nationally, the United States is a net importing country.

Mrs. HANSEN. Yes.

Mr. CLIFF. Our export of all kinds of products—logs, lumber, plywood, pulp and paper products—amounted to the equivalent of about 7.4 billion board-feet of timber this past year. Our imports, largely from Canada, in the form of lumber and pulp and paper products amount to the equivalent of slightly over 15 billion board-feet of timber.

Mr. WYATT. Chief, of your total export of wood fiber, approximately what amount of that last year was in round logs exported?

Mr. CLIFF. About 2.5 billion board-feet as I remember it. The rest was primarily pulp and paper products. We exported to all countries about 2.5 billion board-feet of round logs last year. The export to Japan was 2 billion board-feet of softwood logs which was just 4 percent less than it was the preceding year. It was almost as much as a year ago. Earlier in the year the Japanese were saying that their exports would be 15 percent less, but it was 4 percent less. This demand from Japan still continues strong.

EXPORT OF PULP CHIPS

In addition, Japan purchased 1.5 million cords of pulp chips from the United States.

Mrs. HANSEN. What is the current price on chips?

Mr. CLIFF. About $24 or $25 a cord at the dockside is the last figure I have.

Mr. WYATT. What is the equivalent of a cord to the bone dry unit, Chief?

Mr. CLIFF. I tried to find that out before I came here today and I didn't get an answer, but I will supply it.

(The information follows:)

One cord of chips is considered equal to 2,400 pounds bone dry, or 1.2 units of 200 cubic feet.

EXPORTS TO JAPAN

Mr. CLIFF. This 1.5 million cords of chips was an increase from 1.1 million cords in 1968. The Japanese are increasing their imports of chips from the west coast. I have some other factors on the Japanese situation that I think might be interesting to the committee. The total imports of foreign timber into Japan in 1969 reached 35.8 million cubic meters. I can't transpose that for you to board feet readily, but I will be glad to do that for the record. This 35.8 was compared with

46.2 million cubic meters that was produced in Japan domestically, so they are importing nearly half of the total wood used. The South Sea logs made up 48 percent of the total imports, North American 25 percent, Soviet logs 15.5 percent, and timber from other sources 11 percent. Imports from the Soviet Union and from other sources are increasing.

(The information follows:)

In converting estimates of log volumes in cubic meters to board-foot volumes, a factor of 244 board feet per cubic meter has been adopted in the case of log exports to Japan. This was determined by comparing Japanese reports of log imports in cubic meters with U.S. export volumes in Scribner log scale. If allowances were made for overrun in lumber manufacture, the appropriate factor is estimated to be approximately 340 board feet lumber tally per cubic meter of logs.

In 1969 the foreign import to Japan of timber was about 8.7 billion board feet long scale, or 35.8 million cubic meters. This compared with about 11.3 billion board feet, or 46.2 million cubic meters, that was produced in Japan domestically.

SOVIET EXPORTS TO JAPAN

Mr. WYATT. Do you have figures on the Soviet imports into Japan for the past 2 or 3 previous years?

Mr. CLIFF. We will furnish what we have. We don't have complete data, but I got some rather good recent figures from Japan last fall when I was over there.

For 1970 Japanese estimates indicate a further rise in imports of foreign timber, possibly 11 percent more. These estimates include an 11-percent increase of timber from North America. This includes lumber as well as logs. They are taking quite a bit of lumber from British Columbia and Alaska.

(The information follows:)

JAPANESE LOG IMPORTS

Year	Imports from U.S.S.R.		Imports from United States	
	Cubic meters [1]	Log scale [2]	Cubic meters [1]	Log scale [3]
	1,000 m [3]	Million board feet	1,000 m [3]	Million board fret
1966	3,425	835	4,382	1 · 83
1957	4,769	1,163	6,732	1, 77
1958	5,545	1,352	9,098	2,110
1959	5,484	1,338	7,610	2,020

[1] From Japan Lumber Journal.
[2] Converted at 244 board feet per cubic meter—the same as the ratio between United States and Japanese reports on American log shipments.
[3] From U.S. Bureau of Census.

EXPORTS FROM BRITISH COLUMBIA

Mrs. HANSEN. Why do they buy lumber from British Columbia and logs from the United States?

Mr. CLIFF. Because the British Columbia law does not permit the export of logs from government-owned lands.

Mrs. HANSEN. In other words, British Columbia wants to make sure their people are employed?

Mr. CLIFF. I understand British Columbia does not permit the

export from Crown lands, but logs can be exported from the privately owned lands in British Columbia.

Mrs. HANSEN. What percentage of British Columbia land is privately owned?

Mr. CLIFF. I don't know offhand, Madam Chairman, but the bulk of the timberland in British Columbia is Crown land.

Mrs. HANSEN. The British Columbia Government is making sure that their own mills are operating at full capacity.

Mr. CLIFF. That is correct.

Mrs. HANSEN. Do they ship the manufactured lumber to Japan?

Mr. CLIFF. That is correct.

Mrs. HANSEN. Isn't the U.S. policy directly opposite?

Mr. CLIFF. Except in Alaska.

Mrs. HANSEN. Except in Alaska?

Mr. CLIFF. We require primary processing in Alaska of national forest timber.

EXPORT LIMITATIONS

Mr. NELSON. It is not directly opposite, Madam Chairman, because we have a limit on the amount of Federal logs that may be exported.

Mrs. HANSEN. The U.S. policy was directly opposite until a limit was imposed by the Senator from Oregon in the foreign aid bill.

Mr. CLIFF. That is correct, the so-called Morse amendment limited the amount that could be exported from Federal lands to 350 million board feet per year. This made a requirement by law similar to what the Secretary had required the previous year by regulation.

Mrs. HANSEN. It seems strange that the United States would be supporting a housing program in Japan when our own citizens are curtailed as to housing and to employment.

Let me point out what has happened in our fishing industry. We have noticed the imports going up year by year, but they have made the sharpest rise in the last 2 years. Now this is due to a variety of reasons. We have not developed our commercial fishing industry. The United States has not spent enough funds on technology. The United States has plenty of resources, but it hasn't accomplished programs that would permit American fishermen to compete.

The United States hasn't always made sure that our lumber mills were the ones that were employing people.

Mr. CLIFF. I agree with what you are saying. I personally feel that our timber should be used to support our local industry, but the Japanese export situation is a many-faceted problem. We have a problem as to what to do about the sales on which extensions have been made. I am sure that Congressman Wyatt will want an explanation of that.

GROSS NATIONAL PRODUCT

The gross national product in Japan increased 13 percent last year.

Mrs. HANSEN. How much did the gross national product of the United States increase?

Mr. CLIFF. Approximately 3 percent in constant dollars and nearly 8 percent in current dollars.

In Japan it is expected to increase 11 percent in 1970. Housing construction has been increasing more rapidly than the gross national

product. The 5-year housing plan, scheduled to end in 1970, is reportedly achieving the goal of about 800,000 private housing starts plus 500,000 starts supported by public funds. This is a total of 1.3 million units annually, which is as high as our current level of housing starts in this country.

Mrs. HANSEN. Japan has a very small defense budget.

Mr. WYATT. One percent, Madam Chairman.

HOUSING PLANS IN JAPAN

Mr. CLIFF. An increase in housing starts to 1.5 million units annually is planned in the 5-year plan beginning in 1971 in Japan. Interest rates have been high and funds for housing construction have, in effect, been rather strictly rationed. There are indications, however, that future policies will favor stepped up housing construction in Japan.

All of the indications that I have been able to get is that this demand for import of logs from other countries is going to remain strong in Japan for another two decades at least. They are practicing intensive forest management in Japan on private as well as national lands. They are doing a very professional job. They estimate that it will be another 20 years or more before they become self-sufficient. They have a massive job of reforesting lands that were cut too heavily during World War II. They also have a massive job of reconverting lands that were once used for charcoal or fuel production. Now there is no market for fuel. The market for charcoal has dropped off. These forest lands that were used for that purpose are being reforested for timber production. This program is making good strides in Japan, but it is going to be a couple of decades or more before their dependence on imports declines.

EXPORT LIMITATIONS ON EXTENDED SALES

The question as to our policies on permitting or not permitting timber to be exported under extended sales contracts has been a source of concern and controversy with certain segments of the forest industry. Last year when the lumber prices were high, and the demand was relatively pressing, we made a decision in the Department of Agriculture to restrict exports on extended sales just the same as they are restricted on new timber sales. The reasoning for this was that when we extend a sale, it is a unilateral action by the Government. In many respects it is considered to be a new contract. We reappraise the timber. We change the terms of the contract, as needed, to bring the sales in line with other current transactions. A Secretary's regulation was promulgated last August, which in effect said that if the Government agrees to extend timber sales which were made prior to the imposition of export controls, that the timber cut under these revised, remodeled sales would not be eligible for export. The Morse amendment in the Foreign Assistance Act of 1968 would apply.

All of the operators who had sales coming up for extension were notified in writing of this. The regulation was to go into effect immediately, but there were not many sales to be extended prior to the end of calendar year 1969. Thus, most of the operators had at least 5

months notice, under which they could export, without restriction, the products from the sales before they come up for extension.

Other sales were due for extension in March of 1970, and still others are eligible for consideration of extension later in 1970. The producers did have some notice.

OBJECTIONS FROM OPERATORS

We received no objections to this until about November, and then some of the operators, in the State of Washington primarily, started raising some questions. The timber market had fallen off. The lumber market had leveled off to about 1967–68 levels. They wanted to continue the opportunity to export timber from these sales.

Additional objectives came up by the end of the year and shortly thereafter. Right now, with the continued slump in the market, there is still continued interest, and some from the State of Oregon.

We felt that the action we took was fully justified at the time it was taken, and that reasonable notice was given. We, of course, didn't foresee that the lumber market would decline as it has, and stay down.

Mrs. HANSEN. Mr. Cliff, isn't this one of the reasons that caused exports in the first place?

Mr. CLIFF. No.

Mrs. HANSEN. Several years ago when you appeared before us there was a severe economic condition in the Northwest. One of the reasons exporting began was to keep the logging camps operating at a time when they would have been closed.

Mr. CLIFF. This was part of the argument for exports. We have had some communications with the congressional delegations from Oregon and Washington on this subject. We did decide that in order to help meet this desire to export part of the volume under the extended sales we would give them part of the calendar year 1970 quota, about half of the remaining export quota. This could amount to approximately 65 million board feet during the balance of this calendar year. In 1971, if there is still timber to be cut under these sales, we could use part of the 1971 quota.

That has been our proposal. We have instructed the regional forester to write to the operators and determine from each how much timber they would plan to export if they had permission to do it under these sales. We could then determine how to distribute this quota.

This proposal did not meet the full approval of the Northwest delegation, as you know. We have a letter from Senators Jackson and Magnuson, and signed by yourself and Congressman Wyatt, and several Congressmen from the State of Washington, stating that this is not entirely satisfactory.

As of now, we are making our survey hoping to determine what the real demands are. We do know that the market for logs for export to Japan has softened some. Log export prices are down somewhat. Japan is able to get all the logs they need without this proposed relaxation of the export quota.

Mrs. HANSEN. From British Columbia?

Mr. CLIFF. No; from the United States. There is a buildup of log inventories in the Pacific Northwest. In the Puget Sound area and all up and down the Pacific Northwest Coast the market has de-

clined. The export trade is not as attractive as it was a short time ago. The price of hemlock has dropped off. In the fourth quarter of 1969, the price of a particular hemlock log grade was $119 per million board feet for export. In the third quarter it was $128. It dropped off $9 in one quarter. The point of this is that there is no guarantee that if we had no export limitation on these sales, that very much of the timber would find its way to the Japanese market.

Mr. WYATT. In that case there is not much point in having the limitation, is there, if that is a good, sound argument?

NEEDS IN UNITED STATES

Mr. CLIFF. I guess that could be argued. One of the reasons that we are concerned about this is our firm belief that we are going to need this national forest timber to meet our own needs, to keep our own mills operating, and to help the housing situation. When the housing situation improves, we will be in a position where we will need every bit of the timber we can produce on the national forests.

POPULATION STATISTICS

Mrs. HANSEN. What is the population of Japan?

Mr. CLIFF. It is a little over 100 million people.

Mrs. HANSEN. What is the population of the United States?

Mr. CLIFF. It is over 200 million now.

Mrs. HANSEN. Japan is able to construct 1.3 million housings units per year. How many units is the United States able to construct each year?

Mr. CLIFF. It is about 1.3 million right now.

HOUSING NEEDS

Mrs. HANSEN. It seems to me that one of the basic ingredients of this country is decent housing. This is something you need to have a decent society.

The United States should be as concerned about our housing program as Japan has been with their's.

You don't need to worry about the stability of our forest products industry, because the market is there.

Mr. Cliff, you stated that a shortage might even occur once housing starts begin to increase. It seems that a policy should have been developed to regulate housing in such a way so that these types of conditions would not occur.

Mr. CLIFF. I certainly agree with what you have expressed about the housing needs. I personally believe that decent housing is one of the most important ingredients of a desirable environment in this country. I foresee that we are going to be under terrific pressure to produce more and more timber on the national forests to support this housing program whenever it gets unleashed. That is why I have been reluctant to open the door any wider. I have been trying to partly close the door to exporting national forest timber to Japan because we are going to need it here.

Mr. WYATT. Madam Chairman, may I interject at this point?

Chief, I certainly am delighted to hear you predict the vast increase in the demand on wood timber for housing in this country. You and I have discussed this before, and there is no question but what the demand is going to come back, and when it comes back again, it is going to be much more severe than it was last spring, and it is going to be, I think, relatively permanent. But I am concerned about the prohibition in exports in these extensions. Frankly, it appears to me that it is a drop in the bucket compared to what we are talking about in regard to the demands in this country. My only concern is the fact that I have constituents that come to me that say they are going broke, and that the only possible way they can now stay in business, you may have all kinds of figures about the cost of hemlock or the price of hemlock, what the Japanese are paying, but these people tell me the only way they can stay in business, and get over this rough spot they are in now, is by export to Japan.

NEW CONTRACTS VERSUS EXTENSIONS OF EXISTING CONTRACTS

This affects payroll. This affects jobs. This affects the ultimate capacity to produce lumber and plywood in this country. I have no reason to disbelieve the people that come to me and tell me this.

I am interested in what you say that these are new contracts, you can renegotiate the price, the logging conditions and so forth, which I appreciate, but legally these are not new contracts or you would have to ask for bids again, isn't that correct, if they were new contracts legally?

Mr. CLIFF. This regulation was checked out thoroughly by our general counsel before it was adopted.

Mr. WYATT. I have no question as to your power to impose it. I have no question about that. But legally these are not new contracts, but extensions of old ones.

Mr. CLIFF. It is my understanding that they are in the nature of new contracts.

Mr. WYATT. Yes, but in the nature of is a lot of difference from being new contracts. They are either new contracts or they aren't. If they were new contracts, you would have no alternative but to put them up for bid. Isn't this really true now?

Mr. CLIFF. No. We have the alternative of reforming the contract and making it a new contract.

Mr. WYATT. You are splitting hairs that I don't see, Chief, really. If you can refuse to renew the contract, which you can legally, then you can renew it on any condition that you choose. I don't think there is any legal prohibition on this, but when you say it is a new contract, I just can't buy that, because the only way you can sell timber under the conditions of a new contract, is by asking for competitive bids.

To carry this step a little bit further, the Morse amendment specifically excluded existing contracts, because there was a real legal problem so far as making the prohibition retroactive. Contracts were existing, and I don't think legislatively we could have made the prohibition retroactive. I think the big quarrel that we have, based upon

the people who come to us, in an industry that is already struggling for survival among the small people anyway, is to then have the rules changed in the middle of the road. They knew when they bid on these contracts that you could readjust the price. They knew that you could readjust the logging practices. They also knew that if they had any justification at all, that you would renew them. They didn't know that you would put in a prohibition against log exports, because log exports on those contracts were specifically permitted, and that is the point really that I can't understand, and I can't explain to my people.

It has been stated that there is a division in the industry on this. I can't find that division. I know of one company in the State of Washington that favors the prohibition.

Mrs. HANSEN. Which company?

Mr. WYATT. It is up in Port Angeles, but that is the only company that I know of. I have not had one single, large or small company, come to me and support the prohibition.

Another thing that bothers me is that by adopting your proposed compromise, Chief, you create three different classes of people, of contract purchasers, all of whom bid at the same time originally. There are those before the effective date of your prohibition, those contracts were renewed with no export prohibition. Then you have a class that was renewed with a total export prohibition, and then you have a class now where they will be allowed a part of the quota, and this doesn't seem to be equitable to me.

I think about all I am saying, Chief, is that I would very much appreciate, and I think the Chairwoman would to, because she is very much concerned about this, if you would really take a good hard look and review your decision in light of my remarks.

Mrs. HANSEN. There are a lot of unhappy unemployed people.

Mr. WYATT. If something isn't done by the end of this week, it is just like nothing being done because these are March contracts, and it is going to be too little, too late, as far as they are concerned.

Mr. CLIFF. Could I comment on that, Madam Chairman?

Mrs. HANSEN. Please do.

COMMENTS OF CHIEF CLIFF ON RELAXATION OF LOG EXPORTS

Mr. CLIFF. The contracts in these three categories that you mentioned, Congressman Wyatt, were not bid on at the same time. They were bid on at different times, because they came due at different times. Any change in the law or in the regulations makes a division between those that get under it and those that fail to get under it. The Congress passes a law, and those that were not affected by the law or to its passage are in one class, and those that are, are in another. That is the situation we have as between the contracts that were renewed before August 7 and those that are extended after August 7. I don't see any way to avoid that if you make a change in regulations or law.

In regard to the other point on industry support, I am sure Dr. Cowden will remember that when we were meeting with the leaders of the National Forest Products Association in the Secretary's conference room in December, we discussed this problem with them. We

were just starting to get some objections. They were starting to build up at that time, so I asked the leaders of the industry what they would advise us to do about this. They refrained from giving us an immediate answer, but after a recess, they came back and advised us to stand firm. They stated that these purchases had run the full term of the contract to get the timber out, and they had been given prior notice. The leaders of this association advised us in December of 1969 to not change, not invalidate the Secretary's regulation.

Mr. WYATT. Chief, this was a proposition that was put to them as a matter of first impression for their reaction. They went into another room, came back out and said, "Continue doing what you are doing."

These were not the small Forest Service dependent sawmill owners that are going broke in our part of the country that I have been talking about.

I am further advised that the NFPA does not have an official position, no matter what they may have informally advised you at this time.

Mr. CLIFF. I think perhaps that is true.

Mr. WYATT. Then you shouldn't rely upon just offhand decisions that they made as a justification for the decision. I really don't see that. Again about all I can say is that I wish you would really seriously and objectively review this thing, and see if you don't conclude that there are some people that are being badly hurt. Now, I have people in my district that are losing $75,000 and $80,000 a month, and they have been losing at this rate the last several months. In the foreseeable future they probably are going to lose enough to go broke and there are quite a few of them, and I am genuinely concerned about them. If there is no real advantage to the Government in doing this, I just don't see why you just continue to stand by a decision that was made under circumstances that don't now apply, as far as market prices are concerned.

Mr. CLIFF. Of course, Congressman Wyatt, we have taken some steps to alleviate this.

Mr. WYATT. Those steps just aren't going to keep the small guy from going broke, Chief.

Mr. CLIFF. We are in the process now of surveying each of our purchases to determine to what extent this would or would not help them.

Mr. WYATT. But in the meantime they are being asked to sign a renewal with this condition in, are they not?

Mr. CLIFF. Some of them. I don't know how many.

Mr. WYATT. I think there are quite a few.

Mr. PAYNE. We have a list made up earlier.

Mr. WYATT. It may be a relatively small number as far as the entire Forest Service is concerned, but numerically in our part of the country it is really quite a few. We have one county in Oregon with a 20-percent unemployment rate right now. I have several counties in my district that have over 10-percent unemployment, and it is largely due to the woods fiber industry.

Mrs. HANSEN. Chief Cliff, even with last year's wage increases, overtime has been curtailed so much that the people find themselves living with escalated prices on the same salary they made last year.

There is no overtime. Shifts have been cut. This is one of the most serious problems in the whole timber industry. It is a lot better to have people employed than on welfare.

Mr. CLIFF. I agree.

Mr. WYATT. That is where they are going.

Mr. CLIFF. We certainly don't want to see any of our industrial operators go broke.

Mr. WYATT. They are well on their way.

Mr. CLIFF. We are concerned about that. There is a question in my mind as to how much the relaxation of the Japanese log exports would benefit.

Mr. WYATT. Chief, who does it benefit? That is the question I can't see.

Mr. CLIFF. The bulk of these logs that go out to Japan come from private lands and from State lands in the State of Washington.

Mr. WYATT. I am talking about your regulation. Who does your regulation benefit, compared to the dangers to these people who are complaining to me. You say you can't see how it hurts them?

Mr. CLIFF. I said I didn't see how relaxation would be of particular benefit.

Mr. WYATT. That is the same thing in different language.

Mrs. HANSEN. The committee stands adjourned until 1:10 p.m.

AFTERNOON SESSION

LOG EXPORTS

Mrs. HANSEN. The committee will come to order.

Mr. WYATT. Madam Chairman, let me just tell the Chief, before we get entirely off that subject, that I certainly can appreciate that he gets battered around like a ship in a hurricane, on many subjects, and I know he is doing his very, very best as he sees it.

I think this particular situation, and the urgency of it, is a pretty good example of the gulf that has been built up between the people out in the country and the bureaucracy here in Washington. I think a lot of people have just kind of given up in this country on the Government being responsive to the real hard needs that we have. Again, Chief, all I can say is I just would appeal to you in the strongest possible way to objectively review this matter and bear in mind that no decision to change at the end of this week means no relief.

Mrs. HANSEN. I agree with Mr. Wyatt. The situation is very critical.

Mr. CLIFF. Mr. Wyatt and Madam Chairman, we will give this further consideration, dig in further into the implications of this locally. I would like the chance to do this before we make any further changes. As for this week being a deadline, it is my understanding that many of these extensions that would be made this quarter come due on March 15, which is already passed, but if we should change the regulation, it could be changed, I believe, so that it would include them. This will give us a little more time to study these cases. I would like an opportunity to examine the particular case where the hardship is alleged to be pending, and evaluate what the measures we have

already proposed would do for them. Frankly, and I just checked this at noon, we have received only two letters from operators in Oregon on this subject. We have had communications with others who feel very strongly that we shouldn't change this. So we are caught between two different points of view.

Mrs. HANSEN. I hope you will review this situation.

Mr. CLIFF. Yes, we will.

Mr. WYATT. I would again say that I have received no communication from any group or any individual operator supporting the prohibition, and this includes those who were strongly in favor of the Morse amendment when it was enacted. To the contrary, I have received considerable pushing and very heartfelt complaints from individuals and at least one association.

Mr. CLIFF. Yes, I am aware of this association's position and we will reevaluate our position on this.

CONTRACTING

Mrs. HANSEN. Mr. Cliff, during the last 4 years we have had continuing discussions on your personnel ceilings and their effect on contracting. How much contracting are you doing, and what is the cost?

Mr. CLIFF. Madam Chairman, we have been doing considerable contracting. I think this past year it amounts to about $75 million. Much of this work is work that lends itself very well to contracting.

Mrs. HANSEN. Such as?

Mr. CLIFF. Most of our road construction and building construction. Each year we have contracted more of our timber stand improvement, tree planting, and work of this kind.

Mrs. HANSEN. How about your tree planting?

Mr. CLIFF. We are not contracting to avoid personnel ceilings, but personnel ceilings do make it necessary for us to do more contracting than we would otherwise.

Mrs. HANSEN. What is the cost of your tree planting? Does it cost less to contract?

Mr. CLIFF. We have many examples of where we can save money by contracting the field planting itself. There are others where there was the indication that it may cost us a little more.

Mrs. HANSEN. Insert in the record a couple of examples.

Mr. CLIFF. Yes, ma'am. Mr. Schultz may have some additional information on the volume of contracting that we did last year.

Mr. SCHULTZ. I don't have the up-to-date figures. The percentage that is being done by contracting is about the same as it was last year, but Mr. Cliff's figure of $75 million is about right.

Mrs. HANSEN. Insert in the record a typical case.

(The information follows:)

Contracting in fiscal year 1969 amounted to about $75,000,000. The amount varies from year to year depending on construction work.

To obtain accurate on-the-ground comparisons of tree planting costs one

would have to advertise for contracting a certain area and then reject all bids and do the work by force account. Costs vary from project to project due to site accessibility, travel distance, soil type, terrain, spacing, et cetera.

Examples of costs of tree planting (excluding site preparation, seeding or seed stock, animal and disease control, etc.) for reasonably comparable areas are as follows:

Examples of where tree planting by contract cost more than planting by force account:

Region 1, Idaho, Clearwater National Forest, Bungalow Ranger District—40 acres by contract cost $43.22 per acre; 41 acres by force account cost $39.46 per acre.

Region 6, Oregon, Mount Hood National Forest—auger plantings by contract cost $60 per acre; by force account the cost was $48 per acre.

Examples of where tree planting by contract cost less than planting by force account:

Region 1, Idaho, Clearwater National Forest, Lochsa Ranger District—195 acres by contract cost $36.02 per acre; 160 acres by force account cost $41.52 per acre.

Region 6, Oregon, Fremont National Forest—hand planting by contract cost $26 per acre; by force account the cost was $35 per acre.

Servicewide the average total investment cost (including site preparation, seedling or seed stock, animal and disease control, etc.) for reforestation by all artificial measures was $76.52 per acre in fiscal year 1969.

BLUE LAKE CEREMONIAL SITE

Mrs. HANSEN. We have discussed in the past the Taos-Pueblo issue. Has that been settled?

Mr. CLIFF. No, it has not been settled, but I can say that it is under consideration at high levels in the administration. There is a council on Indian opportunities headed by the Vice President that is considering this and other Indian problems. They are taking a complete fresh look at it. They haven't yet made a decision as to what the administration's position will be, as far as I know.

TIMBER/RECREATION/WILDERNESS BALANCE IN NATIONAL FORESTS

Mrs. HANSEN. I hope some decision will be made, so that this matter can be settled.

You apparently have little ability to sustain many more visitors in your recreational lands with your present rate of maintenance and construction.

You will recall the discussion that was held on the House floor not too long ago relative to the timber supply bill. You must provide adequate recreational facilities to meet the recreation needs or you will see an explosion of emotion against timber cutting that could forestall the needed timber for the national housing market.

The 1970 sewage disposal funds for the National Park Service were placed in reserve by the Bureau of the Budget. This doesn't make for a good environment. It also does not make for adequate or intelligent use of our recreation lands., I think you have to do some rather thoughtful planning so that you will be able to meet the recreational needs. Would you comment on that, Mr. Cliff?

RECREATION DEVELOPMENT PROGRAM

Mr. CLIFF. I agree with you wholeheartedly that we need to move ahead in our recreation development program. It has lagged behind

the increased use. One of our problems is that as we get more people, we have to use more of the money that is available to us for operation, maintenance, and cleanup. This leaves less for development.

CLEANUP COSTS

Mrs. HANSEN. What percent of your budget is spent for cleaning up your facilities?

Mr. CLIFF. Operation, maintenance, and cleanup? I will ask Mr. Nelson.

Mr. NELSON. The proposal for 1971 would be to spend $35.2 million for operation, maintenance, and supervision of recreation use. and $7,030,000 for development—capital developments—including $5.4 million for water pollution abatement. This is in our recreation-public use line item.

Mr. CLIFF. Five-sixths of our recreation budget is going for operation, maintenance, and cleanup.

Mrs. HANSEN. How much is for cleanup?

Mr. CLIFF. A considerable part of it is for cleanup. The rest is for repair of improvements due to wear and tear and vandalism.

Mr. NELSON. Cleanup of developed sites is $13,645,000 for 1971. In addition to that, there is cleanup and maintenance of areas other than our developed areas.

Mrs. HANSEN. If the American public would better take care of the present areas more could be spent on improving the structures.

Mr. CLIFF. That is very true.

Mrs. HANSEN. And developing more campsites.

Mr. CLIFF. That is very true, Madam Chairman.

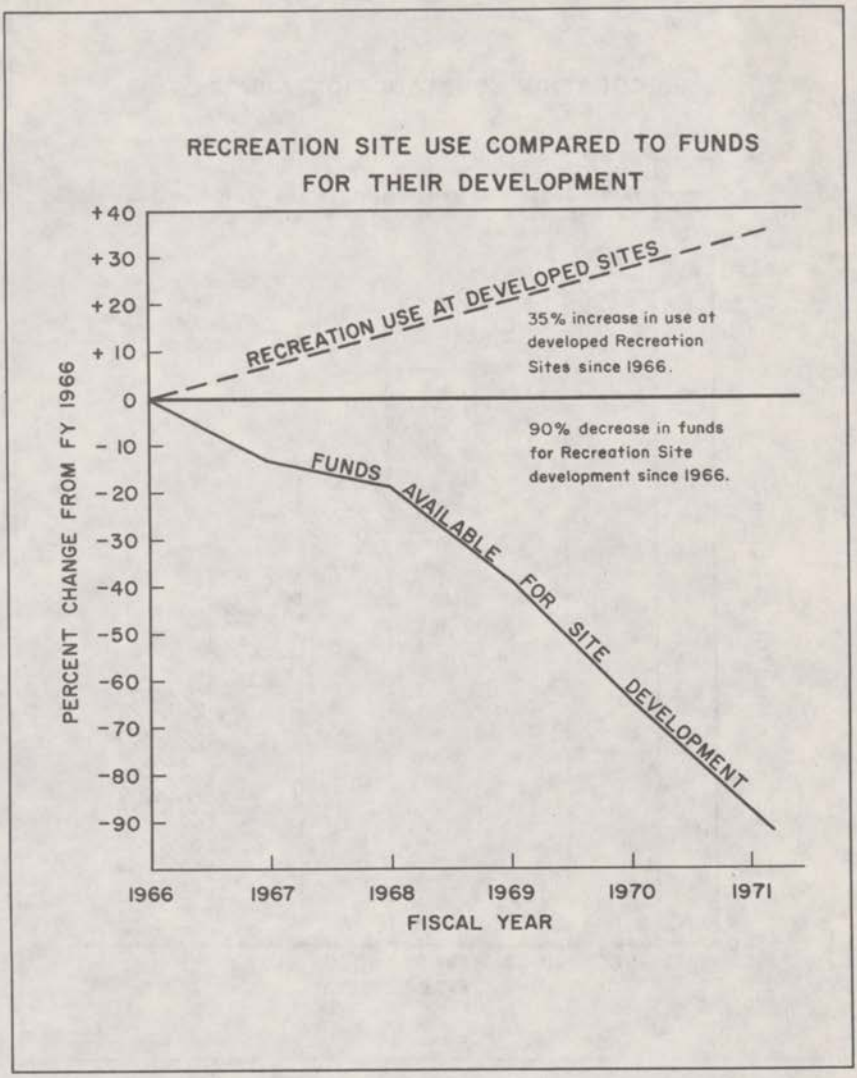
Mr. NELSON. Madam Chairman, could I show you another chart that we have. Our recreation budget as a whole has in fact been going up over the last several years, but the increased amount has to be spent for operation and maintenance.

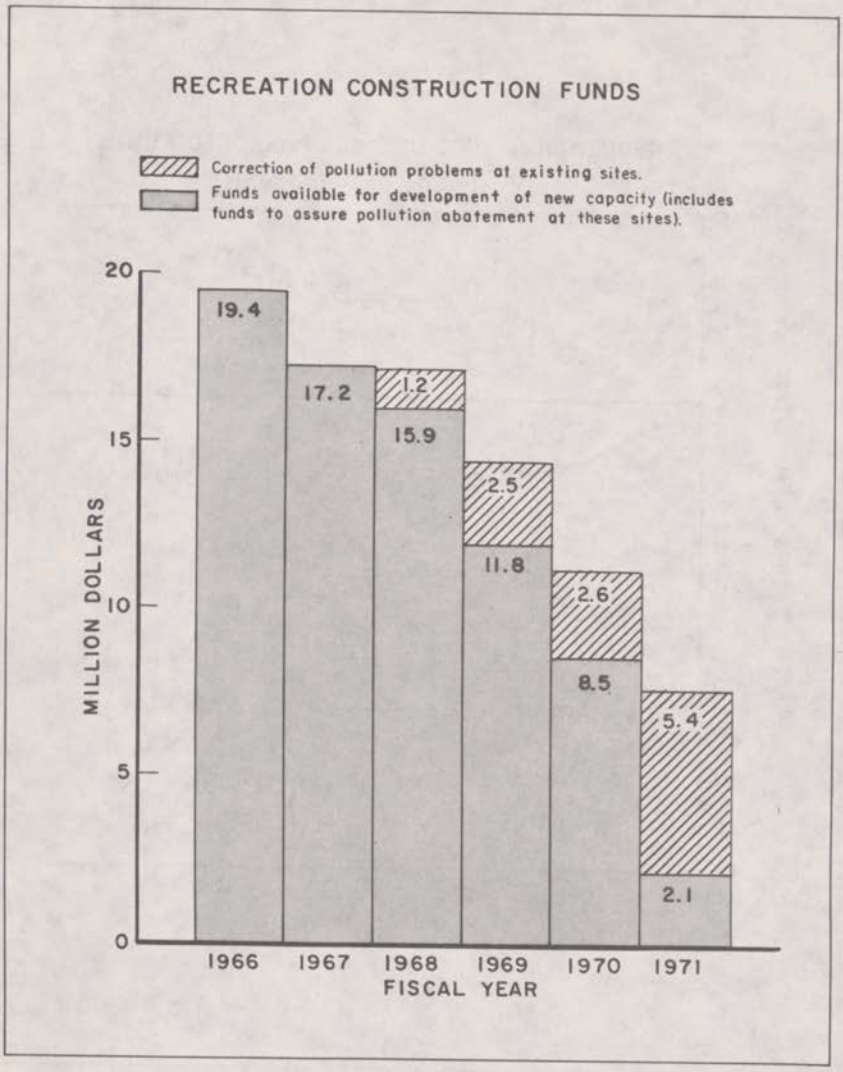
That means that each year the amount that is available for development of new sites, campgrounds, and so forth, has been going down. It was nearly $20 million in 1965. It will be just over $2 million in 1971. The other item shown on the chart is the financing for correction of water pollution abatement. We started in on the program in 1968 with $1.2 million and increased it to $2.5 million in 1969 and $2.6 million in 1970. This budget proposes $5.4 million for water pollution abatement at the recreation areas but this amount is really only a start.

Mrs. HANSEN. Insert the charts in the record. I think they are very important.

Mr. NELSON. We will be glad to make it available, as well as the chart I used earlier.

(The information follows:)


RECREATION SITE USE COMPARED TO FUNDS FOR THEIR DEVELOPMENT
+40
+30
+20
+10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
PERCENT CHANGE FROM FY 1966
RECREATION USE AT DEVELOPED SITES
35% increase in use at developed Recreation Sites since 1966.
90% decrease in funds for Recreation Site development since 1966.
FUNDS AVAILABLE FOR SITE DEVELOPMENT
1966
1967
1968
1969
1970
1971
FISCAL YEAR


RECREATION CONSTRUCTION FUNDS
Correction of pollution problems at existing sites.
Funds available for development of new capacity (includes funds to assure pollution abatement at these sites).
MILLION DOLLARS
20
15
10
5
0
19.4
17.2
1.2
15.9
2.5
11.8
2.6
8.5
5.4
2.1
1966
1967
1968
1969
1970
1971
FISCAL YEAR

OTHER DEMANDS ON RECREATION FUNDS

Mr. CLIFF. There are other demands on our recreation funds that come under the category of operation, maintenance, and supervision. These come about because of the passage of the Wild and Scenic Rivers Act, the National Trails Act, and the work that we have to do on examination and reclassification of primitive areas called for by the Wilderness Act. These activities are taking a great deal of time of our professionals at the forest and regional levels. We have responsibility for developing plans and managing four of the eight wild and scenic rivers, actually 4.5 of them. We share the Rogue River in Oregon with the Interior Department. We have responsibility for taking the leadership in making studies of nine additional wild and scenic river proposals. We have responsibility for leadership in the planning and management of the Pacific Crest National Trail. We work with the Interior Department in the administration of the Appalachian Trail. These activities are further reducing the amount of money in our recreation budget that is available for construction work. This explains in part why the amount of construction has gone down in the last few years.

VANDALISM AND LAW ENFORCEMENT

Mrs. HANSEN. What can be done, Mr. Cliff, to better educate the public so that you can begin to spend your funds on providing more and better facilities?

Mr. CLIFF. I think it comes down to a matter of getting better public education. This starts in the schools. We can reduce some of this by better supervision. We need a national campaign for litter reduction. As a matter of fact, there is one in "Keep America Beautiful" and we participate in this quite actively. There is no question but what we need to accelerate our public educational efforts. Part of it is law enforcement. We do have law enforcement problems in some of these areas.

Mrs. HANSEN. How much time does your personnel spend on law enforcement?

Mr. CLIFF. I don't know exactly.

Mr. NELSON. It is very difficult to say just how much, because like our fire control people, they spend only part of their time on law enforcement in connection with their other work on recreation. When they are checking compliance with the permits to use an area, or if there is some vandalism, they move in and do what is needed from a law enforcement standpoint. It would be very difficult to say what percentage of just what part of time of our employees is devoted to law enforcement. It is a big problem. For example, in 1969 we had 4,900 recreation occupancy violations in the Southern Region. In California alone there were 4,700 such violations.

You may have noticed in the submission we did make a site-by-site survey of our 3,238 sites last year, and determined that our vandalism costs alone are running at about $2 million a year at these developed sites.

Mrs. HANSEN. What does that consist of?

Mr. NELSON. Vandalism in rest rooms, breaking up tables, stoves, windows in rest rooms, etc.

Some of it is by youth groups that have been moving into some of our areas en masse. Another thing, we are working with the teach-ins, hoping to get a little understanding with that group on this type of a problem as well as other problems, including, environment and the national forests. We believe there are a lot of serious people involved that are concerned and could be useful.

Mrs. HANSEN. You are right.

Mr. NELSON. We have had some reasonable successes in relation to some of our hike-in areas such as wilderness, by providing people with a plastic bag and urging them to carry their litter out. That has saved us a lot of money I am sure.

DRUG PROBLEMS

Mr. WYATT. Madam Chairman, could I inquire if you have begun to run into drug problems in connection with your law enforcement in the last year or two, to any extent?

Mr. CLIFF. I don't know of any, Congressman Wyatt, specifically, but we have had areas where the so-called hippie type have moved into campgrounds and dominated their use. No doubt there are some drug users involved in these groups.

Mrs. HANSEN. It apparently is becoming a problem in some of the national parks.

Mr. CLIFF. We have the same kinds of problems, probably even more so because we have traditionally allowed people more freedom in their use of the national forests. We don't try to check them in and out and control their activities as stringently as they are controlled in the national parks. We have rather prided ourselves in the freedom of movement in the national forests with more variety of activities and less supervision, but we are getting to the point where we are going to have to increase supervision to control behavior.

Mr. NELSON. We know of at least one campground in Utah, where apparently they were buying and selling drugs. I am sure we must have had some in other States too.

1970 CONSTRUCTION DEFERRALS

Mrs. HANSEN. Please insert in the record Assistant Secretary Cowden's letter of March 11, 1970. concerning the 75-percent cutback in direct Federal construction. This committee is disturbed that you didn't spend all the funds that were needed for forest land management, forest research, forest roads and trails, and water resource development projects.

(The letter follows:)

Hon. JULIA BUTLER HANSEN,
Chairman, Subcommittee on Department of the Interior and Related Agencies, Committee on Appropriations, House of Representatives, Washington, D.C.

DEAR MRS. HANSEN: As you know, the President, in September, ordered a 75-percent cutback in direct Federal construction. Exempted from the cutback were (1) construction required for increased timber production, (2) ongoing construction where contracts had already been let, and (3) construction required to restore facilities damaged by natural disasters.

Agencies were authorized to carry out construction projects up to 25 percent of the amounts which had been included in the 1970 budget, exclusive of the exemptions listed above. They also could carry out projects added by the Con-

gress in lieu of projects included in the 1970 budget as long as the 25-percent ceiling was not exceeded.

The following reflects the construction deferrals required in the Forest Service:

Forest land management	$2,840,900
Forest research	860,000
Forest roads and trails	2,203,200
Total	5,904,100

Included in the above amounts are the following construction projects added by the Congress:

Water resource development projects:	
Antelope (California)	$69,000
Upper American River (California)	115,000
Allegheny (Pennsylvania)	155,000
Meeks Cabin (Utah)	171,000
Middle Fork Anderson (Indiana)	148,000
Forest research construction projects:	
Laboratory at Nacogdoches (Texas)	360,000
Laboratoy at Corvallis (Oregon)	500,000
Total	1,518,000

Apportionment of the withheld funds for work or purposes not subject to the construction deferral policy is as follows:

1. Rehabilitation and restoration of roads, buildings, improvements, etc. damaged by Hurricane Camille and other natural disasters	$2,466,000
2. Completion of unfinished projects underway at time of closure of Job Corps Conservation Centers	320,200
3. Applied against 1970 Pay Act costs	1,639,900
4. Proceed with direct Federal construction for water pollution abatement projects previously deferred	148,000
5. Reserved for future use (Forest Roads and Trails funds)	1,330,000
Total	5,904,100

The use of deferred construction funds for repairing damages caused by natural disasters obviates the need for a supplemental request for these purposes. Proceeding with the completion of the most urgent road and building projects started by Civilian Conservation Centers prior to their closure avoids loss of the Government's investment. Use of funds for increased salary costs pursuant to Executive Order 11474 results in a smaller supplemental appropriation request than would otherwise have been required for this purpose. Continuation of work on two deferred water pollution abatement projects will expedite compliance with applicable air and water quality standards.

Additional detail of the construction deferral and planned use of such funds is given in the attachment. We hope you concur in the use of the deferred funds for the purposes indicated.

A similar letter is being sent to Senator Bible.

Sincerely,

T. K. COWDEN, *Assistant Secretary.*

POLLUTION ABATEMENT PROJECTS DEFERRED

Mr. NELSON. I might clear up one thing. You mentioned in relation to the Park Service the amount of pollution abatement projects that have been deferred. We had only three that were originally deferred, and two of those have been unfrozen. There is one, Diamond Lake in Oregon, which is a new construction sewage project, involving $518,400, which is still frozen and the funds reprogramed.

Mrs. HANSEN. You made the statement in your justifications that it would be better to correct the problems before they start than it is to do it afterwards?

Mr. NELSON. Certainly.

Mrs. HANSEN. I am very concerned about funds being placed in reserve in a department that is one of the major revenue producers of the Federal Government. Isn't it true that the Forest Service returns $7.10 to the U.S. Treasury for every dollar expended?

Mr. CLIFF. Timber sales only.

Mrs. HANSEN. Isn't it true, Mr. Cliff, that if you are going to have a tree 25 years from now, it must be in the ground today?

Mr. CLIFF. That is very true.

Mrs. HANSEN. Bureau of the Budget Director, Mr. Mayo, addressed the National Forest Products Association in Florida on Wednesday, November 12. I am quoting from an article that appeared in the New York Times concerning Mr. Mayo's address:

"Mr. Mayo also gave a detailed outline of the future supply and demand situation for lumber, suggesting that there was the danger of a shortage in both the near and long terms."

Funds curtailed this year may be reflected in the future needs of this Nation not only for timber but for watersheds, recreation, and for all the multiplicity of uses which are traditionally inherent in the Forest Service. If you defer land management, forest research, forest roads and trails, you have deferred items that belong to America's inventory of the future. The America of tomorrow is too dependent on these things.

This committee learned from previous hearings that we don't know enough about certain resources to use them wisely. What is the function of the Corvallis laboratory?

LABORATORY AT CORVALLIS, OREG.

Mr. CLIFF. This is a forest biology laboratory where they are studying insect and disease problems as well as tree genetics and other problems.

Mrs. HANSEN. Isn't it true that you are going to have to develop better quality trees? You are now trying to develop faster growing trees because of the necessity to create more watersheds. If this laboratory is curtailed you will be curtailing the total output of tomorrow.

Mr. CLIFF. We regret the need for postponing it, because we are convinced the work that is going on there and the work that is planned there is very important to the future of the forestry particularly in the Northwest. We are not only studying the things we mentioned, but it is also a center for silvicultural research and watershed management research in the Cascade Mountains of Oregon. Dr. Arnold may want to supplement what I have said. This is in his area.

Mr. ARNOLD. Corvallis is a particularly unique facility in that every bit of research there is equally important to the quality of the environment and reduction of pollution as it is to timber supply, particularly when you look at such problems of insects and disease.

LAND MANAGEMENT

Mrs. HANSEN. This is why this committee thought it was important last year. You had flood damage last year in Northern California. You had an enormous amount of this kind of damage. If you better control the land where the floods occur, perhaps you wouldn't have so much flood damage.

Mr. ARNOLD. Yes, Madam Chairman.

Mrs. HANSEN. I think America is always paying for a crisis, instead of taking a long look ahead. We are now, in the crisis of environment, and everybody is concerned about the water, the air, the land. They should have been concerned 100 years ago. When this committee appropriates funds for these programs, we intend for those funds to be spent instead of being placed in reserve because failure to expend the funds restricts that much more flood control, watershed protection, and watershed development.

Mr. CLIFF. I think what you say about learning how to properly manage the land has an important bearing on flood prevention. We can and do have floods arising in areas that haven't been modified by man, but generally floods would be much less disastrous if we managed the land properly.

One of the other problems of great concern to us is the opposition that we are getting against timber harvests. In our research we are trying to improve our cutting practices, our methods of logging so as to reduce the confrontation from people who are objecting.

Mrs. HANSEN. If you don't reduce it, Mr. Cliff, there is going to be a confrontation.

(Discussion off the record.)

Mrs. HANSEN. You can't avoid the confrontation by curtailing forest management.

Visitations are going to increase every year because the urban areas and the suburban areas no longer offer people recreational facilities at a reasonable cost. If you want to eliminate the kind of pressures that will be disastrous to the supply of building materials for homes of the future, you have to develop recreational facilities that will meet the demands of the public.

Mr. WYATT. Madam Chairman, if I may second what you have said, I think we are going to have to do our best to see that the Forest Service asks for and receives whatever its capability may be both in forest research resources money and road money and other kinds of intensified management money, because I think the confrontation may come in a little different form perhaps. I think when we get our housing starts cranked up to the point of maybe 2.5 million or 3 million or maybe even more than that in units per year, and then when we don't have lumber and plywood, either because the price is so high because of the concentrated demand, or because there just simply isn't enough product at any price, then I think you are going to have a reverse in the situation. I think you are going to have an emotional backlash that is going to overcome the present resistance to fully utilizing our forest crops.

I think that the time is not far off when the preservationists and the conservationists will have to join us who are interested in meeting the wood fiber demands of this country, in trying to fight back those who come in and cut down every last tree in this country, whether it permits sustained yield or not, in order to fulfill the wood fiber requirements of this country.

MAINTAINING BALANCE

Mrs. HANSEN. This is why I am concerned that a balance be maintained. I am quoting from an article that appeared in the Portland Oregonian:

One trouble with national priorities is we keep stumbling over each other's feet * * *

So we get a fiscal 1971 budget for the U.S. Forest Service which places major emphasis on timber production but seems to give the short end of the stick to overall resources development—campgrounds, wild rivers, pollution.

I am afraid that neither side is going to have what they want, unless the necessary funds for management are provided.

REDUCTION OF FLOOD DAMAGES

Mr. NELSON. Speaking about management, you referred to good land management to reduce the damage from floods. We had an excellent example of that in the southern California floods last winter. The Los Angeles River watershed has been a special watershed with a lot of investment placed in it through the Soil Conservation Service appropriation. We found that our damages in the Los Angeles River portion of the Angeles National Forest was very minor, compared to what it was on the San Gabriel River watershed where a large part of a community was washed out, and so forth. This is an example of investment in the land in the right way that reduced the amount of damages from floods.

Mrs. HANSEN. Thank you very much, Mr. Nelson.

MAINTAINING BALANCE BETWEEN RESOURCES

Mr. CLIFF. Madam Chairman, on this question of keeping balance between various resources uses, I agree with you wholeheartedly, I want to say that the Forest Service welcomes an opportunity to practice more intensive timber management on our timber growing lands. We are convinced that we can produce more timber by intensive timber management.

We also know that if we do this, we must face up to the problem and the responsibility for minimizing the damages and the impacts on other resources, such as watershed, wildlife, and science resources. This takes more intensive management of these other resources as well. If we move forward in meeting the housing needs of this country, and we can contribute substantially to this, we have to keep these other resource needs in balance. We just can't move ahead in one front and not have the people who are interested in the other things confront us with their criticism. I think the strength of our program will be in keeping it well balanced.

Mr. NELSON. This morning you asked that our report to the President's Task Force on Lumber Supply and Demand be placed in the record. You will find in that not only what we indicated would be needed for timber cutting, roads, planting, and other intensive timber management measures but also what would be needed for protection of the landscape, and esthetic side, the protection of watersheds, and fish and wildlife habitat. We are trying to look at the total problem and get the picture before those that will make the decisions that it is only one or two items but they are all in a package, and must all be considered.

JUSTIFICATION MATERIAL

Mrs. HANSEN. Thank you. Insert pages 1 through 12 of the justifications in the record.

(The pages follow:)

FOREST SERVICE

Purpose Statement

The Forest Service is responsible for promoting the conservation and wise use of the country's forest and related watershed lands, which comprise one-third of the total land area of the United States. To meet its responsibility the Forest Service engages in three main lines of work, as follows:

1. Management, protection, and development of the National Forests and National Grasslands. The 154 National Forests and 19 National Grasslands are managed under multiple use and for sustained yield. Under these principles natural resources of outdoor recreation, range, timber, watershed, and wildlife are utilized in a planned combination that will best meet the needs of the Nation without impairing the productivity of the land.

   Direct as well as generated employment for rural residents contribute to community development and to environmental protection and improvement. Gross area within unit boundaries encompasses about 226 million acres in 44 States and Puerto Rico, of which some 187 million acres are under Forest Service administration.

   In managing the National Forests, technical forestry is applied to the growing and harvesting of timber crops. Grazing use is managed to obtain proper range conservation along with utilization of the annual growth of forage. Watersheds are managed to regulate stream flow, prevent floods, and provide water for power, irrigation, navigation, and municipalities.

   Management includes the development, maintenance, and protection of sites and facilities for the millions of people who visit the National Forests each year for recreation purposes. Emphasis is given to protecting scenic quality while at the same time assuring availability for forest users. Wildlife habitat is managed to provide a suitable land and water environment for both game and non-game wildlife.

   Under the multiple use principles most areas are used for, or serve, more than one purpose or objective. For example, about 50 percent of the area within the National Forests serves five different purposes:

   (a) Timber production
   (b) Watershed protection
   (c) Forage production
   (d) Wildlife production
   (e) Recreation

   An additional 28 percent serves four purposes in varying combinations. Of the remainder, 21 percent of the total serves three purposes with only 1 percent of the total reserved exclusively for a single purpose, mainly campgrounds and special use areas, such as summer homesites, pastures, and corrals.

The varied interests which frequently conflict and which must be reconciled, and the vast areas covered, clearly require careful planning and skillful management of the National Forest properties to most effectively serve the Nation's people.

The protection of the National Forests includes the control of forest fires, the control of tree disease and insect epidemics, and the prevention of trespass.

The major development activities of the National Forests are reforestation; timber stand improvement; revegetation; construction of roads, recreational facilities, range and other necessary improvements; and land acquisition and exchanges. Each of these activities contributes to the local economy and in many areas serves to improve incomes of the rural poor.

The economic importance of the National Forests and National Grasslands is evident when it is considered that:

(a) They produced a cash income in fiscal year 1969 of over $321.3 million. Approximately 65 percent of this amount is credited to the general fund in the Federal Treasury (miscellaneous receipts). The remainder is distributed in accordance with special acts of Congress, including 25 percent to the States or counties in which lands are located, and 10 percent made available for construction and maintenance of the Forest Service system of roads and trails. In addition to these cash receipts, there are the even greater economic values which result from the processing of end products derived from this utilization of National Forest timber, forage, and minerals. Recreation, wildlife and water result in important economic activity in local, State, and national economies. There are also important intangible values of water, recreation, and wildlife such as the esthetic enjoyment of natural beauty.

(b) The area within National Forests boundaries is equivalent to some 10 percent of the area of the continental United States. Over 40 percent of this land is within areas now experiencing economic distress. Proper management, development, and utilization of these lands are important factors in permanent improvement of these local economies. Millions of people who live in and near the National Forests are supported in whole or in part through the economic development arising from the forests and their resources. These resources offer the most favorable basis for developing prosperous and vigorous local economies and communities.

(c) The National Forests supplied 11.8 billion board feet of timber in fiscal year 1969 to the Nation's forest products industries. This is expected to increase to 12.9 billion board feet in 1970. Dependence of the forest products industries on National Forest timber continues to increase as the result of depletion of good quality timber on private lands. In some areas, the dependence of local industry on National Forest timber is almost 100 percent. Without this supply some small communities could not exist.

(d) About 7.3 million head of domestic livestock (including calves and lambs) are grazed on the National Forests and Grasslands. In many local areas this is a major industry. Without such Federal rangelands the economic activity would be drastically curtailed from currently depressed levels.

(e) These lands provide protection to municipal water supplies for nearly all western cities and towns and many in the East, to irrigation water used on about 20 million acres of western lands, and to many streams with water power developments. They provide flood protection to thousands of acres of rich valley lands and help to prevent more rapid siltation of reservoirs and stream channels. A dependable water supply is an important prerequisite for economic and community development.

(f) They provide 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. Hunting and fishing constitute an important supplementary source of income for numerous communities, many of which are economically depressed.

(g) They provide opportunities for healthful outdoor recreation, with a minimum of restrictions. Outdoor recreation is an important source of supplementary income in most areas as well as providing recreational opportunities for local residents. In some relatively depressed communities it becomes even more important.

2. Forestry research. The Forest Service conducts research in the entire field of forestry and the management of forest and related 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.

The research program has a two-fold objective:

(a) To backstop the National Forest development program by devising more efficient practices for protecting, managing, and utilizing forest resources.

(b) 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(b)(3) 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.

Results of research are made available to owners of private forest and rangelands, to public agencies which administer such lands, to forest product industries, and to consumers. Research in the growing, harvesting, processing, and marketing of forest products results in increased competitiveness for forest products. Contribution of the forest resource to the economic and social welfare is made more effective. Research in the management of resources for water, forage, wildlife, and recreation has similar effects as a basis for community development and satisfaction of national demands.

3. Cooperation with State and private forest landowners. The Forest Service cooperates with State agencies and private owners to improve management of non-Federal forest lands. Technical help is also provided by the Forest Service in cooperation with the State agencies to the processors of forest products. Opportunities exist for greatly increasing the contribution of these lands to social and economic welfare of the Nation as a whole and more particularly through rural development and outreach activities in rural America to improve the economic levels, employment opportunities, and general welfare of the people living in these areas. Specific programs are designed to:

(a) Better protect the 519 million acres of State and privately owned forests and critical watersheds against fires, insects, and diseases.

(b) Encourage better forest practices, for resource conservation, betterment, and profit, on the 395 million acres of non-Federal forest land.

(c) Aid in the distribution of planting stock for forests, shelterbelts, and wood lots.

(d) Assist the harvesters, processors, and marketers of forest products in doing a better job and thereby bring about greater use of forest products and increased income and employment for rural people.

(e) The Forest Service also provides assistance to States for tree planting, reforestation, and tree improvement under Section 401 of the Agricultural Act of 1956 (16 USC 568e-568g), through the State forester or equivalent State official, including advice, technical assistance, and financial contributions, in accordance with plans submitted by the State and approved by the Secretary of Agriculture.

(f) Provide assistance to local communities in planning and development of new and greater opportunities for creative and satisfying living, work, and recreation in rural America.

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.

   (b) Control operations to suppress or eradicate forest insects and diseases, including white pine blister rust in a manner that does not impair the quality of our environment.

5. Flood prevention and watershed protection. The Forest Service cooperates with the Soil Conservation Service, appropriate State agencies and the local organizations sponsoring small watershed protection projects initiated under the Watershed Protection and Flood Prevention Act of 1954 (16 USC 1001-1007) in planning and installing forestry and related land resource measures on the watersheds. The Forest Service also collaborates with the Soil Conservation Service, other Federal and State agencies in the conduct of comprehensive river basin studies relating to the development of water and related land resources under authority of the Water Resources Planning Act (42 USC 1962) and 16 USC 1006 mentioned above. Such studies can form part of the basis of plans for regional and community economic development.

   On National Forest lands and on non-Federal forest lands within the watersheds authorized for treatment by the Department of Agriculture under the Flood Control Act (33 USC 701), the Forest Service plans and installs watershed improvement measures, in the form of minor physical structures, cultural measures, and intensified fire control, to retard runoff and reduce flood water and sediment damage. Work on non-Federal land is carried on in cooperation with the Soil Conservation Service and the appropriate State and local agencies.

   The Forest Service cooperates with the Soil Conservation Service and other Federal, State, and local agencies or groups in the emergency treatment of watersheds impaired by fire or other similar disasters to prevent the loss of life or serious flood and sediment damages. This work is performed under the authority of Section 216 of the Flood Control Act of 1950 (33 USC 701b-1) with funds allotted to the Forest Service by the Soil Conservation Service. This section of the Act provides that not more than $300,000 of the regular appropriations for Flood Prevention may be expended during any one fiscal year for emergency measures. The Supplemental Appropriation Act of 1969 provided $4,000,000 for emergency measures needed as a result of the 1969 California floods and a contingency for other emergencies.

   Generally, this work is performed with funds allotted to the Forest Service by the Soil Conservation Service. Forest Service funds are used to finance land treatment and certain other measures on small watershed projects located on National Forest lands.

6. Job Corps Conservation Centers. The Forest Service operates 20 Job Corps Conservation Centers on National Forests throughout the United States under agreement with the Department of Labor. The Forest Service provides the staffing, administration and logistical support to physically operate and maintain the Centers and conduct the basic education, plan and supervise the recreation, and fully implement the vocational training of corpsmen. The funds for this program are transferred from Department of Labor. There are 41 to 60 permanent staff assigned to each Center based upon enrollee capacity of 112 to 224. Total capacity of all Centers is 3,568 corpsmen and Centers operate on a 24-hour, seven-day week basis. Both human and natural resources are being upgraded through these Conservation Centers, as young men improve their education and job skills in preparation for a more productive life.

7. Timber stand improvement. Funds collected from timber purchasers in connection with timber sales, under authority of the Knutson-Vandenberg Act, make possible some timber stand improvement work on cut-over areas each year looking to the establishment of natural tree growth and protecting it through the critical period of early growth. This work also helps to obtain stocking of trees of desirable species, form and quality. Timber stand improvement in promising young growth not associated with timber sale cuttings is done with funds directly appropriated by Congress.

8. Brush disposal. National Forest timber sale contracts require treatment of debris from cutting operations or deposit of funds to pay for the work. If it is not feasible for the timber purchaser to dispose of the logging slash, which is the case in most sales, it is done by the Forest Service using deposits made by the purchaser. This work is essential because logging slash increases the fire hazard and may contribute to the buildup of insect populations, increase certain disease infestations, and cause damage to stream channels.

9. Land and Water Conservation Fund. This fund, transferred from the appropriation made to the Department of the Interior, finances the acquisition of lands, waters, or interests in lands or waters by the Forest Service as well as certain other Federal agencies. The Act creating the fund from which appropriations are made requires that the lands and waters acquired be primarily of value for outdoor recreation. Means are provided for expanding outdoor recreation opportunities and protecting and improving environmental quality including natural beauty. The fund derives revenues from admission and user fees, sales of surplus real property, and motor boat fuel tax. The first purchase of recreation land made by the Forest Service was on October 19, 1965.

10. Rural fire defense. The Forest Service, as a part of its regular programs, also directs Federal activities and provides technical guidance and training to States concerned with the prevention and control of fires which might be caused by an enemy attack or a nuclear accident in rural areas of the United States.

11. Appalachian regional development program. Under the Appalachian Regional Development Act (40 USC app. 204), the Forest Service provides technical assistance to timber development organizations to improve development and utilization of timber stands in the Appalachian region. Regional and community development is encouraged and assisted with attendant progress in eliminating rural poverty. The funds for this program are transferred from the Appalachian Regional Development Commission.

ORGANIZATIONAL STRUCTURE

The Forest Service maintains its central office in Washington with program activities decentralized to 9 regional offices, 130 forest supervisors' offices, 772 district rangers' offices, 2 State and private forestry area offices, 8 forest and range experiment stations, the Institute of Tropical Forestry, and the Forest Products Laboratory. Location of headquarters offices:

Regional Offices: Missoula, Montana
Denver, Colorado
Albuquerque, New Mexico
Ogden, Utah
San Francisco, California
Portland, Oregon
Atlanta, Georgia
Milwaukee, Wisconsin
Juneau, Alaska

State and private forestry area offices: Upper Darby, Pennsylvania
Atlanta, Georgia

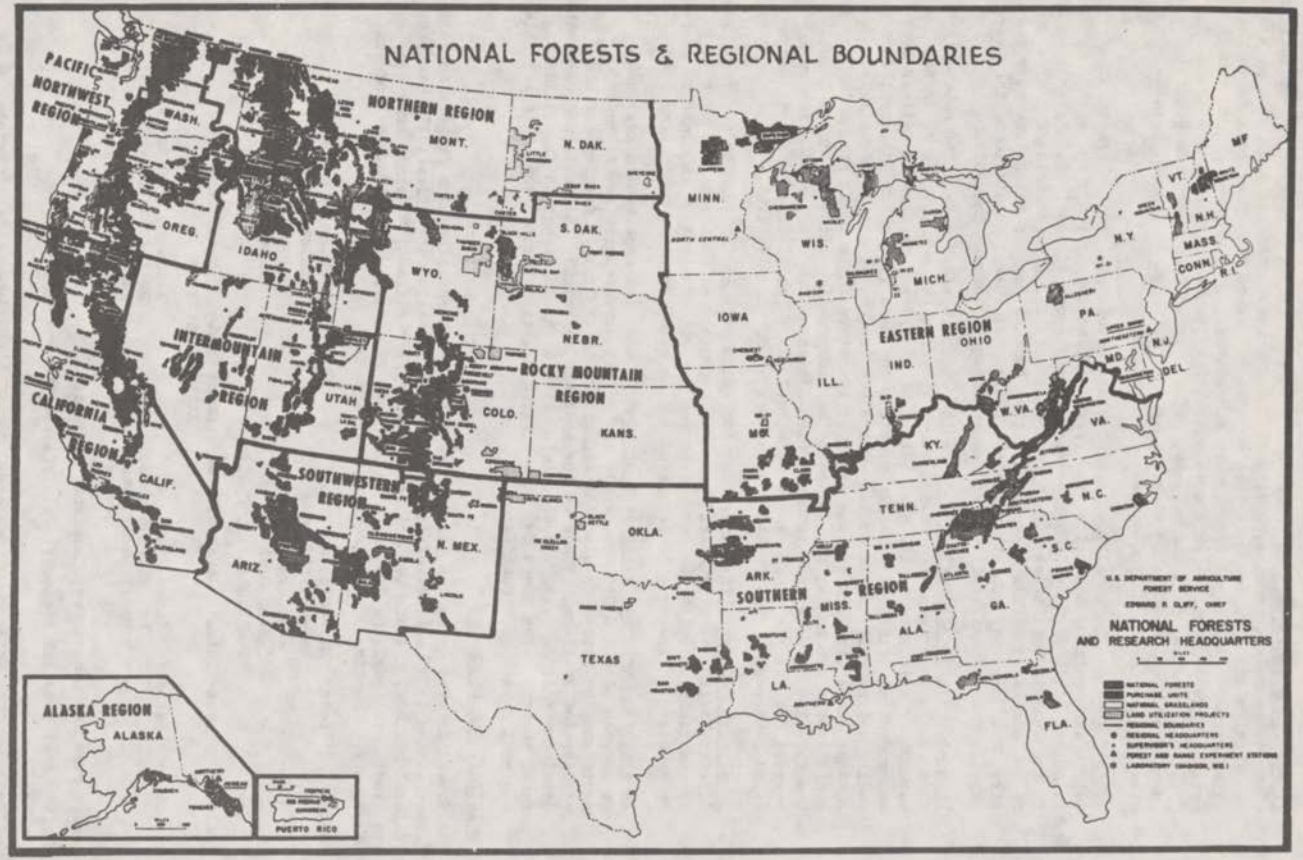
Experiment stations: Ogden, Utah
St. Paul, Minnesota
Upper Darby Pennsylvania
Portland, Oregon
Berkeley, California
Fort Collins, Colorado
Asheville, North Carolina
New Orleans, Louisiana

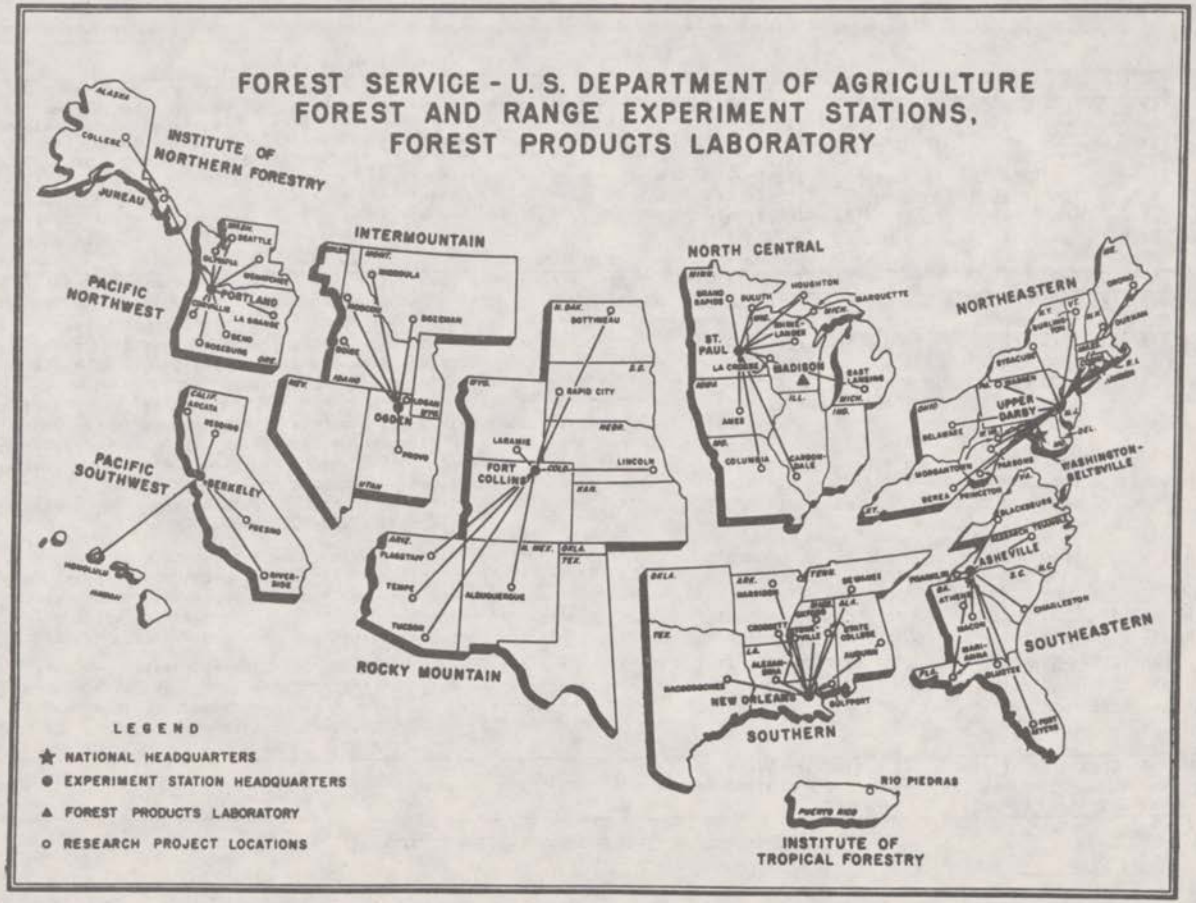
Forest Products Laboratory: Madison, Wisconsin

Institute of Tropical Forestry: Rio Piedras, Puerto Rico

National Forest, National Grasslands, and Utilization lands administered by the Forest Service are located in all States except the following six:

Delaware
Hawaii
Maryland
Massachusetts
New Jersey
Rhode Island


NATIONAL FORESTS & REGIONAL BOUNDARIES
PACIFIC NORTHWEST REGION
WASH.
OREG.
CALIFORNIA REGION
CALIF.
NORTHERN REGION
MONT.
N. DAK.
IDAHO
WYO.
S. DAK.
NEBR.
INTERMOUNTAIN REGION
UTAH
COLO.
ROCKY MOUNTAIN REGION
KANS.
SOUTHWESTERN REGION
ARIZ.
N. MEX.
OKLA.
TEXAS
MINN.
IOWA
WIS.
MICH.
ILL.
IND.
OHIO
EASTERN REGION
KY.
TENN.
MO.
ARK.
MISS.
ALA.
GA.
LA.
FLA.
S.C.
N.C.
VA.
W. VA.
PA.
N.Y.
MD.
DEL.
N.J.
CONN.
R.I.
MASS.
VT.
N.H.
ME
SOUTHERN REGION
ALASKA REGION
ALASKA
PUERTO RICO
U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
EDWARD P. CLIFF, CHIEF
NATIONAL FORESTS
AND RESEARCH HEADQUARTERS


FOREST SERVICE - U. S. DEPARTMENT OF AGRICULTURE
FOREST AND RANGE EXPERIMENT STATIONS,
FOREST PRODUCTS LABORATORY
INSTITUTE OF NORTHERN FORESTRY
JUNEAU
COLLEGE
PACIFIC NORTHWEST
PORTLAND
INTERMOUNTAIN
OGDEN
PACIFIC SOUTHWEST
BERKELEY
ROCKY MOUNTAIN
FORT COLLINS
NORTH CENTRAL
ST. PAUL
MADISON
NORTHEASTERN
UPPER DARBY
WASHINGTON-BELTSVILLE
ASHEVILLE
SOUTHEASTERN
SOUTHERN
NEW ORLEANS
RIO PIEDRAS
INSTITUTE OF TROPICAL FORESTRY
LEGEND
NATIONAL HEADQUARTERS
EXPERIMENT STATION HEADQUARTERS
FOREST PRODUCTS LABORATORY
RESEARCH PROJECT LOCATIONS

Summary of Estimated Appropriations and Receipts

Page No.	Item	Available 1969 1/	Estimated Available 1970 2/	Budget Estimates 1971	Increase or Decrease 1971 over 1970
	Appropriated Funds				
	Forest protection and utilization:				
21	Forest land management	$208,684,000	$200,788,000	$211,561,000	+$10,773,000
97	Forest research	40,046,000	43,920,000	45,066,000	+1,146,000
127	State and private forestry cooperation	19,929,000	22,939,000	21,939,000	-1,000,000
	Total, Forest protection and utilization	268,659,000	267,647,000	278,566,000	+10,919,000
138	Forest roads and trails 3/	91,000,000	100,570,000	115,000,000	+14,430,000
143	Acquisition of lands for National Forests, Special Acts	80,000	80,000	80,000	- -
137	Cooperative range improvements	700,000	700,000	700,000	- -
145	Assistance to States for tree planting 3/	1,000,000	1,000,000	1,000,000	- -
	Permanent Appropriations				
157	Expenses, brush disposal 3/	11,904,351	12,800,000	12,800,000	- -
156	Roads and trails for States, National Forests Fund	20,931,005	31,206,198	34,292,200	+3,086,002
158	Forest fire prevention 3/	100,461	125,000	133,000	+8,000
159	Restoration of forest lands and improvements 3/	11,319	25,000	25,000	- -
160	Payment to Minnesota (Cook, Lake, and St. Louis Counties) from the National Forests Fund	146,232	257,955	258,000	+45
161	Payments to counties, National Grasslands	538,155	488,000	488,000	- -
162	Payments to school funds, Arizona and New Mexico	90,193	124,709	125,000	+291
163	Payments to States, National Forests Fund	52,325,638	78,012,921	85,727,875	+7,714,954
	Total	447,486,354	493,036,783	529,195,075	+36,158,292
	Deduct permanent appropriations shown above	86,047,354	123,039,783	133,849,075	+10,809,292
	Total (excluding permanent appropriations)	361,439,000	369,997,000	395,346,000	+25,349,000
	Receipts 4/				
	Timber sales	306,810,625	336,700,000	371,400,000	+34,700,000
	Grazing	3,842,344	4,328,000	4,415,000	+87,000
	Power	151,515	152,000	152,000	- -
	Recreation	2,468,126	2,670,000	2,870,000	+200,000
	Land uses	681,054	715,000	785,000	+70,000
	Mineral leases and permits	3,976,536	4,022,000	4,075,000	+53,000
	Admission and user fees	1,236,526	1,540,000	1,840,000	+300,000
	National grasslands and land utilization	2,087,104	2,130,000	2,165,000	+35,000
	Total receipts	321,253,830	352,257,000	387,702,000	+35,445,000

(Footnotes on next page)

Summary of Estimated Appropriations and Receipts--continued

1/ Includes Second Supplemental Appropriation Act, 1969 (PL 91-47, 7/22/69) as follows: $1,676,000 transferred from other Forest Service accounts for fighting forest fires and new budget authority of $26,062,000 -- fighting forest fires, $18,670,000; increased pay costs, $6,932,000; timber sale acceleration, $460,000.

Excludes GSA space transfers of $546,000.

2/ Includes following proposed supplemental for increased pay costs:

	Proposed Supplemental
Forest Protection and Utilization:	
Forest land management	$8,271,000
Forest research	1,785,000
State and private forestry cooperation	210,000
Total	10,266,000

Excludes following: GSA space transfers of $295,000 (Forest land management, $293,000 and Forest research, $2,000) and proposed supplemental for fighting forest fires of $21 million.

3/ In addition, prior year balances are available.

4/ Amounts include:

	1969	1970	1971
Suspense account, Alaska a/	$2,207,282	$2,400,000	$2,600,000
Suspense account, O&C lands b/	6,935,762	7,000,000	7,000,000

a/ Account established pending settlement of Indian rights on Tongass National Forest, Alaska.
b/ Account established for Oregon and California railroad grant lands, for which receipts are transferred to Department of the Interior for distribution under the Acts of August 28, 1937, June 24, 1954, and August 3, 1961 (43 USC 1181f-g).

STATUS OF FINANCING

DEVELOPMENT PROGRAM FOR THE NATIONAL FORESTS

Cumulative Fiscal Years 1963-1970
(In thousands)

(The planned levels shown in this table were developed by the Forest Service and were not specifically indicated in the program submitted by the President on September 21, 1961. This program stated that it would "be carried out as rapidly as possible within overall budgetary requirements and financial resources of the Federal Government.")

	1963-1970 Planned Level	1963-1970 Available: Forest Service Appropriation	1963-1970 Available: Public Works	1963-1970 Available: Total	Difference	Percent Financed
FOREST LAND MANAGEMENT:						
National Forest Protection and Management:						
Timber resource management:						
(a) Sales administration and management	$285,566	$270,592		$270,592	$14,974	94.8
(b) Reforestation and stand improvement	341,987	131,305	$5,294	136,599	205,388	39.9
Recreation-public use	571,679	248,850	10,611	259,461	312,218	45.4
Wildlife habitat management	54,094	31,947	1,637	33,584	20,510	62.1
Range resource management:						
(a) Management	54,175	44,410		44,410	9,765	82.0
(b) Revegetation	26,729	22,939	46	22,985	3,744	86.0
(c) Improvements	39,275	27,418	1,986	29,404	9,871	74.9
Soil and water management	94,175	47,648	1,206	48,854	45,321	51.9
Mineral claims, leases, and special uses	37,838	32,469		32,469	5,369	85.8
Land classification, adjustments, and surveys	67,724	41,121		41,121	26,603	60.7
Forest fire protection	283,417	202,230	1,187	203,417	80,000	71.8
Construction and maintenance of improvements for fire and general purposes (including communications)	141,593	83,710	16,715	100,425	41,168	70.9
Total, National Forest Protection and Management	1,998,252	1,184,639	38,682	1,223,321	774,931	61.2
Insect and Disease Control	98,719	93,249	197	93,446	5,273	94.7
Acquisition of Lands, Weeks and Special Acts	52,130	13,922		13,922	38,208	26.7
Forest Roads and Trails (including all related appropriations) (obligating authority)	1,138,033	823,546	18,719	842,265	295,768	74.0
TOTALS	3,287,134	2,115,356	57,598	2,172,954	1,114,180	66.1

OFFICE OF ECONOMIC OPPORTUNITY (JOB CORPS)

Transfers to Forest Service

	Available 1969		Estimate 1970		Estimate 1971	
	No. of Permanent Positions	Amount (in thousands)	No. of Permanent Positions	Amount (in thousands)	No. of Permanent Positions	Amount (in thousands)
Center readiness	- -	$1,301	- -	$1,290	- -	$1,290
Center operation	1,425	40,321	1,195	18,797	1,195	18,797
Program direction and training	218	2,871	145	1,580	145	1,580
Total	1,643	44,493	1,340	21,667	1,340	21,667

NOTE: Fiscal years 1970 and 1971 estimates are based on best information available to the Forest Service as of December 12, 1969.

JOB CORPS CENTERS

Mrs. HANSEN. Please insert in the record at this point the locations of your Job Corps centers.

(The information follows:)

Job Corps conservation centers: City and State

Anaconda: Anaconda, Mont.
Angell: Yachats, Oreg.
Arrowood: Franklin, N.C.
Blackwell: Laona, Wis.
Boxelder: Nemo, S. Dak.
Branchville: Branchville, Ind.
Cass: Ozark, Ark.
Cottonwood: Cottonwood, Idaho.
Curlew: Curlew, Wash.
Flatwoods: Coeburn, Va.
Golconda: Golconda, Ill.
Heber: Heber, Ariz.
Jacobs Creek: Bristol, Tenn.
Ouachita, Royal, Ark.
Pine Knot: Pine Knot, Ky.
Pine Ridge: Chadron, Nebr.
Schenck: Pisgah Forest, N.C.
Timberlake, Estacada, Oreg.
Trapper Creek: Conner, Mont.
Wolf Creek: Glide, Oreg.

FORESTRY NEAR URBAN POPULATIONS

Mrs. HANSEN. On page 6 of your justifications you list six States that have no national forests. I have a letter from our very distinguished colleague, Congressman Conte. He says:

I think that the novel concept of environmental forestry has considerable merit. A comprehensive study of the role played by forests in a densely populated area could provide a partial solution to the current urban crisis.

I believe that Professor Rhodes submitted material on this subject before your committee last year. I know the budget is tight this year. However, I think this forestry program has tremendous potential in itself and as part of the national policy to improve our environment.

Have you anything in this budget or are you contemplating anything that would help solve some of the urban problems?

Mr. CLIFF. Madam Chairman, the question of forestry in the vicinity of urban populations is receiving some attention. We have a small start with research in this area, and Dr. Arnold can comment on that.

Our State and private forestry programs do contribute some to forestry and forest protection in the areas in and around cities.

We have done very little except on a consulting or educational basis within the urban centers themselves. The States of Georgia and Missouri have very progressive urban forestry programs. We find that many of the people who own forest land out in the country live in the cities, and the only place you can reach them is in the cities. Many landowners living in the city are interested in forestry.

In Atlanta, Ga., for example, meetings have been well attended. We think that there is a role that we can contribute to, but this budget does not provide anything specific for it except a small amount of research. Do you have anything to add, Dr. Arnold?

Mr. ARNOLD. We have one research project which is studying the noise reduction resulting from various kinds of forest cover, and we are getting as much as a 50-percent reduction in highway noise. It looks like a very profitable research area, and one that would be applicable to the planning in and around urban areas as well as adjacent to major highways.

USE OF TREES FOR AIR POLLUTION CONTROL

Mrs. HANSEN. Isn't it true that trees are a major ingredient of air pollution control within our cities?

Mr. ARNOLD. Yes. We are finding out and trying to measure the screening of particulate matter out of the air that trees do. In city areas trees do help in the carbon dioxide-oxygen balance.

COMMENTS ON PROPOSAL MADE BY PROFESSOR RHODES

Mr. REIFEL. Madam Chairman.

Chief, are you aware of this proposal by Professor Rhodes?

Mr. CLIFF. Yes, we are.

Mr. REIFEL. Have you had a chance to study it?

Mr. ARNOLD. Yes. Our Northeastern Experiment Station works very closely with Professor Rhodes and his staff, and some of the urban and environmental forestry research programs are planned jointly. We plan to encourage them and others with requests for grant proposals.

Mr. REIFEL. Is what Professor Rhodes proposes a unique approach?

Mr. ARNOLD. It is an approach that several universities are now using. We have had some studies going on now for 3 years in these areas, but they are all exploratory, and it is I think quite appropriate that they be for major programs.

Mrs. HANSEN. Is Dr. Rhodes' work progressing faster than the other studies?

Mr. ARNOLD. He is in the van, but I think there are probably at least six universities in about the same position that have attracted several different disciplines. They have strong capability in landscape architecture. The College of Agriculture at Massachusetts has forestry and landscape architecture departments. Scientists are grouped together to form interdisciplinary teams to work in this field of environmental forestry. That is occurring at other places in the United States, too.

Mr. REIFEL. Does this proposal intend to have a consortium or group come together to work on this thing, or is it just for the one university?

Mr. ARNOLD. That particular proposal, as I remember, is for one university to work with the Forest Service. However, we are exploring with a number of universities in the Northeast of the possibility of a major consortium to work with us in this very area of environmental forestry.

Mr. REIFEL. Would this bring recreation in forest areas closer to a good many people in the urban centers than is now available?

Mr. ARNOLD. Yes, sir. There are many opportunities for small areas to create a forest environment. We are finding out that we can manage small areas in and around metropolitan centers for wildlife so that people in the cities can enjoy it more. There are many people in the Northeast megalopolitan corridor. This is an excellent place for this kind of research.

Mr. REIFEL. Does this mean some cooperative agreements with private owners?

Mr. ARNOLD. Yes, sir.

Mr. REIFEL. Is there a lot of State land involved?

Mr. ARNOLD. Yes. The research is not yet that far along to determine the nature of the legal and land ownership questions. We have to determine what the parameters are that can be changed, and what the benefits are, and the nature of the things that can be done. Then the

States and local areas, in working with their planning authorities, would be able to continue the application of this research.

Mr. REIFEL. The growing need for recreational opportunities for the congested metropolitan areas, what would a beginning in funding, with something like Professor Rhodes' proposal?

Mr. ARNOLD. The funding of the proposal like this for a consortium would take about $500,000 for a realistic program. This would involve Forest Service research and six to eight universities to make a realistic beginning.

ADVANTAGES OF CONSORTIUM

Mr. REIFEL. Would it be better to have it worked out through a consortium, or start with one university, like Rhodes' proposal?

Mr. ARNOLD. I am of the impression that it is better to work it out through a consortium, because you have to have university groups very strong in ecology, you have to have a university group strong in the management of wildlife, including songbirds. You have to have a university group very strong in landscape architecture and esthetic management of the environment and you didn't find all these strengths in any one university, except on rare occasions. There are other areas and disciplines required and the universities are accustomed to working together in these environmental problems.

Mr. REIFEL. When you speak of $500,000, this does not envision buildings?

Mr. ARNOLD. No, sir.

Mr. REIFEL. But rather research on the part of people in institutions that are already in operation.

Mr. ARNOLD. Yes, sir. These would be programed funds in this broad interdisciplinary area of environmental forestry.

Mr. REIFEL. This would involve contracts with a group of universities banded together on specific tasks that they would explore?

Mr. ARNOLD. Yes, sir, a combination of Forest Service and university research.

Mr. REIFEL. Thank you very much, Madam Chairman.

STATE COOPERATION

Mr. CLIFF. Before we leave the question of urban forestry, Assistant Chief Bacon is responsible for the cooperative operational work that is being done in this field. He indicated he would like to say something.

Mr. BACON. I would just like to add, Madam Chairman, that all of the State foresters are most anxious to develop cooperatively with us the same kind of a cost-sharing arrangement that we have with the cooperative forest mangament activity on the forest land, and bring those skills to the urban areas. We are currently examining opportunities, for example, to amend the Cooperative Forest Management Act to specifically provide for some input of this both on the question of broad environment and urban community forestry specifically.

Mrs. HANSEN. Why did your State and private forestry cooperation funding decrease by $1 million?

Mr. CLIFF. That is accounted for by the reduction of $2 million in the cooperative fire control activity, which is offset by an increase of $1 million in cooperative forest management and general forestry assistance. So the net reduction was $1 million.

Mrs. HANSEN. It is very good arithmetic, but it isn't very good sense.

Mr. CLIFF. We discussed the cooperative fire program this morning.

Mrs. HANSEN. I know, but the Federal Government shouldn't place a great portion of the burden on the State governments.

Mr. CLIFF. In both of these programs the States are more than matching the Federal Government's contribution in fire control.

FOREST PROTECTION AND UTILIZATION

Mrs. HANSEN. Please insert pages 13 through 19 of the justifications in the record.

(The pages follow:)

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	1969 actual	1970 estimated	1971 estimated
Program by activities:			
1. Forest land management:			
(a) National forest protection and management	163,029	181,910	189,681
(b) Water resource development related activities	9,254	7,339	5,109
(c) Fighting forest fires	25,697	4,275	4,410
(d) Insect and disease control	5,813	9,843	11,346
(e) Acquisition of lands	3,148	1,298	1,300
Total, forest land management	206,941	204,665	211,846
2. Forest research:			
(a) Forest and range management	16,841	18,028	18,297
(b) Forest protection	10,306	11,414	11,414
(c) Forest products and engineering	7,953	8,966	9,307
(d) Forest resource economics	5,067	5,441	6,048
(e) Forest research construction	1,565	567	36
Total, forest research	41,732	44,416	45,102
3. State and private forestry cooperation:			
(a) Forest fire control	13,901	16,469	14,469
(b) Forest tree planting	250	313	313
(c) Forest management and processing	3,556	4,130	4,950
(d) General forestry assistance	1,685	2,027	2,207
Total, State and private forestry cooperation	19,392	22,939	21,939
Total program costs, funded [1]	268,065	272,020	278,887
Change in selected resources [2]	−2,206	−3,213	379
Total obligations	265,859	268,807	279,266
Financing:			
Receipts and reimbursements from: Federal funds	−700	−700	−700
Unobligated balance available, start of year		−460	
Unobligated balance available, end of year	460		
Unobligated balance lapsing	3,040		
Budget authority	268,659	267,647	278,566
Budget authority:			
Appropriation	269,205	257,676	278,566
Transferred to other accounts	−546	−295	
Appropriation (adjusted)	268,659	257,381	278,566
Proposed supplemental for civilian pay act increases		10,266	
Relation of obligations to outlays:			
Obligations incurred, net	265,159	268,107	278,566
Obligated balance, start of year	36,877	40,991	44,516
Obligated balance, end of year	−40,991	−44,516	−40,051
Adjustments in expired accounts	2,626		
Outlays, excluding pay increase supplemental	263,670	254,922	282,425
Outlays from civilian pay act supplemental		9,660	606

[1] Includes capital outlay as follows: 1969, $27,970,000; 1970, $30,000,000; 1971, $40,000,000.

[2] Selected resources as of June 30 are as follows:

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

	1969 actual	1970 estimate	1971 estimate
FOREST SERVICE			
Personnel compensation:			
Permanent positions	116,227	132,495	138,560
Positions other than permanent	29,456	28,253	29,647
Other personnel compensation	7,793	7,466	7,431
Special personal service payments	1,753	537	537
Total personnel compensation	155,229	168,751	176,175
Personnel benefits: Civilian employees	14,469	15,550	16,208
Benefits for former personnel	22	15	15
Travel and transportation of persons	7,147	6,450	7,000
Transportation of things	9,015	7,300	8,000
Rent, communications, and utilities	6,172	4,500	6,500
Printing and reproduction	1,732	1,500	2,500
Other services	25,023	20,425	17,415
Supplies and materials	14,255	12,500	13,000
Equipment	5,893	4,500	6,000
Lands and structures	9,048	7,100	8,000
Investment and loans	2	1	5
Grants, subsidies, and contributions	18,146	20,510	18,700
Insurance claims and indemnities	58	30	50
Subtotal	266,211	269,132	279,568
Quarters and subsistence charges	−1,384	−1,320	−1,450
Total obligations, Forest Service	264,827	267,812	278,118
ALLOTMENT TO DEPARTMENT OF THE INTERIOR			
Personnel compensation:			
Permanent positions	290	289	311
Positions other than permanent	268	304	323
Other personnel compensation	8	7	8
Total personnel compensation	566	600	642
Personnel benefits: Civilian employees	33	37	41
Travel and transportation of persons	65	70	72
Transportation of things	29	28	31
Rent, communications, and utilities	11	11	13
Printing and reproduction	2	2	3
Other services	252	177	249
Supplies and materials	46	44	60
Equipment	28	26	37
Total obligations, Department of the Interior	1,032	995	1,148
Total obligations	265,859	268,807	279,266

PERSONNEL SUMMARY

FOREST SERVICE			
Total number of permanent positions	13,358	13,746	14,154
Full-time equivalent of other positions	5,274	4,897	5,138
Average number of all employees	17,588	17,762	18,401
Average GS grade	7.9	8.0	8.0
Average GS salary	$9,095	$10,106	$10,106
Average salary of ungraded positions	$7,451	$7,716	$7,716
ALLOTMENT TO DEPARTMENT OF THE INTERIOR			
Total number of permanent positions	51	51	51
Full-time equivalent of other positions	48	53	55
Average number of all employees	80	83	87
Average GS grade	8.6	8.6	8.6
Average GS salary	$9,744	$10,682	$10,689
Average salary of ungraded positions	$6,964	$7,308	$7,550

Proposed for separate transmittal, existing legislation:

FOREST PROTECTION AND UTILIZATION

PROGRAM AND FINANCING (IN THOUSANDS OF DOLLARS)

	1969 actual	1970 estimate	1971 estimate
Program by activities: Forest land management: Figthing forest fires (costs—obligations)		21,000	
Financing: Budget authority (proposed supplemental appropriation)		21,000	
Relation of obligations to outlays:			
Obligations incurred, net		21,000	
Outlays		21,000	

FOREST PROTECTION AND UTILIZATION

	Forest Land Management	Forest Research	State and Private Forestry Cooperation	Total
Appropriation Act, 1970 ..... a/	$192,810,000	$42,137,000	$22,729,000	$257,676,000
Budget estimate, 1971	211,561,000	45,066,000	21,939,000	278,566,000
Increase in appropriation	+18,751,000	+2,929,000	-790,000	+20,890,000
Adjustment to 1970 appropriation:				
Appropriation Act, 1970 ..... a/	192,810,000	42,137,000	22,729,000	257,676,000
Transfer to General Services Administration for space rental	-293,000	-2,000	- -	-295,000
Proposed supplemental for pay costs	+8,271,000	+1,785,000	+210,000	+10,266,000
Adjusted appropriation, 1970	200,788,000	43,920,000	22,939,000	267,647,000
Budget estimate, 1971	211,561,000	45,066,000	21,939,000	278,566,000
Change in 1971 program level	+10,773,000	+1,146,000	-1,000,000	+10,919,000

a/ In addition, $700,000 is available by transfer from Cooperative Range Improvements.

SUMMARY OF INCREASES AND DECREASES
(On basis of adjusted appropriation)

	1970 Available	1971 Estimate	Increase or decrease
Forest land management:			
Sales administration and management -- To increase harvest in the regular timber sale program by 230 million board feet; to administer the harvest of additional 250 million board feet of commercial thinning and salvage material; and for increased costs of inventory and management plan preparation	$47,050,000	$52,310,000	+$5,260,000
Reforestation and timber stand improvement -- To accelerate the total net timber growth and to raise both the short-term and long-term sustainable harvest from National Forests	16,535,000	19,412,000	+2,877,000
Recreation-public use -- To supervise increased recreation use and operate, cleanup, and maintain recreation areas and to upgrade sanitation systems to alleviate existing or potential water pollution problems	39,093,000	42,225,000	+3,132,000
Range improvements -- To provide fencing, water developments and other improvements required to accelerate improvement of range conditions and increase forage production in areas of low income and critical under-employment	3,028,000	3,678,000	+650,000
Construction and maintenance of improvements for fire and general purposes (including communications) -- To correct water pollution at 24 critical sites	9,517,000	10,056,000	+539,000
Payments to Employees' Compensation Fund -- To increase amount needed to reimburse the Employees' Compensation Fund	1,100,000	1,456,000	+356,000

SUMMARY OF INCREASES AND DECREASES -- continued	1970 Available	1971 Estimate	Increase or decrease
Insect and disease control -- To purchase Zectran, a non-persistent, carbamate insecticide that will be used as a substitute for DDT to control spruce budworm	$9,846,000	$11,346,000	+$1,500,000
Land classification, adjustments, and surveys -- Decrease is due to the need to hold Federal expenditures to a minimum	6,919,000	6,769,000	-150,000
Water resource development related activities -- Decrease is due to the need to hold Federal expenditures to a minimum	7,500,000	4,109,000	-3,391,000
All other Forest land management:			
Wildlife habitat management	4,642,000	4,642,000	- -
Range management	6,571,000	6,571,000	- -
Range revegetation	3,252,000	3,252,000	- -
Soil and water management	6,317,000	6,317,000	- -
Mineral claims, leases, and special uses	4,633,000	4,633,000	- -
Forest fire protection	29,210,000	29,210,000	- -
Fighting forest fires	4,275,000	4,275,000	- -
Acquisition of lands, Weeks Act	1,300,000	1,300,000	- -
TOTAL, Forest land management	200,788,000	211,561,000	+10,773,000
Forest Research:			
Timber management research -- To strengthen research on techniques for intensive timber culture; to accelerate research on forest regeneration and seed problems; and to speed research on prediction of timber growth and yield	10,125,000	10,319,000	+194,000
Watershed management research -- To accelerate research on techniques to control sedimentation on forested and logged watersheds in Alaska and Idaho	4,341,000	4,416,000	+75,000
Forest products utilization research -- To strengthen research program on new wood pulping processes and on improved utilization of wood-derived wastes	8,057,000	8,227,000	+170,000
Forest engineering research -- To strengthen a cooperative research program with industry for development of bark-chip separation and segregation process required for whole tree utilization systems and for research for mechanization of regeneration and harvesting systems to increase productivity of rural woods workers and help meet timber supply goals in the South	909,000	1,080,000	+171,000
Forest survey -- To accelerate and intensify national and regional inventories of forest resources to determine ways of providing timber supplies needed to meet the Nation's housing and other economic goals	2,680,000	3,115,000	+435,000

SUMMARY OF INCREASES AND DECREASES -- continued

	1970 Available	1971 Estimate	Increase or decrease
Forest research: (continued)			
Forest economics research -- To evaluate opportunities for increasing production of timber and associated benefits on different classes of ownership	$1,097,000	$1,269,000	+$172,000
Forest research construction -- Decrease is due to non-recurring construction projects	71,000	- -	-71,000
All other research:			
Range management research	1,420,000	1,420,000	- -
Wildlife habitat research	1,238,000	1,238,000	- -
Forest recreation research	904,000	904,000	- -
Forest fire research	3,821,000	3,821,000	- -
Forest insect research	4,783,000	4,783,000	- -
Forest disease research	2,810,000	2,810,000	- -
Forest products marketing research	1,664,000	1,664,000	- -
TOTAL, Forest research	43,920,000	45,066,000	+1,146,000
State and private forestry cooperation:			
Cooperation in forest management and processing -- To increase availability of technical assistance to loggers, mill operators, other processors of timber products, and private non-industry forest owners in areas having good potential for increasing the production of softwood sawtimber	4,130,000	4,950,000	+820,000
General forestry assistance -- To carry out needed measures to increase softwood timber supplies	2,027,000	2,207,000	+180,000
Cooperation in forest fire control -- Decrease is due to the need to hold Federal expenditures to a minimum	16,469,000	14,469,000	-2,000,000
Cooperation in forest tree planting	313,000	313,000	- -
TOTAL, State and private forestry cooperation	22,939,000	21,939,000	-1,000,000
TOTAL, FOREST PROTECTION AND UTILIZATION	267,647,000	278,566,000	+10,919,000

PROJECT STATEMENT
(On adjusted appropriation basis)

Project	1969	1970 estimate	1971 estimate	Increase or decrease
FOREST LAND MANAGEMENT:				
National Forest protection and management:				
(1) Timber resource management:				
(a) Sales administration and management	$38,387,902	6/ $47,050,000	$52,310,000	+$5,260,000
(b) Reforestation and stand improvement	1/ 14,361,931	6/ 16,535,000	19,412,000	+2,877,000
(2) Recreation-public use	1/ 37,964,478	6/ 39,093,000	42,225,000	+3,132,000
(3) Wildlife habitat management	1/ 4,237,015	4,642,000	4,642,000	- -
(4) Range resource management:				
(a) Management	7,250,980	6,571,000	6,571,000	- -
(b) Revegetation	2,433,400	3,252,000	3,252,000	- -
(c) Improvements	1/ 3,197,236	6/ 3,728,000	4,378,000	+650,000
(5) Soil and water management	1/ 5,960,921	6/ 6,317,000	6,317,000	- -
(6) Mineral claims, leases, and special uses	4,742,905	4,633,000	4,633,000	- -
(7) Land classification, adjustments, and surveys 2/	6,621,537	6/ 6,919,000	6,769,000	-150,000
(8) Forest fire protection	1/ 26,728,812	6/ 29,210,000	29,210,000	- -
(9) Construction and maintenance of improvements for fire and general purposes (including communications)	1/ 10,813,537	6/ 9,517,000	10,056,000	+539,000
(10) Payments to Employees' Compensation Fund	1,118,131	1,100,000	1,456,000	+356,000
Subtotal	163,818,785	178,567,000	191,231,000	+12,664,000
Amount advanced from Cooperative range improvements	700,000	700,000	700,000	
Subtotal, National Forest protection and management	163,118,785	177,867,000	190,531,000	+12,664,000
(11) Water resource development related activities	8,303,768	6/ 7,500,000	4,109,000	-3,391,000
(12) Fighting forest fires	23,285,198	3/ 4,275,000	4,275,000	- -
(13) Insect and disease control 4/	1/ 9,335,009	9,846,000	11,346,000	+1,500,000
(14) Acquisition of lands, Weeks Act	1,296,665	1,300,000	1,300,000	- -
Unobligated balance	5/ 3,314,512	- -	- -	- -
Total, Forest Land Management	208,653,937	200,788,000	211,561,000	+10,773,000
FOREST RESEARCH:				
Forest and range management research:				
(15) Timber management research	9,313,088	6/ 10,125,000	10,319,000	+194,000
(16) Watershed management research	1/ 4,057,391	6/ 4,341,000	4,416,000	+75,000
(17) Range management research	1,460,038	1,420,000	1,420,000	- -
(18) Wildlife habitat research	1,183,273	1,238,000	1,238,000	- -
(19) Forest recreation research	785,751	904,000	904,000	- -
Subtotal, Forest and range management research	16,799,541	18,028,000	18,297,000	+269,000

Project	1969	1970 estimate	1971 estimate	Increase or decrease
FOREST RESEARCH -- continued				
Forest protection research:				
(20) Forest fire research	3,248,672	3,821,000	3,821,000	- -
(21) Forest insect research	4,205,183	4,783,000	4,783,000	- -
(22) Forest disease research	2,614,187	2,810,000	2,810,000	- -
Subtotal, Forest protection research	10,068,042	11,414,000	11,414,000	- -
Forest products and engineering research:				
(23) Forest products utilization research	7,195,221	8,057,000	8,227,000	+170,000
(24) Forest engineering research	822,057	909,000	1,080,000	+171,000
Subtotal, Forest products and engineering research	8,017,278	8,966,000	9,307,000	+341,000
Forest resource economics research:				
(25) Forest survey	2,388,123	2,680,000	3,115,000	+435,000
(26) Forest products marketing research	1,099,611	1,664,000	1,664,000	- -
(27) Forest economics research	1,591,894	1,097,000	1,269,000	+172,000
Subtotal, Forest resource economics research	5,079,628	5,441,000	6,048,000	+607,000
(28) Forest research construction	- -	6/ 71,000	- -	-71,000
Unobligated balance	111,309	- -	- -	- -
Total, Forest Research	40,075,798	43,920,000	45,066,000	+1,146,000
STATE AND PRIVATE FORESTRY COOPERATION:				
(29) Cooperation in forest fire control	14,339,806	16,469,000	14,469,000	-2,000,000
(30) Cooperation in forest tree planting	304,872	313,000	313,000	- -
(31) Cooperation in forest management and processing	3,543,555	4,130,000	4,950,000	+820,000
(32) General forestry assistance	1,666,638	2,027,000	2,207,000	+180,000
Unobligated balance	74,129	- -		
Total, State and Private Forestry Cooperation	19,929,000	22,939,000	21,939,000	-1,000,000
Total available or estimate	268,658,735	267,647,000	278,566,000	+10,919,000
Proposed supplemental for increased pay costs	- -	-10,266,000		
Transferred to General Services Administration	+546,265	+295,000		
Total appropriation	269,205,000	257,676,000		

1/ Includes following reprograming made to cover California flood damage repairs:

FOREST LAND MANAGEMENT:	
National Forest protection and management:	
Timber resource management, reforestation and stand improvement	$15,000
Recreation-public use	446,000
Wildlife habitat management	15,700
Range resource management, improvements	37,300
Soil and water management	340,000
Forest fire protection	100,000
Construction and maintenance of improvements for fire and general purposes (including communications)	516,000
Subtotal	1,470,000
Insect and disease control	-1,500,000
FOREST RESEARCH:	
Forest and range management research, Watershed management research	30,000

2/ Includes allocation to the Department of the Interior, Geological Survey: 1969, $270,000; 1970, $270,000; 1971, $270,000.

3/ Excludes proposed supplemental for Forest Land Management, fighting forest fires -- $21 million.

4/ Includes allocation to the Department of the Interior, Bureau of Land Management: 1969, $939,000; 1970, $725,000; 1971, $877,700.

5/ Includes fiscal year 1969-1970 supplemental of $460,000 for timber sale acceleration which was obligated in fiscal year 1970 (PL 91-47, July 22, 1969). Also, includes $1.3 million emergency fire fighting funds.

6/ Excludes following reprograming proposed as a result of savings due to construction deferrals pursuant to President's directive of September 4, 1969, and need for additional funds because of Wisconsin tornado, Hurricane Camille, and California floods:

	Construction Cutback Savings	Proposed for Repairs Due to Natural Disasters
National Forest protection and management:		
Timber resource management:		
(a) Sales administration and management		$162,000
(b) Reforestation and stand improvement		440,000
Recreation-public use	$1,004,000	740,000
Range resource management, improvements		108,000
Soil and water management		309,000
Land classification, adjustments, and surveys		48,000
Forest fire protection		79,000
Construction and maintenance of improvements for fire and general purposes (including communications)	251,000	27,000
Water Resource Development Related Activities	658,000	
Total	1,913,000	1,913,000

Includes following proposed adjustments:

	Construction Cutback Savings	Proposed to be Applied to 1970 Pay Act Costs
National Forest protection and management:		
Timber resource management, sales administration and management		$510,000
Recreation-public use	$172,000	172,000
Construction and maintenance of improvements for fire and general purposes (including communications)	98,000	98,000
Water Resource Development Related Activities	510,000	
Forest and range management research:		
Timber management research		642,000
Watershed management research		218,000
Forest research construction	860,000	
Total	1,640,000	1,640,000

Mrs. HANSEN. You have requested an increase of $2,877,000 for reforestation and timber stand improvement. What percent of the need is this going to meet?

Mr. CLIFF. I am going to ask Mr. Nelson to respond to these questions on forest land management.

Mr. NELSON. Madam Chairman, I can't give you an exact percentage figure on that, but it is a very small percentage of our needs for reforestation and stand improvement.

Mrs. HANSEN. You might restate your total needs.

Mr. NELSON. Based on our latest inventory, we have needs in the national forest for reforesting 4,788,254 acres. We have needs for releasing of young trees on 4,282,739 acres, and we have 9,122,746 acres of overstocked young timber that needs timber stand improvement treatment, if we were to get on with doing a real forestry job.

This particular item is very important, if we are going to meet the supply demands in the years ahead. As you mentioned this morning, you have to make the investment now, if you are going to harvest some pulpwood from a tree that is planted this year; it takes perhaps 20 years before you get your first harvest, which might be pulpwood. This $2,800,000 increase is in the right direction, but it is pretty small in relation to the total job that needs to be done. Investment in this phase of forestry is the key, meeting not only long term but also short term demands for wood. Allowable cut is based on growth. Idle or low production acres don't produce growth. Growth resulting from planting or treating a forest can be cut from other acres in the near future.

In fact, based upon our national forest program that we have talked about from time to time that was prepared more than 8 years ago, the reforestation and timber stand improvement as of 1970 would be only at 39.9 percent of what we indicated 8 years ago was really needed to practice intensive forestry. The 1971 budget will place it down to only 35.4 percent of recommended needs.

Mrs. HANSEN. Insert in the record the acres that had reforestation and the amount spent in this 8-year program to date.

(The information follows:)

ACRES ACCOMPLISHED AND COSTS OF REFORESTATION AND STAND IMPROVEMENT PROTECTION AND MANAGEMENT FUNDS, FISCAL YEAR 1963-70 INCLUSIVE

Fiscal year	Acres reforestation	Obligations	Acres stand improvement	Obligations
1963	114,578	$8,856,000	328,953	$7,197,000
1964	105,122	9,515,000	185,220	4,498,000
1965	119,619	10,132,002	181,051	4,149,000
1966	114,600	9,474,666	187,927	4,835,000
1967	115,981	9,598,057	194,033	5,104,000
1968	107,525	8,739,157	143,521	4,228,000
1969	112,455	9,456,634	122,432	3,613,000
1970[1]	110,000	10,385,000	125,000	4,375,000
Total	899,880	76,156,516	1,468,137	37,999,000

[1] Estimate.

FOREST MANAGEMENT

Mrs. HANSEN. If you do not properly manage your forests your requests to purchase more lands do not have a sound basis.

Mr. NELSON. I might add a little bit further to my statement on reforestation and stand improvement. If the work I mentioned were done in planting, release, and thinning, there would be an average annual increased growth. This would result in about 1,154 million cubic feet of timber, or approximately 5.8 billion board feet annually.

Mrs. HANSEN. Don't you think you are going to need this timber?

Mr. NELSON. Certainly.

Mrs. HANSEN. Don't you think you should be moving a little faster?

Mr. CLIFF. We are going to need more than that. The report you asked us to put in the record will show that in order to meet the proportion of housing goals that the national forest will be called upon to supply we should increase the output from the national forest over 1968 levels by 7 to 8 billion board feet of timber by 1980. Mr. Nelson has indicated that, by doing the treatment work that he has indicated here, we could increase the growth by about 5.8 billion. We will have to do other things. We will have to plant genetically improved strains of trees. We will have to reduce the loss to insects and disease and fire.

Mrs. HANSEN. That is why we want that laboratory at Corvallis.

Mr. CLIFF. If the national forests come even close to meeting the demands such as housing that are being predicted by others, then we will have to do a lot more things than we are doing now, and do them more intensively. We have the capacity to do this, if we are willing to make the investment.

Mr. NELSON. The growth on the average acre in need of treatment can be increased by 315 board feet per acre per year. This is an indication of the value of treating; the benefit of doing a forestry job on forested acres.

Mr. WYATT. Do we have in the record the cost of the total reforestation, thinning, and salvage? Is that figure in the record?

Mr. CLIFF. We will put it in the record.

(The information follows:)

Latest work inventory estimates on intensifying management on the National Forests are 18,193,739 acres with an estimated (current) cost of $866,174,000. Average annual increased growth which would result is 1,154,406,000 cubic feet of timber (approximately 5.8 billion board feet annually—local scale). It would require about 25 years to complete this backlog of work. A breakdown is:

Kind of work	Acres	Cost	Annual increase million cubic feet	Time element
Reforestation	4,788,254	$387,277,000	480,159	1971–85
Release	4,282,739	79,018,000	177,082	1971–95
Thinning	9,122,746	419,879,000	497,165	1971–95
Total	18,193,739	886,174,000	1,154,406	1971–95

INVESTMENT IN RESEARCH

Mr. WYATT. Going from 5 billion additional feet that is predictable now to the 8 billion feet that we are going to need, by total reforesta-

tion, and coming up to our capability in thinning and salvaging, going from that 5 billion to 8 billion is something that is dependent upon additional investment in research is it not, Chief?

Mr. CLIFF. That is correct.

PROPOSED EMPLOYMENT PROGRAM

Mr. REIFEL. May I ask a question in connection with reforestation? With the experience you have had with the Job Corps and prior to that the CCC Corps, with the child labor laws and the increasing cost in wages, industries, and business that can employ young people, graduating or out of school during the summer, could the Forest Service gear itself up to take in high school teachers, men and women, and kids out of school, boys and girls, and provide an opportunity not in education but to get out and do some reforesting and things that need to be done, so as to give them something, an opportunity for an emotional investment in land and trees? I haven't heard this discussed anywhere for that particular purpose, and nothing else, not to train them in reading and writing, but just to give them an opportunity to go into forests of our country, to help improve it, and give them enough money so they can pay their expenses there and back. I think at times the young people I talk to, that is all they want because there is nothing else they can do except stay around home and drag the main street as they call it with their cars after 10 o'clock at night. Would you comment on that just a little bit?

Mr. CLIFF. The Forest Service has demonstrated on several occasions that we have the capacity to manage this kind of an employment program. The Civilian Conservation Corps in the depression years was a good demonstration of using unemployed youth for doing useful work in the forest. This was a very successful program from many standpoints. We have had several opportunities to employ more mature unemployed people. A few years ago we had the accelerated public works program where we got a great deal of very valuable work done by offering employment to unemployed adults.

The Job Corps that we are now engaged in is not as well suited to work production as the Civilian Conservation Corps, because it is oriented strongly toward education and training. The boys spend half of their time in the classroom, and then the jobs that they are doing out of the classroom are oriented toward training in skills which will improve their employabilty. But we have demonstrated that we can handle this kind of a program.

There is no question but what there is a big backlog of work that could be done, had we the opportunity to match the work with the people. We would welcome this kind of an opportunity, if it should ever come our way.

All of the work can't be done with the kind of labor you are talking about. Some of our work can't be done in the summer months, for example. Tree planting is one of these jobs that has to be done either in the fall or in the early spring, or during the school year. There is work in the more rugged portions of the country that might require the use of skilled woodsmen rather than trainees. I wouldn't want to try to accomplish all of this work with untrained seasonal employees of the kind you mentioned.

Mr. REIFEL. I think we as a Nation have got to find places where through the summer, as soon as school is out, and until school starts in the fall, where young people, and not only boys but girls could work—I don't know how you would do it but it seems to me there are opportunities.

When I was up visiting either Angeles Forest or the forest there near San Diego, the womens' clubs were making quite a contribution planting flowers, trees, or something to contribute to the improvement in appearance of the camps near the forest and, if older women can do it, it looks like younger women of high school age, who have nothing to do through the summer, would have an opportunity to make a contribution.

I think even if it comes or approaches made work, it would be a lot cheaper in the long run than some of the things that can happen in the summer with nothing for the young people to do.

Mrs. HANSEN. I think you should develop a program with the Bureau of Indian Affairs so that young unemployed Indians could work on these undermanaged lands.

Mr. CLIFF. This is an opportunity. We are working with Indian groups. We hire a great many of them on the firefighting crews in the summer, and they are very good. We are working with the Bureau of Indian Affairs and with South Dakota State University to set up a training program for Indian youth at the university. I am sure you are aware that there is a youth conservation bill before the Congress right now that would do some of the things that you are talking about. I think it has already passed the Senate. This is designed to hire both young men and young women in conservation work during the off-school season on a pilot plant basis.

Mr. REIFEL. I think you would be ideally suited by experience and by the part of the land you have to work with. You could make a real contribution to forest land management.

FOREST LAND MANAGEMENT

Mrs. HANSEN. Insert pages 20 through 93 of the justifications in the record.

(The pages follow:)

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS

National Forest Protection and Management
(includes Projects (1) through (10) on following pages)

State	FY 1970 estimate	FY 1971 estimate	Change
Alabama	$1,274,750	$1,430,000	$155,250
Alaska	3,684,630	3,976,000	291,370
Arizona	8,545,730	9,103,000	557,270
Arkansas	3,907,750	4,429,000	521,250
California	32,522,460	34,503,000	1,980,540
Colorado	8,164,100	8,563,000	398,900
District of Columbia	7,539,790	7,685,000	145,210
Florida	1,875,620	2,058,000	182,380
Georgia	1,045,550	1,131,000	85,450
Idaho	14,304,990	15,285,000	980,010
Illinois	690,700	704,000	13,300
Indiana	356,490	363,000	6,510
Kansas	113,540	116,000	2,460
Kentucky	1,181,060	1,262,000	80,940
Louisiana	1,474,460	1,604,000	129,540
Maine	51,370	52,000	630
Maryland	184,700	189,000	4,300
Michigan	3,395,530	3,592,000	196,470
Minnesota	3,933,150	4,129,000	195,850
Mississippi	2,104,260	2,391,000	286,740
Missouri	2,200,740	2,293,000	92,260
Montana	10,275,660	11,013,000	737,340
Nebraska	501,680	512,000	10,320
Nevada	1,672,850	1,740,000	67,150
New Hampshire	927,350	945,000	17,650
New Mexico	6,431,180	6,900,000	468,820
New York	55,550	56,000	450
North Carolina	2,172,500	2,280,000	107,500
North Dakota	307,170	313,000	5,830
Ohio	274,030	279,000	4,970
Oklahoma	337,210	433,000	95,790
Oregon	21,314,160	23,729,000	2,414,840
Pennsylvania	1,163,430	1,223,000	59,570
Puerto Rico	56,300	57,000	700
South Carolina	1,420,960	1,530,000	109,040
South Dakota	2,079,460	2,163,000	83,540
Tennessee	1,283,900	1,367,000	83,100
Texas	1,462,340	1,600,000	137,660
Utah	7,436,920	7,773,000	336,080
Vermont	499,920	510,000	10,080
Virginia	2,112,300	2,222,000	109,700
Washington	10,107,830	11,183,000	1,075,170
West Virginia	1,687,630	1,793,000	105,370
Wisconsin	2,096,210	2,232,000	135,790
Wyoming	4,339,090	4,520,000	180,910
Total	178,567,000	191,231,000	12,664,000

Project (1a)

TIMBER RESOURCE MANAGEMENT - Sales administration and management

1969	$39,351,000
1970	47,050,000
1971	52,310,000
Increase	+5,260,000

A net increase of $5,260,000 is needed as follows:

(1) $5,904,000 increase in regular timber sale program will provide for an increased harvest of 230 million board feet. Costs have increased because the standard of work in relation to environmental quality and other land uses have been upgraded. Need for soil scientists, landscape architects, ecologists, and other specialists in the timber field is increasing rapidly. As the program progresses, timber sale work has been moved into more remote and difficult areas.

(2) $396,000 increase to cover increased costs of inventory and management plan preparation of commercial National Forest land.

(3) $1,040,000 decrease in the commercial thinning and salvage sale program.

(a) Administer the harvest of an additional 250 million board feet of commercial thinning and salvage material. The harvest program will increase from 450 million feet in fiscal year 1970 to 700 million feet in fiscal year 1971.

(b) The commercial thinning and salvage sale preparation program will decrease from 895 million board feet in fiscal year 1970 to 600 million board feet in fiscal year 1971.

The total program for fiscal year 1971, compared with 1969 and 1970, follows:

	1969	1970	1971	Increase or decrease
		(in thousands)		
Regular program				
Harvest	$15,100	$16,375	$20,686	+$4,311
Sale preparation	19,618	22,225	23,818	+1,593
Enforcement of Log Export Act	- -	495	495	- -
Thinning and salvage				
Harvest	1,035	1,427	2,216	+789
Sale preparation	1,334	4,224	2,395	-1,829
Timber inventories and management plans	2,264	2,304	2,700	+396
Total	39,351	47,050	52,310	+5,260

The following tabulation reflects workload and cost information for fiscal years 1969, 1970 and 1971. The unit cost for the fiscal year 1971 reflects a careful analysis of the cost of doing the timber sale and harvest job which is designed to protect the Government's interest and would be fair to timber purchasers. The unit cost for 1969 and 1970 does not reflect fully the cost of the time of soil scientists, ecologists, and other specialists who contributed time from their related resource activities to help maintain higher standards required and to meet the demand for accelerated timber sales in those years.

Project (1a)

	1969	1970	1971
(1) Regular program			
(a) Harvest			
Million board feet	11,438	12,500	12,730
Cost per thousand board feet	$1.32	$1.31	$1.63
Total cost (in thousands)	$15,100	$16,375	$20,686
(b) Sale preparation			
Million board feet	11,604	12,795	11,795
Cost per thousand board feet	$1.69	$1.74	$2.02
Total cost (in thousands)	$19,618	$22,225	$23,818
(c) Enforcement of Log Export Act	- -	$495	$495
(2) Thinning and salvage			
(a) Harvest			
Million board feet	345	450	700
Cost per thousand board feet	$3.00	$3.17	$3.17
Total cost (in thousands)	$1,035	$1,427	$2,216
(b) Sale preparation			
Million board feet	460	895	600
Cost per thousand board feet	$2.90	$4.72	$3.99
Total cost (in thousands)	$1,334	$4,224	$2,395
(3) Timber inventories and management plans			
Thousands of acres	9,600	9,600	9,600
Cost per acre	$0.24	$0.24	$0.28
Total cost (in thousands)	$2,264	$2,304	$2,700

During the fall of 1968 and spring of 1969, lumber and plywood prices rose at an alarming rate. At the President's request, the Forest Service offered an additional 1.1 billion board feet above the regular programed level as authorized and funded by the budget supplement of fiscal year 1969 and budget amendment for fiscal year 1970. This consisted of 745 million feet of timber in the regular sales program chargeable against the annual allowable cut and 435 million feet of sales in the thinning and salvage program.

The volume offered in the sale preparation program will decrease for fiscal year 1971.

The Forest Service is committed to maintain timber harvesting at allowable cut levels wherever possible and to accelerate offerings of timber not normally included under allowable cut levels (thinning and salvage material).

It is planned to sell 11.8 billion board feet of regular material and 0.6 billion board feet of thinning and salvage material, or a total of 12.4 billion board feet. This will cost $26,213,000.

It is planned to harvest 12.7 billion board feet of regular material and .7 billion board feet of thinning and salvage material, or a total of 13.4 billion board feet. This will cost $22,902,000, or $5,100,000 over fiscal year 1970.

Returns to the Treasury from the timber harvest program will continue to increase. The following tabulation shows receipts from the harvest of National Forest timber:

Project (1a)

Fiscal Year	Receipts (in millions)
1964	$128.0
1965	138.8
1966	164.9
1967	172.8
1968	205.6
1969	306.8
1970	336.7 (estimated)
1971	371.4 (estimated)

Based on the above tabulation, each dollar of program cost for 1971 will return over $7.10 to the United States Treasury in the form of timber receipts.

The program for timber inventories and management plans is at a slightly higher level than for fiscal year 1970, or $2,700,000--up $396,000 above fiscal year 1970. Working circles or management units currently are reinventoried, and new management plans developed on the basis of new data at about decade intervals. To update management plans it is necessary to supplement current inventory data. Forest type-maps will be needed for each unit where revisions are made plus records of past silvicultural treatments and measured yields. Special inventories are necessary on study areas that are subject to public hearing and withdrawals from the allowable cut. Special inventories are also necessary for mortality and catastrophe losses.

Part IV of the Foreign Assistance Act of 1968 included a section that for each of the calendar years 1969 through 1971, not more than 350 million board feet of unprocessed timber may be sold for export from the United States from Federal lands located west of the 100th meridian. The Secretary of Agriculture is responsible for enforcement of the Act on National Forest lands. This includes not only log export but holding of public hearings to determine any timber surpluses and prevention of substitution of timber restricted from export for exported non-Federal timber. Program costs have been maintained at the same level for fiscal year 1971 as for fiscal year 1970.

Examples of Recent Accomplishments

Sales administration. Volume harvested during fiscal year 1969 amounted to 11.8 billion board feet--down 0.3 billion board feet from fiscal year 1968. The decrease resulted primarily from early storms and inclement weather throughout the Rocky Mountain and Pacific Coast Areas during the 1968-69 winter and spring logging seasons. Although the harvest decreased, receipts from timber set a new high, with $306.8 million deposited in the Treasury--up $101.2 million over the preceding year. A total of 18.9 billion board feet of timber was sold on the National Forests in fiscal year 1969, which included a large sale of 8.75 billion board feet in Alaska. In addition 1.9 billion board feet was offered for which no bids were received due to the sudden drop in the market during the spring of 1969.

The record of timber cut and timber sold during the past five years is compared with the annual allowable cut in the following table:

Fiscal Year	1/ Annual Allowable Cut	Actual Volume Cut	Percent of Allowable Cut Harvested	Actual Volume Sold	Percent of Allowable Cut Sold
1965	12.0	11.2	93	11.5	96
1966	12.4	12.1	97	11.3	91
1967	12.2	10.9	89	11.6	95
1968	12.2	12.1	99	11.6	95
1969	12.8	11.8	92	18.9 2/	148

1/ As of January 1 preceding the fiscal year. Annual allowable cut includes only sawtimber for National Forests west of the Great Plains and in Alaska, and sawtimber and convertible products for National Forests in the eastern half of the United States.

2/ Includes Juneau Unit Pulp Sale in Alaska of 8.75 billion board feet.

Project (1b)

TIMBER RESOURCE MANAGEMENT - Reforestation and stand improvement

1969	$16,013,000
1970	16,535,000
1971	19,412,000
Increase	+2,877,000

A program increase of $2,877,000 is proposed.

This program increase is needed to accelerate the total net timber growth on National Forests and to raise both the short-term and long-term sustainable harvest from National Forests. This helps to avoid increases in timber product prices due to increasing demands for wood products.

Proposed programing of the increased funds requested in fiscal year 1971 follows:

	Acres	Amount
Reforestation	11,500	$1,112,600
Timber stand improvement	26,000	1,368,500
Genetic tree improvement		269,000
Nursery development		126,900

The 11,500 additional acres to be reforested will be done by planting or seeding understocked or brush-covered land capable of producing high quality timber at a good growth rate. Average annual growth increase from this acreage is estimated at 1.3 million cubic feet (approximately 6.3 million board feet) worth $293,444 at fiscal year 1969 stumpage prices.

The 26,000 additional acres to be treated by stand improvement measures will consist of releasing young conifer from overtopping brush and of thinning overcrowded young stands of both hardwoods and conifers in order to increase the growth rate of the best trees. It also includes developing methods and techniques, pilot-testing, and appraising cost/benefit relationships of forest fertilization. The average annual growth increase from this acreage is estimated at 1.4 million cubic feet (approximately 7.0 million board feet) worth $328,676.

The increase in funds for the genetic tree improvement program is designed to produce improved seed for reforestation projects. Planned conifer seed orchard establishment is nearing completion, but additional orchards of the important Appalachian hardwood species are being established.

The increase in funds for nursery development will be used to modernize facilities at five nurseries, to continue development at four recently-constructed nurseries, and to expand seedling production.

It is also estimated that this program increase will have the added benefit of providing about 45,000 man-days of employment to semiskilled workers, generally in low-income rural areas.

The proposed programing of total funds available in fiscal year 1971 (including the proposed increase) and comparison with 1970 and 1969 follows:

	1969		1970 (estimate)		1971 (estimate)	
		Acres		Acres		Acres
Reforestation	$10,548,000	112,455	$10,723,000	105,900	$11,835,600	117,400
Timber stand improvement	4,033,000	122,432	4,518,000	127,500	5,886,500	153,500
Genetic tree improvement	1,250,000		1,136,000		1,405,000	
Nursery development	182,000		158,000		284,900	
Total	16,013,000	234,887	16,535,000	233,400	19,412,000	270,900

The average annual growth increase from the total 117,400 acres to be reforested is estimated at 12.8 million cubic feet (approximately 64.0 million board feet) worth $2,995,684.

The average annual growth increase from the total 153,500 acres to be treated by stand improvement measures is estimated at 8.3 million cubic feet (approximately 41.4 million board feet) worth $1,940,455.

It is estimated that the total program will provide 325,000 man-days of employment to semiskilled workers, generally in low-income rural areas.

An estimate of the acreage to be treated in each State is shown in Table 1 at the end of this section.

The locations and descriptions of the nursery projects are shown in Table 2.

Examples of Recent Accomplishments

Reforestation. An area of 112,455 acres of National Forest land was reforested with appropriated funds in 1969 -- 83,704 by planting and 28,751 by seeding. In addition, 11,136 acres were artificially reforested by preparing the ground to promote regeneration from natural seed-fall. Other reforestation accomplishments in 1969 include:

(1) Procurement of 66,403 pounds of clean tree seed. Forest Service seed extractories processed 48,085 pounds and 18,318 pounds were purchased from commercial seed companies.

(2) Production of 96.7 million trees in 14 Forest Service nurseries.

(3) Establishment of 97 acres of new seed production areas and 288 acres of seed orchards. Forty-eight percent of the southern pine seedlings outplanted were grown from the better quality seed produced in seed production areas.

In addition to reforestation done with appropriated funds, the following work was done with funds collected under authority of the Knutson-Vandenberg Act:

	Acres
Reforested by tree planting	118,272
Reforested by seeding	23,919
Reforested by ground preparation to regenerate from natural seed fall	32,732
Total	174,923

An additional 1,899 acres of National Forest lands were reforested by other Federal and cooperative programs; 1,849 acres by planting and 50 acres by seeding.

The total area of National Forest land reforested in 1969 was 300,413 acres.

Timber Stand Improvement. An area of 122,432 acres was treated by the following cultural measures with appropriated funds in 1969:

	Acres
Thinning	50,988
Release	70,813
Pruning	631

Project (1b)

Timber stand improvement work was also done for the same purpose with Knutson-Vandenberg funds on the following acreage in 1969:

	Acres
Thinning	87,110
Release	102,215
Pruning	3,662

In addition, 50,055 acres in the Southern pine types were treated by controlled burning to control understory brush with Knutson-Vandenberg funds.

Table 1 - Estimate of Reforestation - Timber Stand Improvement Acreage to be Done
Fiscal Year 1971 -- Appropriated Funds

State	Reforestation	Timber Stand Improvement
Alabama	3,200	3,500
Arizona	300	9,000
Arkansas	10,100	8,000
California	13,000	13,000
Colorado	2,000	2,000
Florida	6,100	1,000
Georgia	700	1,000
Idaho	12,600	5,500
Illinois	1,400	300
Indiana	1,000	100
Kentucky	500	2,000
Louisiana	1,600	1,600
Maine		500
Michigan	7,000	7,000
Minnesota	7,200	8,500
Mississippi	4,200	2,500
Missouri	8,600	4,100
Montana	8,600	4,100
Nevada	100	
New Hampshire		2,500
New Mexico	3,000	7,000
New York		
North Carolina	2,000	3,500
Ohio	800	
Oklahoma	100	3,000
Oregon	7,600	31,000
Pennsylvania		3,000
South Carolina	800	
South Dakota	400	800
Tennessee	1,200	1,000
Texas	900	600
Utah	1,100	2,000
Vermont		400
Virginia	2,000	2,600
Washington	2,800	13,000
West Virginia	700	5,000
Wisconsin	4,800	3,500
Wyoming	1,000	900
Totals	117,400	153,500

Table 2 - Nursery Development Projects - Fiscal Year 1971

		Project (lb)
Coeur d'Alene Nursery, Coeur d'Alene, Idaho		
Install dust collection system	$25,500	
Minor betterment items	6,500	32,000
Mt. Sopris Nursery, Basalt, Colorado		
Temperature warning controls, pallets, platform scales, other minor betterment items	9,500	
Expansion of Working Capital Fund stock production	6,800	16,300
Lucky Peak Nursery, Boise, Idaho		
Complete water and irrigation system	12,000	
Minor betterment items	4,000	
Expansion of Working Capital Fund stock production	4,300	20,300
Humboldt Nursery, Humboldt, California		
Prepare additional seedbeds	87,600	
Pave service area	25,700	113,300
Wind River Nursery, Carson, Washington		
Complete installation of irrigation system (Bunker Hill Division)	9,000	
Minor betterment items	8,400	
Expansion of Working Capital Fund stock production	7,500	24,900
W.W. Ashe Nursery, Brooklyn, Mississippi		
Replace seed handling and treating machinery	13,000	
Expansion of Working Capital Fund stock production	7,000	20,000
J. W. Toumey Nursery, Watersmeet, Michigan		
Expand seed production area	12,800	
Construct implement storage shed	13,000	
Expansion of Working Capital Fund stock production	5,000	30,800
Eveleth Nursery, Eveleth, Minnesota		
Minor betterment items	2,600	
Expansion of Working Capital Fund stock production	4,000	6,600
Chittenden Nursery, Wellston, Michigan		
Replace seed extractory machinery	16,700	
Expansion of Working Capital Fund stock production	4,000	20,700
Total nursery development		**284,900**

Project (2)

RECREATION-PUBLIC USE

1969	$36,767,000
1970	39,093,000
1971	42,225,000
Increase	+3,132,000

A net increase of $3,132,000 is needed to accomplish expanded activities as follows:

(1) An increase of $3,598,000 to:

(a) Administer increased use of and cleanup undeveloped recreation areas.

(b) Supervise increased use and operate, cleanup, and maintain 53 new developed recreation sites with an increased capacity of 13,300 persons at one time as of start of fiscal year 1971.

(c) Administer the use of, and to keep clean areas of particularly national significance included in the National Wilderness Preservation System and four National Recreation Areas.

(2) An increase of $2,840,000 to upgrade sanitation systems at developed recreation sites to alleviate existing and forestall potential water pollution problems, and otherwise make these sites safe for visitor use.

(3) A decrease of $3,306,000 in recreation development is needed to help reduce Federal spending, especially in construction activities.

The Forest Service manages recreation use and develops recreation and visitor information facilities throughout the National Forest System. The following tabulations show, by major program segments, the total planned financing for fiscal year 1971 as compared with the preceding fiscal year (in thousands):

	1970	1971	Changes between 1970 and 1971
Operation, Maintenance, and Administration			
Cleanup and administration of undeveloped areas	$2,080	$2,708	+$628
Cleanup of developed sites	11,982	13,645	+1,663
Maintenance of developed sites	11,240	11,924	+684
Wilderness administration	2,300	2,500	+200
National Recreation Area cleanup and administration	1,670	1,783	+113
Administration, maintenance, and manning of Visitor Information Service	2,325	2,635	+310
Development			
Quality improvement of existing facilities and new construction	4,936	1,630	-3,306
Water pollution abatement	2,560	5,400	+2,840
Total	39,093	42,225	+3,132

Recreation use on the National Forests in 1971 is estimated at 192.5 million visitor-days, an increase of 35 percent over reported use of 156.6 million in fiscal year 1968. Under this request for fiscal year 1971 the new construction funding level (including Water Related Resources Development activities) for the same period will decrease 42 percent. Thus, as in the past two years, the demand for outdoor recreation opportunities on the National Forest has increased more rapidly than the level of funding to provide for the recreation use. The table below illustrates two segments of this problem.

Project (2)

Comparison of Capacity and Use Increases at Campgrounds and Picnic Grounds

	Fiscal Year					
	1965	1966	1967	1968	1969	1970 3/
Campgrounds						
Capacity (thousands of people at one time)	326.9	373.1	381.9	397.0	401.3	406.0
Increase in capacity over previous year (percent)	11.0	14.1	2.7	4.6	1.3	0.2
Measured increase in use (percent) 1/	2/	2/	7.0	8.0	8.0 3/	8.0
Picnic Grounds						
Capacity (thousands of people at one time)	98.4	105.6	108.6	111.8	113.2	116.0
Increase in capacity over previous year (percent)	3.5	7.3	3.0	3.2	1.4	0.1
Measured increase in use (percent) 1/	2/	2/	7.0	8.0	8.0 3/	8.0

1/ Based on statistical sampling at selected developed sites.
2/ Not measured in these years.
3/ Estimated.

It should be emphasized that problems associated with needs for funds for recreation are not restricted to developed sites. The fastest growing and most difficult problems are associated with dispersed types of recreation activities. Some circumstances contributing to this are:

(1) Snowmobiling, which is the fastest growing outdoor activity.
(2) New innovations in camping equipment which make recreationists independent of the usual developments.
(3) Cross country vehicles which enable people to reach areas previously little used for recreation.
(4) Lack of developed sites facilities.

In the past, developed sites have attracted most recreationists; so the problems of administration, cleanup, sanitation, and fire prevention were more easily handled. As yet, there is an uncertainty of the total consequences of this new dispersed recreation phenomenon, but the best methods are being continually seeked to assure recreationists the fullest possible freedom consistent with good resource management. There are many hazards and problems involved in these new forms of recreation. The over-snow travel by snowmobiles and skis can be hazardous because of avalanches, the danger of becoming lost, and sudden weather changes. These dangers can be minimized through avalanche warnings, directional signing, and public contacts. Public contact has been found to be the most effective way to influence the behavior of recreationists.

Operation and Maintenance

Cleanup and administering undeveloped areas, roadsides, and trails $2,708,000

An increase of $628,000 is necessary to meet the rapidly expanding dispersed recreation use. This work includes cleanup, providing for the safety of users, some minimal sanitation facilities, and regulation enforcement.

The cleanup work is costly because of the large areas involved. Oftentimes it is necessary to pack litter on horseback to road heads.

Project (2)

We have found the best approach to the total problem is through on-site visitor contact at which time visitors are encouraged to carry out their own litter. Inevitably, however, some leave the job for the Forest Service to do.

Administration and cleanup of developed sites $13,645,000

An increase of $1,663,000 is proposed to administer the use, provide for public safety and handle cleanup generated by additional use. The estimated capacity at the beginning of fiscal year 1971 for Forest Service developed sites is 700,200 persons at one time, an increase of 13,300 over that reported for fiscal year 1969.

In addition to the 700,200 persons-at-one-time capacity at Forest Service sites, there are 3,238 sites with a capacity of 594,097 which require supervision to assure proper concessionaire service to the public and compliance with special-use permits.

Because of the lack of new facilities, there are some areas where campgrounds are being utilized in excess of optimum capacity. This overuse requires more intensive administration; but despite this, it still results in a deterioration of facilities and the recreation resource. Limitation of use to design capacity is a general policy necessary to follow in more and more areas. This, of course, results in unserved and disgruntled would-be users.

Last year, in a site-by-site survey, it was determined that vandalism costs were at least $2 million at developed sites. The only solution to this and the associated problem of rowdyism is an increased intensity of administration, including new actions such as night patrols and stricter regulations enforcement.

Maintenance of developed sites $11,924,000

An increase of $684,000 is needed to meet the constantly increasing cost of maintenance, part of which is the result of vandalism. This amount will provide only current maintenance. It will not meet needs for a backlog of jobs which must eventually be done if:

(1) Worn and overloaded water and sanitation systems are to be prevented from breaking down completely.
(2) Worn tables and cracked fireplaces are to be salvaged.
(3) Attractive and commonly irreplaceable recreation sites are to be preserved from serious environmental degradation.

Administration of wilderness $2,500,000

An increase of $200,000 is proposed to cover costs resulting from increased use and to provide for essential protection and supervision of wilderness use.

The Wilderness Act requires that the Forest Service gather and disseminate information to the public to promote the use and enjoyment of the National Wilderness Preservation System and that the public be informed as to the rules and regulations governing wilderness use. The required information on ten wildernesses was prepared in fiscal year 1970, and another ten will be prepared in fiscal year 1971. Two National Forest additions to the Wilderness System were approved by Congress in calendar year 1969, and seven proposals are still pending in Congress. Public hearings on four Primitive Areas were held in 1969, and there will be seven in 1970. Field examinations on review will be started on the five remaining National Forest Primitive Areas on which hearings are planned for fiscal years 1972 and 1973.

Many of the boundaries around the 9,950,000 acres of wilderness are not adequately marked on the ground. Marking and signing of wilderness boundaries are essential to proper administration of the National Wilderness Preservation System. Boundary marking on one million acres was accomplished in fiscal year 1970; another million acres are scheduled for fiscal year 1971.

Project (2)

Public use on the 14.6 million acres of National Forest Wildernesses and Primitive Areas amounted to 5,056,200 visitor-days in calendar year 1968; it is expected to reach 6 million visitor-days by fiscal year 1970. Wilderness use must be carefully supervised, distributed, and, in some cases, limited in order to protect the wilderness resource. This requires use of on-the-ground wilderness rangers in many of the 60 National Forest Wildernesses and 28 Primitive areas. There is a significant increase each year in the number of nonconforming uses and activities within the Wilderness System which contributes to increased administrative workload. Examples of such work-generating activities include the:

(1) Controversy over timber sales adjacent to the Gore Range -- Eagle Nest Primitive Area -- Parker vs. U.S. in Colorado.
(2) Proposal to add Sylvania to National Wilderness Preservation System -- Dr. Gandt vs. U.S. in Michigan.
(3) Prospects of mining in White Cloud area adjacent to Sawtooth Primitive Area in Idaho.
(4) Multiple use development adjacent to Three Sisters Wilderness in Oregon -- French Pete Creek controversy.
(5) Mining prospects in the Boundary Waters Canoe Area in Minnesota.
(6) Citizen proposals for wildernesses including the West Chichagof-Yakobi in Alaska.

Administration and cleanup of National Recreation Areas $1,783,000

Because of their national prominence, recreation use is increasing faster on these areas than elsewhere. The proposed increase of $113,000 is necessary to meet the expected increase in visitor use at these popular recreation areas.

Visitor Information Service $2,635,000

The $310,000 increase will be used to serve public interest reflected in visitation to Visitor Information Service facilities and services. An increase in public use is anticipated for activities provided at:

(1) Existing visitor centers.
(2) Information stations.
(3) Roadside exhibits.
(4) Guided interpretive walks and auto tours.
(5) Amphitheater and campfire talks.

Additionally, there will be new facilities which have recently opened or expanded their capacity, such as the Massanutten outdoor classrooms (Virginia), Wapati Information Station (Wyoming), Wilkerson Pass Information Station (Colorado), Lolo Pass Visitor Center (Idaho), two information stations along the Talimena Scenic Drive (Oklahoma-Arkansas) and the Spruce Knob Observation Tower (West Virginia). There are fifteen new interpretive trails available for public use.

The naturalist programs provided at these locations contribute to public understanding and appreciation of natural resources and the effect of natural resources on the quality of the human environment. These programs are the foundation of the Forest Service's people-to-people environmental education activities.

Development

Quality improvement of existing facilities and new construction $1,630,000

This is a decrease of $3,306,000 below fiscal year 1970 and reflects the relative priority of this work in comparison to the necessity to assure water pollution abatement.

Quality improvement consists of replacing or upgrading structures such as water systems, toilets, tables, bathhouses, and refuse-handling facilities which are inadequate or worn out. Very little increase in capacity results from this kind of work. The benefit is, essentially, extension of service life of recreation sites and facilities and improvement of recreation experience.

New construction will continue at 35 sites resulting in an increased capacity of 1,950 people at one time. The new facilities will provide some relief at existing sites where users have been forced to double up or to crowd into undeveloped areas where the concentrated overflow use is causing vegetative loss, soil erosion, and sanitation problems.

Emphasis will be placed on completion of projects started in previous fiscal years and not completed because of fund limitations and recisions. A list of proposed projects is included in Exhibit I.

Minor Visitor Information Service facilities will be developed on National Forests and the Institute of Tropical Forestry. These are facilities which meet the visitor's need for orientation, see-and-do activities, and environmental education. Included in this category are interpretive trails, informational signs, auto tours, amphitheaters, scenic overlooks with interpretive signs, and information stations. The purpose of these facilities is to interpret the forest environment and give the visitor a better understanding of natural resource management.

The emphasis will continue to be on low cost, high quality facilities and services.

Water pollution abatement $5,400,000

An increase of $2,840,000 will permit an expanded effort to alleviate existing pollution problems at recreation facilities on the National Forests. One hundred thirty-five sites will be treated. Because of the very heavy use at major recreation complexes such as Diamond Lake and Timberline Lodge in Oregon, Lake Sinclair in Georgia, and Sherando Lake in Virginia, sewage treatment plants are necessary. At many of the smaller sites, the necessary protection can be provided by converting to vault toilets or low-capacity septic tank or sewage treatment systems. This work is urgently needed in order to properly safeguard public health and to maintain the quality of the environment. The sites to be treated are shown in Exhibit I.

Examples of Recent Accomplishments

The validity of recreation use estimates continue to be strengthened through statistical sampling and other measuring techniques. At present, sampling models have been developed for application at campgrounds; picnic grounds; swimming, boating, and observation sites, reservoirs, wilderness units, and large administrative units. In 1968 approximately 30 percent of the total recreation use of the National Forest System was gauged through these estimating techniques, and this percentage is increasing each year. These more accurate estimates provide a better basis on which to plan future needs and resource allocations.

There was a net increase in persons-at-one-time capacity of 13,300 in fiscal year 1969. It is expected to be lower in fiscal year 1970.

The rate of increase in capacity at developed sites has fallen behind the rate of increase in use for the third year in a row. The effect of this has already been felt in overuse at numerous sites.

Admission and user fees, and recreation special-use permit fees are summarized below (exclusive of $7 annual permit sales):

	FY 1968	FY 1969	Change
Recreation special-use permits	$2,266,648	$2,468,430	+$201,782
Admission and user fees	912,236	1,237,563	+325,327
Total	3,178,884	3,705,993	+527,109

Project (2)

The National Forests are providing in many areas opportunities for extended outdoor recreation seasons, and even yearlong outdoor activities. Innovative National Forests have already provided several hundred miles of marked trails for ski-touring and snowmobiling.

One of the more popular recent construction completions is a stream profile chamber at Lake Tahoe, California. Here the visitor can observe fish in their natural habitat, study the stream environment, and become acquainted with the benefits of maintaining a clean water supply.

Of major importance is the continuing emphasis being placed on making all National Forest activities and the facilities to support them more compatible and harmonious with the natural environment. The Forest Service has 150 landscape architects working in all aspects of landscape management, recreation, and resource development activities to assure that demands of the public for a quality environment and simultaneous demands for more commodity production will be met.

In 1969 the capacity of sites developed under recreation use permits increased by 27,964 persons-at-one-time. A similar increase is expected in 1970. These facilities accommodated 37 percent of developed site use, or 11 percent of the total recreation use reported for the National Forests in 1968.

EXHIBIT I -- Recreation-Public Use -- FY 1971
Capital Investments -- Distribution by National Forests

Region	Forest and Project	Quality improvement of existing sites: Sewage systems (No.)	Quality improvement of existing sites: Estimated cost	New sites, expansion, and planning: Camp and picnic sites (Capacity)	New sites, expansion, and planning: Sewage systems (No.)	New sites, expansion, and planning: Other developments (No. of sites)	New sites, expansion, and planning: Estimated cost	Total capital investment
NORTHERN	Water Pollution Abatement:							
	Kaniksu (Samowen)	1	$19,000					$19,000
	Kaniksu (Luby Bay)	1	88,000					88,000
	St. Joe (Little Boulder)	1	6,000					6,000
	Gallatin (Bakers Hole)	1	4,000					4,000
	Lolo (Seeley Lake I)	1	5,000					5,000
	Lolo (Seeley Lake II)	1	3,000					3,000
	Helena (Meriwether)	1	6,000					6,000
	Gallatin (Holland Lake)	1	14,000					14,000
	Kaniksu (Outlet)	1	3,000					3,000
	Other Projects:							
	Helena	—	16,000					16,000
	Subtotal, Northern Region	9	164,000					164,000

EXHIBIT I -- Recreation-Public Use -- FY 1971
Capital Investments -- Distribution by National Forests

Region	Forest and Project	Quality improvement: of existing sites: Sewage systems (No.)	Quality improvement: of existing sites: Estimated cost	New sites, expansion, and planning: Camp and picnic sites (Capacity)	New sites, expansion, and planning: Sewage systems (No.)	New sites, expansion, and planning: Other developments (No. of sites)	New sites, expansion, and planning: Estimated cost	Total capital investment
ROCKY MOUNTAIN	Water Pollution Abatement:							
	Arapaho (Clear Creek)	1	$80,000					$80,000
	Arapaho (Peninsula)	1	112,000					112,000
	White River (Maroon Lake)	1	125,000					125,000
	Gunnison (Taylor Park)	1	68,000					68,000
	Grand Mesa-Uncompahgre (Grand Mesa Disposal)	1	80,000					80,000
	Roosevelt (Rollinsville)	1	5,000					5,000
	Shoshone (N. Fork Shoshone)	1	3,000					3,000
	Roosevelt (Upper Poudre)	1	4,000					4,000
	Bighorn (Burgess)	1	7,000					7,000
	Medicine Bow (Snowy Range)	1	5,000					5,000
	Black Hills (Horsethief Lake)	1	3,000					3,000
	Black Hills (Pactola)	1	3,000					3,000
	Black Hills (Bob Marshall)	1	8,000					8,000
	San Juan (Lime Creek)	1	3,000					3,000
	Grand Mesa-Uncompahgre (Glacier Spring)	1	7,000					7,000
	(Spruce Grove)	1	7,000					7,000
	(Carp Lake)	1	7,000					7,000
	(Island Lake)	1	1,000					1,000
	Bighorn (Leigh Creek)	1	70,000					70,000
	Roosevelt (Redfeathers)	1	50,000					50,000
	Other Projects:							
	Black Hills	—	—	195			$14,000	14,000
	Subtotal, Rocky Mountain Region	20	648,000	195			14,000	662,000

EXHIBIT I -- Recreation-Public Use -- FY 1971
Capital Investments -- Distribution by National Forests

Region	Forest and Project	Quality improvement of existing sites: Sewage systems (No.)	Quality improvement of existing sites: Estimated cost	New sites, expansion, and planning: Camp and picnic sites (Capacity)	New sites, expansion, and planning: Sewage systems (No.)	New sites, expansion, and planning: Other developments (No. of sites)	New sites, expansion, and planning: Estimated cost	Total capital investment
SOUTHWESTERN	**Water Pollution Abatement:**							
	Apache (Big Lake)	1			1		$705,000	$705,000
	Sitgreaves (Woods Canyon)	1	$50,000					50,000
	Coconino (Oak Creek Canyon)	1	94,000					94,000
	Sitgreaves (Spillway)	1	13,000					13,000
	Coronado (Sabino Canyon)	1	20,000					20,000
	Sitgreaves (Chevelon Lake)	1	30,000					30,000
	Carson (Cepulin)	1	4,000					4,000
	Sitgreaves (Fool Hollow)	1	25,000					25,000
	Coronado (Cochise Stronghold)	1	3,000					3,000
	Coconino (Bull Pen P.G.)	1	4,000					4,000
	Gila (Lake Roberts)	1	15,000					15,000
	Carson (Trout Lakes)	1	13,000					13,000
	Minor VIS Facilities:							
	Coronado					1	6,000	6,000
	Panhandle National Grasslands					1	2,000	2,000
	Cibola					1	6,000	6,000
	Kaibab					1	3,000	3,000
	Other Projects:							
	Apache			190			9,000	9,000
	Coronado	—	30,000	—	—	—	—	30,000
	Subtotal, Southwestern Region	12	301,000	190	1	4	731,000	1,032,000

EXHIBIT I -- Recreation-Public Use -- FY 1971
Capital Investments -- Distribution by National Forests

Region	Forest and Project	Quality improvement: of existing sites: Sewage systems (No.)	Quality improvement: of existing sites: Estimated cost	New sites, expansion, and planning: Camp and picnic sites (Capacity)	New sites, expansion, and planning: Sewage systems (No.)	New sites, expansion, and planning: Other developments (No. of sites)	New sites, expansion, and planning: Estimated cost	Total capital investment
INTERMOUNTAIN	Water Pollution Abatement:							
	Fishlake (Fishlake)	1	$30,000					$30,000
	Targhee (Buffalo C.G.)	1	7,000					7,000
	Teton (Snake River)	1	73,000					73,000
	Wasatch (Box Elder)	1	25,000					25,000
	Teton (Hoback)	1	7,000					7,000
	Teton (Granite Creek)	1	8,000					8,000
	Wasatch (Brighton)	1	38,000					38,000
	Targhee (Flat Rock)	1	110,000					110,000
	Sawtooth (Little Red Fish)	1	25,000					25,000
	Sawtooth (North Alturas Lake)	1	40,000					40,000
	Dixie (Navajo Lake)	1	38,000					38,000
	Dixie (Spruces)	1	43,000					43,000
	Cache (Box Elder)	1	80,000					80,000
	Challis (Stanley Lake)	1	75,000					75,000
	Sawtooth (Wood River)	1	43,000					43,000
	Other Projects:							
	Uinta		33,000					33,000
	Regional Recreation Planning	—	—				$60,000	60,000
	Subtotal, Intermountain Region	15	675,000				60,000	735,000

EXHIBIT I -- Recreation-Public Use -- FY 1971
Capital Investments -- Distribution by National Forests

Region	Forest and Project	Quality improvement of existing sites: Sewage systems (No.)	Quality improvement of existing sites: Estimated cost	New sites, expansion, and planning: Camp and picnic sites (Capacity)	New sites, expansion, and planning: Sewage systems (No.)	New sites, expansion, and planning: Other developments (No. of sites)	New sites, expansion, and planning: Estimated cost	Total capital investment
CALIFORNIA	Water Pollution Abatement:							
	Sierra (Bass Lake)	1	$150,000					$150,000
	Inyo (June Lake Loop)	1	50,000					50,000
	Sierra (Camp Five)	1	26,000					26,000
	Lassen (Cave)	1	45,000					45,000
	Lassen (Battle Creek)	1	31,000					31,000
	Lassen (Bridge)	1	28,000					28,000
	Other Projects:							
	Cleveland			125			$28,000	28,000
	Eldorado		5,000					5,000
	San Bernardino		36,000					36,000
	Sierra (Wishon P. and C.G.)		66,000					66,000
	Tahoe		4,000					4,000
	Shasta-Trinity (Hirz Bay Complex)		190,000					190,000
	Six Rivers				1		15,000	15,000
	Regional Recreation Planning						48,000	48,000
	Sequoia	—	———	200	—		53,000	53,000
	Subtotal, California Region	6	631,000	325	1		144,000	775,000

EXHIBIT I -- Recreation-Public Use -- FY 1971
Capital Investments -- Distribution by National Forests

Region	Forest and Project	Quality improvement: of existing sites: Sewage systems (No.)	Quality improvement: of existing sites: Estimated cost	New sites, expansion, and planning: Camp and picnic sites (Capacity)	New sites, expansion, and planning: Sewage systems (No.)	New sites, expansion, and planning: Other developments (No. of sites)	New sites, expansion, and planning: Estimated cost	Total capital investment
PACIFIC NORTHWEST	Water Pollution Abatement:							
	Umpqua (Diamond Lake)				1		$500,000	$500,000
	Mt. Hood (Timberline)	1	$106,000					106,000
	Mt. Hood (Multnomah Falls)	1	13,000					13,000
	Snoqualmie (Stevens Pass)	1	11,000					11,000
	Rogue River (Fish Lake)	1	7,000					7,000
	Gifford Pinchot (Spirit Lake)	1	7,000					7,000
	Mt. Hood (Lost Lake)	1	7,000					7,000
	Gifford Pinchot (LaWisWis)	1	19,000					19,000
	Other Projects:							
	Mt. Baker				1		5,000	5,000
	Umatilla						5,700	5,700
	Ochoco						6,700	6,700
	Okanogan (Toroda Creek, Klip Chuck C.G's.)			585			80,600	80,600
	Willamette		13,600					13,600
	Mt. Baker		16,700					16,700
	Regional Recreation Planning						48,000	48,000
	Siuslaw (Siltcoos C.G.)		51,500					51,500
	Snoqualmie		1,200					1,200
	Minor VIS Facilities:							
	Snoqualmie	—	—	—	—	1	17,000	17,000
	Subtotal, Pacific Northwest Region	7	253,000	585	2	1	663,000	916,000

EXHIBIT I -- Recreation-Public Use -- FY 1971
Capital Investments -- Distribution by National Forests

Region	Forest and Project	Quality improvement of existing sites: Sewage systems (No.)	Quality improvement of existing sites: Estimated cost	New sites, expansion, and planning: Camp and picnic sites (Capacity)	New sites, expansion, and planning: Sewage systems (No.)	New sites, expansion, and planning: Other developments (No. of sites)	New sites, expansion, and planning: Estimated cost	Total capital investment
SOUTHERN	Water Pollution Abatement:							
	Georgia (Lake Sinclair)				1		$306,000	$306,000
	Cherokee (Gardens Bluff)				1		91,000	91,000
	Georgia (Winfield Scott)	1	$6,000					6,000
	Daniel Boone (Rockcastle)	1	56,000					56,000
	South Carolina (Lick Fork)	1	51,000					51,000
	Daniel Boone (Bee Rock)	1	4,000					4,000
	Florida (Wright Lake)	1	41,000					41,000
	Georgia (The Pocket)	1	4,000					4,000
	Georgia (Anna Ruby Falls)	1	4,000					4,000
	North Carolina (Cliffside)	1	9,000					9,000
	Cherokee (Mac Point)	1	2,000					2,000
	North Carolina (Sliding Rock)	1	12,000					12,000
	George Washington (Sherando)				1		60,000	60,000
	Florida (Clearwater)				1		60,000	60,000
	Mississippi (Choctaw)	1	45,000					45,000
	Texas (Ratcliff Lake)				1		88,000	88,000
	Kisatchie (Valentine Lake)	1	37,000					37,000
	Texas (Fannin Camp)	1	13,000					13,000
	Texas (Lake Marvin)	1	10,000					10,000
	Cherokee (Dennis Core)	1	11,000					11,000
	North Carolina (Mortimer)	1	4,000					4,000
	Kisatchie (Caney Lakes)				1		100,000	100,000
	Cherokee (Shook Branch)	1	30,000					30,000
	North Carolina (Silver Mine)	1	2,000					2,000
	Other Projects:							
	Jefferson (National Recreation Area, Straight Creek C.G.)					1	194,000	194,000
	Texas (Indian Mounds)			200			54,000	54,000
	Ozark (Blanchard Springs Complex--Shelter Cave Day Use)				1	1	100,000	100,000
	Daniel Boone (Cave Run #2)	—	—	—	1	—	100,000	100,000
	Subtotal, Southern Region	18	341,000	200	8	2	1,153,000	1,494,000

EXHIBIT I -- Recreation-Public Use -- FY 1971
Capital Investments -- Distribution by National Forests

Region	Forest and Project	Quality improvement of existing sites: Sewage systems (No.)	Quality improvement of existing sites: Estimated cost	New sites, expansion, and planning: Camp and picnic sites (Capacity)	New sites, expansion, and planning: Sewage systems (No.)	New sites, expansion, and planning: Other developments (No. of sites)	New sites, expansion, and planning: Estimated cost	Total capital investment
	Water Pollution Abatement:							
EASTERN	Allegheny (Twin Lakes)				1		$75,000	$75,000
	Allegheny (Loleta)				1		116,000	116,000
	Wayne-Hoosier (Iron Ridge)				1		126,000	126,000
	Hiawatha (Breevoort)	1	$5,000					5,000
	Hiawatha (Lake Michigan)	1	10,000					10,000
	Green Mountain (Hapgood)				1		88,000	88,000
	Ottawa (Black River)	1	10,000					10,000
	Hiawatha (Carp River)				1		84,000	84,000
	Nicolet (Boulder Lake)	1	10,000					10,000
	Chequamegon (Two Lakes)	1	20,000					20,000
	Nicolet (Boot Lake)	1	6,000					6,000
	Allegheny (Kennedy Springs)	1	6,000					6,000
	White Mountain (Covered Bridge)	1	4,000					4,000
	Mark Twain (Clearwater)	1	14,000					14,000
	Mark Twain (Watercrest)	1	5,000					5,000
	White Mountain (Hastings)	1	2,000					2,000
	White Mountain (Passaconaway)	1	4,000					4,000
	Mark Twain (Sycamore)	1	5,000					5,000
	White Mountain (Lower Falls)				1		55,000	55,000
	White Mountain (Sugarloaf)	1	5,000					5,000
	White Mountain (Gilead)	1	3,000					3,000
	Allegheny (Loleta)	1	11,000					11,000
	Chippewa (North Star)	1	5,000					5,000
	Monongahela (Stuart)	1	4,000					4,000
	Shawnee (Pounds Hollow)	1	6,000					6,000
	Clark (Loggers Lake)	1	12,000					12,000
	Clark (Davisville Area)	1	23,000					23,000
	Chippewa (Norway Beach)				1		85,000	85,000
	Chippewa (Mosomo Point)	1	7,000					7,000
	White Mountain (Blackberry)	1	4,000					4,000
	Nicolet (Spectacle Lake)	1	4,000					4,000
	Nicolet (Lac Vieus Desert)	1	10,000					10,000
	Superior (Trails End)	1	10,000					10,000
	Nicolet (Franklin Lake)	1	10,000					10,000
	Nicolet (Seven Mile Lake)	1	10,000					10,000

EXHIBIT I -- Recreation-Public Use -- FY 1971
Capital Investments -- Distribution by National Forests

Region	Forest and Project	Quality improvement: of existing sites: Sewage systems (No.)	Quality improvement: of existing sites: Estimated cost	New sites, expansion, and planning: Camp and picnic sites (Capacity)	New sites, expansion, and planning: Sewage systems (No.)	New sites, expansion, and planning: Other developments (No. of sites)	New sites, expansion, and planning: Estimated cost	Total capital investment
EASTERN (continued)	Water Pollution Abatement: (continued)							
	Chippewa (Deer Lake)	1	$5,000					$5,000
	Superior (Whiteface Reservoir)				1		$50,000	50,000
	White Mountain (Dugway)	1	5,000					5,000
	White Mountain (White Ledge)	1	5,000					5,000
	White Mountain (Wildwood)	1	15,000					15,000
	Ottawa (Ottawa Lake)	1	6,000					6,000
	Other Projects:							
	Monongahela (Big Bend C.G., Smoke Hole C.G., Spruce Knob P.G., Seneca Rock planning)		16,000	455			164,000	180,000
	Monongahela (Lake Sherwood C.G.)	1	110,000					110,000
	Subtotal, Eastern Region	34	387,000	455	8		843,000	1,230,000
ALASKA	Other Projects:							
	North Tongass		7,000					7,000
	Chugach		5,000					5,000
	Subtotal, Alaska Region		12,000					12,000
INSTITUTE OF TROPICAL FORESTRY	Minor VIS Facilities:							
	Caribbean					1	10,000	10,000
	TOTALS, ALL REGIONS	121	3,412,000	1,950	20	8	3,618,000	7,030,000

Note: P and C.G. - Picnic and campground
VIS - Visitor Information Center
P.G. - Picnic Ground
C.G. - Campground

Project (3)

WILDLIFE HABITAT MANAGEMENT

1969	$4,403,000
1970	4,642,000
1971	4,642,000

No program increase is proposed.

The wildlife management program for the National Forests is oriented toward the protection and enhancement of the environment for all wildlife and fish species. Special emphasis is placed upon the protection and improvement of the habitat for the 47 rare or endangered species on or near Forest Service administered lands.

Other resource activities have direct impacts on wildlife and fish habitat. Damage or destruction of the wildlife environment often results from natural or human use causes. Rehabilitating habitat, developing a better wildlife environment, and taking special management measures in preventing environmental damage are important parts of the total wildlife program.

The planned level of financing for fiscal year 1971, as compared with 1969 and 1970, is as follows:

	1969	1970	1971
		(in thousands)	
(1) Recurrent Work			
(a) Coordinating wildlife needs with other resource activities	$1,198	$1,257	$1,250
(b) Cooperating with State and Federal agencies	925	970	1,000
(c) Surveys and plans	935	980	950
(d) Maintenance of habitat improvements	361	380	387
(2) Habitat Restoration and Development			
(a) Food and cover development	319	335	300
(b) Water developments	95	90	90
(c) Wetland development	275	290	310
(d) Fish stream improvement	170	200	215
(e) Fish lake development	125	140	140
Totals	4,403	4,642	4,642

Recurrent work is the heart of the wildlife program which involves relatively fixed annual costs in relation to other resource uses and programs.

1(a) Coordination. Coordinating wildlife environmental needs in all other resource uses and activities. Wildlife biologists are assigned to all regional offices and to a number of the National Forests to give technical guidance to this activity. The intensity of coordination determines the degree to which wildlife values are protected or enhanced. The control of animal damage to other resources also requires intensive coordination.

1(b) Cooperation. Cooperating with State conservation departments, the agencies responsible for protecting wildlife and regulating the harvest of game populations, is an important part of the Forest Service wildlife program. Habitat management on the National Forests is essential to the success of State fish and game programs because habitat and wildlife populations cannot

be managed independently of each other. The States contribute a substantial share of the cost of habitat and fishing water improvements. In 1969, the States financed 52 percent of the habitat work on the National Forests. This amounts to an expenditure of over $1 million.

1(c) Surveys and plans. Evaluating wildlife, fish, and rare or endangered species habitat and preparing or revising management plans are a continuing activity which is basic to an effective wildlife program.

1(d) Maintenance. Maintaining habitat improvements already in place is a recurring job that generally takes precedence over new development work. The States share in this work under terms of cooperative agreements.

Habitat restoration and development includes a wide variety of activities designed to increase wildlife and fish production for the use and enjoyment of the public.

2(a) Food and cover. Developing either food or cover to enhance the quality of the wildlife environment. This is a broad-based program applicable on all Forest Service administered lands.

2(b) Water developments. Includes several types of projects aimed at providing drinking water for wildlife. This work is particularly important in the arid regions of the West.

2(c) Wetland developments. About 90 percent of this work consists of marshland improvement for waterfowl in the north central States and the development of greentree reservoirs along the Mississippi drainage. This work is extremely important in the total national effort to maintain waterfowl production.

2(d) Fish stream improvement. Includes removal of migration barriers, establishing in-stream improvement devices, mechanical gravel cleaning, streambank stabilization and streambank fencing. Program emphasis will be directed toward the western forests and Alaska.

2(e) Fish lake improvement. Includes development of new fishing lakes and the improvement of existing lakes. New lake development is a cooperative program with the State conservation departments.

Work accomplishments during 1969

Summary of habitat restoration and development accomplishments for 1969 is as follows:

(1) Food and cover development	214,131 acres
(2) Water development	2,577 units
(3) Wetland development	3,985 acres
(4) Fish stream improvement:	
(a) In-stream structures	528 units
(b) Barrier removal	226 units
(c) Spawnbed improvements	2,250 rods
(d) Channel fencing	1,911 rods
(e) Rough fish removal	22 miles

(5) Fish lake development:

(a) Spawnbeds and shelters	316 units
(b) Aquatic plant control	985 acres
(c) Rough fish removal	43,498 acres
(d) New fishing lakes	2,613 acres

The first osprey wildlife management area in the United States was established on the Deschutes National Forest in Oregon. The osprey is a spectacular hawk which, unlike most other hawks, feeds exclusively on fish. Osprey populations are decreasing rapidly across the United States and many experts feel that this bird will be on the endangered list in the next few years. The management area covers about 10,000 acres, with the 4,400-acre Crane Reservoir the focal point. This is a cooperative program with the Oregon State Game Commission and the Bureau of Reclamation.

Rare and endangered species continue to receive additional emphasis. At the present time, 26 of the 47 rare or endangered species on Forest Service administered lands are receiving special management attention. This is a cooperative program with the respective States, Bureau of Sport Fisheries and Wildlife, and many private conservation organizations, such as the Audubon Society. The public is demanding programs for the protection of all rare or endangered species.

The Oakwood Bottoms Greentree Reservoir on the Shawnee National Forest in Illinois continues to expand toward the final goal of 9,000 acres in 1971. This project is a superb example of coordination of resources for production of wildlife, timber, and recreation--all simultaneously, without depletion of the natural resources or scenic beauty. Oakwood bottoms is primarily managed to provide a desirable habitat for migrating and wintering waterfowl. A greentree reservoir is a hardwood timbered area that is flooded (artificially) during the growing season. The saturated soil serves to improve timber growth during the long spring and summer months. Excellent timber products are harvested from the stands of mixed oak. The decline of waterfowl for the past several years is dramatic and is of major concern throughout the country. In view of this situation, the Forest Service is emphasizing the development and maintenance of waterfowl habitat. This work is cooperatively planned with the Bureau of Sport Fisheries and Wildlife, and the State conservation departments.

Public use and enjoyment of the wildlife resources continue to grow. This use includes both hunting and fishing and appreciative uses. In calendar year 1968, the estimated public wildlife use of Forest Service administered lands amounted to:

Hunter visitor-days	14,044,000
Fisherman visitor-days	14,520,000

(The visitor-day is a unit of measure amounting to 12 hours.)

In addition, there was an estimated 10.4 million days of appreciative use which includes bird watching, wildlife photography, and trips to observe all forms of wildlife including rare and endangered species. Wildlife activities not only provide for an outdoor recreation experience and a suitable environment for all wildlife species, but it is also important from an economic standpoint. This is especially true in rural areas and communities. Estimated user expenditures for wildlife-oriented activities on the National Forests for fiscal year 1969 are as follows:

Project (3)

Activity	Days Use*	User Expenditures**
	(in millions)	
Appreciative (bird watching and photography)	10.4	52
Big-game hunting	24.1	230
Small-game hunting	8.2	49
Waterfowl hunting	1.4	9
Freshwater fishing	43.2	215
Saltwater fishing	0.2	2
Commercial salmon fishing	0.4	26
Total	87.9	583

*Days use - calculated from visitor-days use reports, using the following conversions:

(1) Each hunter averages 5 hours of hunting time per day.

(2) Each freshwater fisherman averages 4 hours of fishing per day.

(3) Each saltwater salmon fisherman averages 6 hours of fishing per day.

(4) Each bird watcher/photographer is estimated to spend 4 hours per day.

**User expenditures - based on average expenditures for sport fishing and hunting as determined in the National Survey of Fishing and Hunting. For commercial fishing, the output value is based on the value of the salmon catch of fish spawned in waters within National Forests but caught in offshore saltwater.

Project (4a)

RANGE RESOURCE MANAGEMENT

1969	$6,001,000
1970	6,571,000
1971	6,571,000

No program increase is proposed.

The purpose of this program is to manage the National Forest System ranges and provide leadership in management and development of the Nation's woodland ranges. The work consists of:

(1) Overall program formulation and execution.

(2) Conducting resource inventories and analyses.

(3) Preparing and implementing management and development plans for the 11,700 range allotments in the National Forest System.

(4) Administration of the Grazing Permit System.

(5) Supervising the management of livestock permitted to graze.

(6) Controlling unauthorized livestock use of National Forest System ranges.

(7) Maintaining cooperative relations with local, State, and national livestock associations and related agencies and groups.

(8) Providing leadership, through demonstration and through individual and group contacts, in management and development of the Nation's woodland ranges.

Of the 11,670 range allotments in the National Forest System, there are presently 4,600 on which there are intensive management plans in effect on the ground. On these allotments, there is close supervision of the livestock use; advanced management techniques such as rest-rotation grazing are employed; and needed development work is being done. Manpower requirements to accomplish this intensive management are about twice that for a protection and custodial type of management. It is estimated that, with intensive management and development, the 11,670 allotments in the National Forest System can be made to produce 75 percent more livestock and big game forage than currently is being produced. Other resource values will be proportionately increased.

In fiscal year 1969, with an estimated 4,600 allotments under intensive management, and 7,070 under extensive management, 576 man-years were employed at the tasks listed above. This includes business and clerical personnel. It does not include a very significant amount of noncompensable overtime worked by management personnel and management accomplished by the users under the guidance of Forest Service administrators. In the National Grasslands, cooperative grazing associations perform on-the-ground management, such as trespass control and supervision of grazing use in accordance with management plans. These associations also issue grazing permits to individual members, collect grazing fees, and see to compliance with the provisions and requirements of the permits.

Examples of Accomplishment in 1969

(1)	Range allotments for which an analysis was completed and a management plan prepared	475
(2)	Range allotments under intensive management (increase of 600 over 1968)	4,600
(3)	Administration of grazing permits:	
	(a) Paid	18,500
	(b) Free	50,000
	(c) Private Land	2,000
	(d) Crossing	900
(4)	Livestock permitted to graze:	
	(a) Cattle and horses (including offspring)	2,756,000
	(b) Sheep and goats (including offspring)	4,420,000

For a number of years, $50,000 has been administratively earmarked for control of noxious farm weeds on National Forest System lands. Farm weeds on these public lands have increased steadily during the past 10-15 years to the point of having become a major problem. The problem is compounded by the cross-translocation of these weeds between National Forest System lands and agricultural and other high-value private lands downstream. Water is the principal transporter of seeds from National Forest System watersheds to private lands downstream. On National Forest System lands, most of the uses and activities contribute to the problem, i.e., road construction, logging, control of wildfires and rehabilitation of burned areas, livestock grazing, hunter-recreation use, and the traveling public.

With the enactment of Public Law 90-583 (82 Stat. 1146), counties throughout the country are formulating weed control programs. County boards are already requesting the Forest Service to participate in a coordinated effort. A preview may be drawn from the planning activities of National Forest and National Grassland associated counties in Montana and parts of Idaho and Washington. Preliminary plans in these counties call for treatment of over 80,000 acres of private land annually at a cost of over half a million dollars. The Forest Service would need to treat about 10,000 acres of associated public land annually as part of the same program. The Forest Service is now treating about 600 acres annually in these areas.

Project (4b)

RANGE REVEGETATION

1969	$2,948,000
1970	3,252,000
1971	3,252,000

No program increase is proposed.

There are an estimated 7.8 million acres of rangeland in the National Forest System in need of revegetation by direct seeding and/or control of undesirable competing vegetation. These ranges are producing much less than their potential and over much of them serious loss of soil is taking place. About 4.7 million acres of the 7.8 million are in areas of economic depression and underemployment.

The range revegetation program is aimed at the dual objective of arresting soil resource depletion and restoring productive capacity. Priority is given to areas of low income and underemployment where there is a high dependency on public range resources by small livestock operators and livestock based communities.

Recent and Planned Accomplishments

	FY 1969 (accomplished)	FY 1970 (estimated)	FY 1971 (planned)
Acres revegetated:			
With appropriated funds	177,980	210,000	210,000
With permittee funds	51,028	50,000	50,000
Total	229,008	260,000	260,000

Project (4c)

RANGE IMPROVEMENTS

1969	$3,564,000
1970	3,728,000
1971	4,378,000
Increase	+650,000

An increase of $650,000 is needed to provide the fencing, water developments and other improvements required to accelerate improvement of range conditions and increase production in areas of low income and critical underemployment. The increased funds will be spent in the Four Corners and Ozark Regional Development Areas, and in other rural areas in the West and South where similar conditions of economic depression and underemployment exist.

The increased funds are to be used, for the most part, to construct an estimated 400 miles of range fences and 100 water developments. It is expected that the improved management made possible through these improvements will, in a few years, increase grazing capacity by 11,000 animal unit months. This added grazing will be available to small low income farmer-ranchers. This will make it possible to increase their base herds by an estimated 2,400 head of cattle. (The average grazing season on the National Forest in these areas is 4.6 months.) This herd increase will result in the added production and export of an estimated $240,000 of livestock products annually. These exports will generate an estimated $500,000 of economic activity in other sectors of the rural economy. The equivalent of 25 man-years of added direct employment will accrue to the small livestock operations benefited and about 50 man-years of indirect employment will be generated in the rural communities of which they are a part.

Intensive management of range allotments requires facilitating structures such as fencing and water developments. Range fences provide control over distribution of livestock and make possible such management techniques as rest-rotation. This technique provides for resting areas on a rotation basis to allow for regeneration and recovery of vigor by desirable vegetation. Water developments make more forage available to livestock and game by providing water in unused or underused areas. They also serve to prevent depletion of soil and vegetation by dispersing livestock use. Besides the construction of new improvements, by 1971, there will be about 58,500 miles of range fences and 41,500 water developments which need to be maintained to keep them effective.

Examples of Recent and Planned Accomplishments

	1969 (accomplished)	1970 (estimated)	1971 (planned)
Miles of fence constructed:			
With appropriated funds	1,650	1,700	2,100
With permittee funds	380	400	500
Total	2,030	2,100	2,600
Water developments:			
With appropriated funds	1,170	1,200	1,300
With permittee funds	330	350	400
Total	1,500	1,550	1,700

Project (5)

SOIL AND WATER MANAGEMENT

1969	$5,994,000
1970	6,317,000
1971	6,317,000

No program increase is proposed.

Total proposed fiscal year 1971 financing for this project is shown on table at end of this section.

Emphasis will continue to be given to:

(1) Resource protection requirements and design services ($1,750,000)

This activity develops the methods, criteria, and standards for determining watershed condition and trend and for rating soil and water resource hazards on National Forest System lands. This translates into what is commonly called soil and water management services and results in resource protection requirements and design services to guide multiple use management activities. As National Forest resource use is accelerated, so must soil and water management services in rural areas be increased to provide scientific guidance for management activities. Local standards will be developed to fit the wide range of resource conditions and will be updated periodically to assure they are responsive to multiple use management needs on the National Forests and National Grasslands. Among other things, this program is needed to keep clean water clean.

Included in this activity will be an acceleration in developing local soil and water resource standards for the 1,100 municipal water supply watersheds that occupy 40 million acres of valuable timber lands. Especially important are the 700 watersheds which supply municipal and domestic water to small, rural communities where the municipal water is not given adequate treatment and where, under the accelerated timber harvest program, increased timber sale activity will occur.

This effort provides the scientific underpinning and technical support services relating to soil, geology, and hydrology in meeting the many individual special and specific requests for assistance to ongoing or impending action programs by other resource management and service divisions. Such services include advice for specific situations to identify potential productivity increases and the avoidance of costly mistakes in terms of soil and water damages for:

Timber Management - reforestation, fertilization, harvest, and intermediate cuts and salvage.

Engineering - roads, highways, transmission lines, water supplies, and waste disposal.

Fire - fuel treatment and firebreaks.

Range - revegetation, stock water development, and grazing systems planning.

Recreation - developed sites, special uses, and landscape.

Lands - exchanges and purchase.

Wilderness - landscape and cover considerations.

Source information for this activity is drawn from experience and research findings and from output from the soil and water resource analysis, planning, predictions, and evaluations activity.

Examples of Accomplishments

Increasing emphasis is being placed on getting soils, geologic, and hydrologic inventory information into the early planning stages of resource management on district-wide and forest-wide basis. The Siskiyou National Forest in Oregon, for example, has developed specific management directions pertaining to road construction and logging on each of the important soil stability groups on the forest. The Olympic National Forest in Washington has developed a transportation planning procedure which incorporates much of the soil stability information provided in its soil resource inventory. The Payette and Boise National Forests in Idaho are applying reconnaissance soil and hydrologic information to a broad array of resource use and activity plans.

In the area of soil management, some 1,500 acres of young forest stands were fertilized on the North Tongass National Forest in Alaska. Joint studies conducted by the soil scientists and the foresters indicated that tree growth in this area could be greatly accelerated--up to double on selected soils and tree stands--through the addition of nitrogen. In conjunction with this pilot fertilization program, the State Fish and Game Department, the Bureau of Commercial Fisheries, and the Pacific Northwest Forest and Range Experiment Station are cooperating to monitor water quality in the area's streams as a positive check of environmental quality.

Geologic data and its interpretation is a necessary input for efficient land management planning. An increased effort is being made to utilize this science. Geological field work necessary for resource protection requirements and design services has been completed on 523,000 acres of National Forest land in the four southwest regions. This field work includes seismic probes which supply data about conditions below the earth's surface, otherwise unknown or only conjectured. This past year, the efforts were confined to the Pacific Southwest Hydrologic Survey Phase II. The geologic contribution to this study is primarily for determination of rate and direction of groundwater flow and the amount of groundwater in storage.

Resource protection requirements and design services were provided on over 400 projects covering about 781,300 acres in fiscal year 1969.

(2) Reconnaissance surveys and inventories ($1,000,000)

These management oriented surveys and inventories are designed to provide basic but limited technical information about the soils, geology, and hydrology of large areas of land in rural America. As management and development activities move at increasing rates into the remote, more difficult, and more fragile areas, the need for at least minimal levels of basic information about the watersheds becomes more critical. Such information is essential in the support of multiple use planning on a broad scale basis in the nonmetropolitan areas of the Nation.

Information provided by these reconnaissance resource surveys and inventories has and is being used to help sustain local economies. Such activities include:

(a) Development of preliminary plans for timber harvest, reforestation, range improvement, and wildlife habitat improvement.

(b) Determination of areas suitable for recreation development.

(c) Provision for resource data for watershed planning purposes in nonmetropolitan areas.

Such plans depend on sound appraisals of soil productivity potentials, the identification of soil and land stability hazards, various soil-rock-water

relationships such as permeability and moisture storage capacity determinations, and plant-soil-water-climatic relationships in various ecological communities.

Hydrologic surveys at the reconnaissance levels are primarily concerned with the prediction and evaluation of the effects of land management in broad terms, on runoff, streamflow, and sedimentation relationships. This is basic information for any management planning or evaluation effort.

Reconnaissance surveys of the water resources, including both surface and groundwater supplies, are needed to aid the development of a more positive water management program on the National Forest System lands. Sufficient geologic and hydrologic information should be available to properly assess the overall water balance at any time, determine direction of the underground flows, and aid in the solution of water rights cases.

A group of resource plans that must be provided with at least limited basic soil, geologic, and hydrologic information are the working circle timber management plans. Soil management needs and a general consideration of overall hydrologic characteristics and of the significant geologic features enter into the operability appraisals and in the development of erosion control, regeneration, and other management prescriptions. About 10 percent of the timber management working circle plans are updated each year.

Not the least important area to be benefited by sound soil, geologic, and hydrologic reconnaissance information is transportation system plans. The recognition of the stability hazards and the essential soil and water values, for example, is fundamental in the development stages of these important resource plans.

Examples of Accomplishment

In fiscal year 1969, reconnaissance surveys and inventories were conducted on 5.2 million acres. A goal of 11.7 million acres has been set for fiscal year 1971.

(3) Water quality surveillance program ($397,000)

This program includes:

(a) General evaluation on the effect of land, vegetation, and soil management practices on water.

(b) The effect of increasing public uses of water discharging from National Forest System lands.

(c) Determination of the quality of water leaving the National Forest.

The purpose of this program is to:

(a) Provide improved watershed protection through early identification of potential changes and trends in water quality that may occur in accommodating increasing use and development of resources associated with existing and accelerated programs, and new projects so that prompt adjustments or corrective action can be undertaken.

(b) Provide a sound management basis for interpretation of technical data on the effect of land use activities upon the water resource.

(c) Provide methods and procedures for evaluating and predicting effects of land management activities on water behavior and quality in rural areas. Meeting this management responsibility requires technical data on water resource. This resource may be affected by public use, by activities at administrative sites, special use areas, municipal supply watersheds, forest fires, prescribed burns, or by the surface disturbance normally connected with bridge, road, and trail construction.

The continued work of the program involves 41 surveillance stations in 19 States, and a reconnaissance survey involving selected water quality criteria for surface waters in Arizona and New Mexico. The sampling covers such diverse activities and areas as accelerated timber harvest in fragile areas, mineral developments, Boundary Water Canoe Area, and suspected pollution problem sites where people physically use the water resource. These stations are near watershed outlets and record data on physical (temperature, turbidity, and flow), chemicals (dissolved solids and gases), biological, bacteriological, and esthetic characteristics.

The sampling program is carried out largely by Forest Service field personnel. Qualified private and public laboratories are used for special analytical determinations.

To meet the national policy for non-impairment of existing high quality waters, the local water quality standards are translated into design and performance limits and controls for action programs on the ground.

The 390.4 million acre-feet of water produced from National Forests is an example of the importance of the water resource. In 1967, the dependent gross product for all water uses from National Forests averaged $807 per acre-foot of water produced, or a total of $114.7 billion. The economic implications and intangible benefits for protecting the clean water resource will result in substantial and varied benefits to all our citizens.

(4) Watershed restoration ($100,000)

Restoring the hydrologic functioning of rural lands damaged beyond the point of natural recovery is essential to protecting the beauty and quality of the rural environment. A survey and analysis leading to a blueprint for action and installation of soil and water protection measures are necessary to repair the utility, esthetics, and resource capabilities of damaged areas. The long-term objective is to evaluate watershed conditions which are causing unsatisfactory soil movement, water flow and water quality, and to plan for the correction of these conditions on a complete watershed basis. This is a continuing program planned to:

(a) Meet soil stability and water quality requirements.
(b) Encourage the orderly development of watershed resources.
(c) Repair degraded watersheds.
(d) Provide continuing maintenance to projects completed to keep them effective.

(5) Wild and scenic river studies ($385,000)

The Wild and Scenic Rivers Act (PL 90-542) requires that studies be made and reports prepared by the Secretaries of the Interior and Agriculture for those 27 rivers listed in the Act as potential additions to the national wild and scenic rivers system. Agriculture will provide river study leadership for nine rivers and Interior for 18. All 27 studies will be cooperative endeavors with States, Federal agencies, and other interested parties participating.

The Forest Service is the lead agency for Agriculture's river study work. The nine rivers for which Agriculture has study leadership responsibility are: Chattooga in North Carolina, South Carolina, and Georgia; Flathead in Montana; Illinois in Oregon; Moyie in Idaho; Pere Marquette in Michigan; Priest, St. Joe, and Salmon (Main Stem) in Idaho; and the Skagit in Washington.

Wild and scenic river study work is treated as a new sub-project in 1971. In fiscal year 1970 river study effort went forward on the Chattooga River; less intensive starts were made on the Salmon, St. Joe, and Pere Marquette; and preliminary discussion and planning was initiated for the remaining five rivers. Also, a National Forest contribution was made to the Interior-led Clarion River study in Pennsylvania.

The $385,000 funding for fiscal year 1971 will largely complete the Chattooga River study and will permit work to proceed or commence on four other Agriculture-led river studies. It will also provide for a National Forest contribution to the Interior-led Clarion and Gasconade (Missouri) river studies. Preliminary discussions and planning will continue on the other study rivers pending activation of full-scale study effort in the future.

(6) Soil and water resource analysis, planning, predictions, and evaluations ($1,200,000)

This activity helps achieve, on a watershed-by-watershed basis, a thorough preplanned approach to management that is the long-range alternative to the crisis-type soil and water management services which are in such demand currently.

This involves the skills and knowledge of the soil scientist, the geologist, the hydrologist, and the ecologist in determining the response of forest lands to the various developments in management programs that may be applied to them. It includes the design and planning of specific management programs for minimizing flood peaks, delineating flood prone areas, reducing sediment loads, and increasing the yields or improving the timing of waterflows. It provides predictions regarding the soil and water outputs that will probably be associated with given management alternatives and provides guidance for avoiding watershed damage in rural America as the various resource development and management operations take place.

Source information for this activity is drawn largely from the data and interpretations provided by the reconnaissance and/or detailed surveys.

Examples of Accomplishment

Soil and water resource analysis, planning, predictions, and evaluations were made on 48 watersheds during fiscal year 1969. This activity will be accomplished on 47 additional watersheds in fiscal year 1971.

(7) Detailed surveys ($815,000)

These are intensive surveys designed to provide the technical information and scientific interpretations needed to aid in the design of projects or programs for a specific unit of land in non-metropolitan areas.

The sound and efficient use of National Forest System lands must be in accord with the capabilities of the soil and geologic resources and satisfactory hydrologic conditions in the watersheds. As overall use of the land base expands and becomes more intensive, the more critical becomes the need for

detailed technical (physical, chemical, biological) information about the basic resources and their functioning. The comprehensive basic information is essential to the development of a wide variety of resource plans dealing with:

Timber production
Flood plain management
Water yield improvement
Recreation activities and facilities
Range improvement
Transportation systems

The technical support provided these essential plans assures that maximum attention will be given to maintaining or enhancing the soil and water productivity potentials, the stability of the soil and land mass, and the capacity of the soil mantle to absorb precipitation. As the demands for the timber and forage production and for greater recreational opportunities increase--providing more jobs and income opportunities and improving rural living conditions--the greater becomes the pressure to move onto the more fragile National Forest System areas. The level of resource use and activity on these highly critical areas must be in complete harmony with the provisions made for quality control of the soil, air, and water environments, including natural beauty. Sound resource development to the fullest extent possible is only possible with a comprehensive understanding of the basic soil, geologic, and hydrologic characteristics of each area.

Examples of Accomplishment

Detailed soils, water, geology, and hydrology surveys were conducted on over 3.0 million acres in fiscal year 1969. This activity will have to be reduced to about 1.8 million acres in fiscal year 1971 and restricted to the highest priority areas.

(8) Water yield improvement ($450,000)

This program, which helps individuals and communities in rural areas improve their quality of life, is an integral part of multiple use management. Specific water resource related outputs of the program include augmentation of existing water supplies, reduction in sediment yields and flood flows, protection and enhancement of water quality, and better timing of waterflows. However, additional outputs achieved through the program include improved carrying capacity for livestock, improved fish and wildlife habitat, reduction hazard from wildfire, maintenance of soil productivity, reduction of soil movement and/or loss, and improved water oriented recreation environment.

The Forest Service water yield improvement program to date has been limited principally to investigations, planning, and project design. Such work on four pilot projects has been undertaken thus far. One of these projects is a joint administration-research project being carried out under a cooperative agreement with, and partially financed by, the Salt River Valley Water Users Association in Arizona.

Costs of Forest Service water yield improvement work are very favorable when compared with alternative methods for water supply augmentation. On the basis of experience to date, permanent-type conversion on chaparral brushlands in Arizona, for example, can be carried out and maintained over a 20-year period at a cost of about $24.80 per acre-foot increase in water yield. After the initial conversion has been completed, the annual maintenance cost is only about $9.90 per acre-foot of sustained water yield. The most economical technique for augmenting water yields from forested areas is through hydrologic design of timber harvest in commercial forests. The additional cost

associated with this technique is about $2 per acre-foot and there is no annual maintenance cost.

Examples of Accomplishment

Water yield improvement accomplishments on National Forest System lands during fiscal year 1969 included:

(a) 15,900 acres of permanent conversion from deep rooted, low value brush to shallower rooted, high value grasses in Arizona and southern California, with an estimated increase in water yields of about 2,850 acre-feet of new water per year, and a reduction in sediment of about 22,500 tons per year.

(b) Treatment of 490 acres for water control in Arizona, New Mexico, and Colorado to augment critical low flows during the summer months and added to available groundwater supplies.

(c) Installation of about 1.5 miles of snow fences in alpine areas of Arizona, Idaho, Oregon, and Wyoming. About 75 acre-feet of additional water is made available later in the year when it is most needed because of the redistribution of the snowpack caused by these fences.

(d) Hydrologically designed timber harvest was applied on about 1,020 acres in the snowpack zone of Arizona with an estimated initial increase in water yields of about 100 acre-feet.

(e) Maintenance of previously completed water yield improvement projects in California, Colorado, and Arizona.

The water yield improvement activity for fiscal year 1971 will consist primarily of maintenance on existing water yield improvement projects to ensure continuation of the full effectiveness of the work done to date. There will also be some additional work on continuing projects.

(9) Water use requirements and availability ($220,000)

In the West, particularly, more and more demands are being made upon available water supplies. The Congress and the courts have determined that the United States has a right to reasonable use of water on National Forests reserved from the public domain except those waters appropriated before the National Forests were created. The objective is to obtain sufficient quantities of water in accordance with legal authority for the administration and development of the National Forest System. This project on a watershed basis includes:

(a) An inventory of present and foreseeable needs.
(b) A determination of water availability.
(c) The potential for increasing yields in water-short areas.
(d) Action to secure the water needed for National Forest purposes.

Continuing this program results in considerable public benefit, both direct and indirect. Even though the reservation principle applies and an analysis would demonstrate action to be in the public interest, recapturing water that has been put to beneficial use at some point downstream would be a complex, controversial, and costly action.

The western States have indicated their interest in having the Forest Service complete this program as rapidly as possible. During fiscal year 1969, the field inventory of Forest Service water uses was about 50 percent completed. A major part of this project is expected to be completed in 1975.

Project (5)

The Forest Service policy is to keep States informed of the need for, and uses of, water for National Forest purposes.

Examples of Recent Accomplishments

Restoring damaged watersheds. Rehabilitation of damaged areas is progressing in all parts of the country, but much of this work still needs to be done. Rehabilitation work is coordinated with other resources and service divisions to accomplish an integrated program of management under multiple use.

In fiscal year 1969, Forest Service crews treated and stabilized:

30,000 acres of sheet eroded and deteriorated areas.
100 miles of gullies.
20 miles of streambanks.
3 miles of shorelines.
700 miles of roads and trails.
900 acres of lands disturbed by surface mining and prospecting.

These measures are helping to enhance a quality forest environment upon a system based on stability, utility, and beauty of our renewable natural resources.

Treatments to aid in restoring favorable watershed conditions on lands damaged by wildfire continued. Emergency measures (initial treatment on new burns and maintenance on older burns) were applied to 10 fires on 37,000 acres that required onsite protection and posed threats to life, property, public health, and watershed functioning.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS

Soil and Water Management

State	FY 1970 estimate	FY 1971 estimate
Alabama	$15,000	$40,000
Alaska	254,000	292,000
Arizona	671,000	676,000
Arkansas	83,000	90,000
California	801,000	720,000
Colorado	491,000	500,000
Florida	20,000	20,000
Georgia	125,000	220,000
Idaho	318,000	545,000
Illinois	20,000	40,000
Indiana		20,000
Kentucky	116,000	40,000
Louisiana	15,000	20,000
Michigan	45,000	60,000
Minnesota	232,000	260,000
Mississippi	15,000	20,000
Missouri	162,000	155,000
Montana	412,000	420,000
Nevada	54,000	50,000
New Hampshire	65,000	50,000
New Mexico	293,000	154,000
North Carolina	83,000	60,000
Ohio	20,000	20,000
Oregon	388,000	320,000
Pennsylvania		50,000
South Carolina	77,000	50,000
South Dakota	54,000	50,000
Tennessee	15,000	40,000
Texas		40,000
Utah	624,000	500,000
Virginia	133,000	60,000
Washington	354,000	450,000
West Virginia	81,000	50,000
Wisconsin	102,000	110,000
Wyoming	179,000	125,000
Total	6,317,000	6,317,000

Project (6)

MINERAL CLAIMS, LEASES, AND SPECIAL USES

1969	$4,299,000
1970	4,633,000
1971	4,633,000

No program increase is proposed.

Mineral claims and leases ($2,085,000)

Mineral exploration and mining operations on National Forest System lands reserved from the public domain are, with few exceptions, conducted with only minimal State or Federal legislative restraints. Under these circumstances the safeguarding of other resource values--particularly esthetics, soil, and water--from serious and lasting damage is dependent upon timely and continuing supervision. Although no permit is required to prospect for minerals and locate claims on National Forest System lands open to entry under the mining laws, responsible mining claimants have been persuaded that mineral development should be conducted with a minimum adverse impact on other forest resources. By and large, this program has been quite successful. In some areas, for example, miners are assisted in road and drill site layout so as to minimize soil erosion, water pollution, and conserve other resources. It is essential that early contact is made with the miner to encourage good conservation practices.

Mineral examination of mining claims is a time-consuming job of qualified mining engineers and geologists. To encourage bona fide mining development and protect the public interest it is necessary to:

(1) Examine and report on those claims on which a patent application has been filed.

(2) Eliminate those claims involving unauthorized use of public lands which conflicts with planned programs of the Forest Service or other public interests.

Because the unauthorized occupancy of these claims conflicts with the public interest and with income-producing programs of the Forest Service, it is essential that this work be accelerated. Increasing numbers of visitors to the National Forests bring an awareness of esthetics and the need for a quality environment. In this connection, many hundreds of abandoned mining claims present hazards and unsightly landscapes. As many owners are deceased or cannot be located, it falls upon the land managing agency to clean up and restore these areas to productivity at Government expense.

Several companies have active prospecting operations underway in Wilderness Areas. These operations can be expected to increase as mining companies attempt to complete their mineral exploration work prior to the 1983 terminal date established in the Wilderness Act. Orderly and supervised exploration, now necessary for coordination with public values of soil, forests, water, and other surface resources in accordance with the Act, will be even more essential and demanding to minimize the effect on the wilderness environment.

Mineral leasing activities require similar managerial measures. The leasing job includes:

(1) Reviewing applications for mineral permits and leases to determine whether mineral exploration and development can be carried on in harmony with National Forest objectives to protect soil, water, recreation, and other purposes, and to provide stipulations and guidelines for assuring coordination with surface resource requirements. (See Figure 6.)

(2) On-the-ground administration to make sure the stipulations are understood and applied in accordance with the permit or lease, and to make sure that facilities which are a part of mineral permits and leases, such as roads and pipelines, are properly installed and maintained.

Surface mining requires protection and supervision before, during, and after the operation to prevent deleterious effects and provide adequate reclamation. Surface mining of coal has an added hazard of acid pollution of streams. Recent expansion of stream generating capacity using coal will give new impetus to the coal strip mining industry, which has been on the increase each year. Operations may include coal deposits in the National Forests and Grasslands. New methods of processing and upgrading iron ore and taconite have now made it economically feasible to mine low-grade deposits. Demands for both coal and iron have resulted in increased leasing and mining of both public and privately owned minerals on acquired lands as well as public domain National Forest System lands. These developments contribute to the economic well-being of local rural communities.

Special uses - non-recreation ($2,548,000)

Occupancy and use permits, easements and memoranda of understanding authorized 43,325 special land uses on 5 million acres of the National Forests in 1967. However, these figures are not static. There is a constant turnover of these authorized uses of about 5 percent each year. The number of new permits issued has increased about 3 percent each year. It is estimated in fiscal year 1971 that the number will have increased to around 48,300 covering a total of 5.5 million acres.

Users include public and private enterprise representing individuals, corporations and, city, county, State and Federal government agencies. The special land uses are grouped in eight broad categories consisting of about 60 kinds of use excluding recreation. Areas of particular interest are antiquities, electronic installations, fences, pastures, powerlines, reservoirs, roads, telephone lines, and water transmission facilities.

Each application for a permit requires the preparation of a multiple use survey or impact report. After permits are issued periodic compliance inspections are made to determine whether the authorized conditions, responsibilities and duties are met according to acceptable standards.

These standards are those which:

(a) Protect the public and other users from physical hazards.
(b) Do not unnecessarily increase fire hazard.
(c) Maintain acceptable levels of water and air quality.
(d) Protect the natural resources from excessive soil erosion.
(e) Protect renewable resources such as timber, forage, and wildlife from careless or wanton damage.
(f) Prevent unnecessary damage to natural beauty and esthetics of the environment, and maintain fees or rentals equal to the value of the use authorized comparable with fair market value.

Of the total funds available, about $50,000 is needed to develop and maintain information on National Forest archaeological sites and to protect such sites and artifacts from vandalism or other damage by unauthorized persons, including, if necessary, excavation of endangered sites on an emergency basis.

Under special authorities almost two-thirds of all permitted uses are allowed without charge. The remaining one-third pay fees for the privilege of occupying National Forest land. Fiscal year 1969 receipts from special land uses were $837,038, an increase of $80,051 over the previous year.

Examples of Recent Accomplishments

Minerals management activities significantly increased over the previous year. Renewed interest in prospecting for uranium, silver, copper, molybdenum, and gold prompted the staking of many hundreds of claims on National Forest lands during the year. Occupancy trespass cases received increasing attention. Only a few new applications under the Mining Claims Occupancy Act were received, but action was completed on over 100 cases. Income from mineral leasing on acquired lands increased nearly $800,000 over 1968 receipts.

Mining claims. A total of 2,300 mining claims were examined for compliance with the mining laws during fiscal year 1969. In addition, management of surface resources was coordinated on 17,521 claims covering over 438,000 acres.

There were 84 patent applications, involving 556 claims, pending at the close of calendar year 1968. Actions on 177 claims were completed during this period; 23 claims (9 applications) aggregating 1,092 acres were patented during the calendar year.

Action in compliance with the Church-Johnson Mining Claims Occupancy Act continued with particular emphasis in the California Region. As of July 1, 1969, a total of 409 cases involved National Forest System lands. Of the 314 cases completed to date, fee title was offered in 52 cases, a lease offered in 113 cases, 7 were issued Forest Service special-use permits and 126 were rejected because applicants were not qualified.

In addition, 226 geologic investigations in connection with land exchanges, recreation areas, road construction, bridge location, and damsites were conducted which required 9,215 man-hours.

Mineral leases and permits. There are nearly 17,000 mineral leases and permits on about 16 million acres of National Forest System lands. There are 262 prospecting permits which are estimated to cover nearly 1 million acres. Included are 7,027 oil and gas leases which required Forest Service action during the year, 3,506 on public domain forest land and 3,521 on acquired lands. Leases for other minerals total 341, with 74 on public domain lands. Hardrock leases on acquired lands aggregate 267. There are 1,330 leases for mineral materials, with 1,167 on public domain forest land. In addition, there were 1,579 free-use permits issued for over 20 million tons of mineral materials, mainly sand and gravel. There are 691 mineral reservations and rights outstanding, aggregating about 200,000 acres, which are being operated.

Total revenue from mineral leases and permits on National Forest System acquired lands amounted to $5,441,284 in fiscal year 1969. In addition, it is estimated that nearly $22 million in revenues were received from rents and royalties for leases on National Forests and National Grasslands reserved from the public domain. These receipts are distributed as follows: 52.5 percent goes to the reclamation fund, 37.5 percent to the State in which the leased land is located, and 10 percent to the Treasury as miscellaneous receipts.

Mine or well-head value of minerals produced from National Forest lands during fiscal year 1969 was estimated to be approximately $103,000,000.

Project (7)

LAND CLASSIFICATION, ADJUSTMENTS, AND SURVEYS

1969	$6,353,000
1970	6,919,000
1971	6,769,000
Decrease	-150,000

A decrease of $150,000 is proposed due to the need to hold Federal expenditures to a minimum.

Subactivities of this program are identified below.

(1) Land Classification ($400,000)

The function is to structure and recommend programs concerning the scope, location and composition of the National Forest System that will most effectively help accomplish national objectives for rural areas. Purposes and activities are to:

(a) Improve the land base to help meet current and prospective public needs for outdoor recreation space.
(b) Enhance the capabilities of recreation, timber, range forage, water, and wildlife resources to build up rural economies.
(c) Increase watershed protection and betterment.
(d) Promote stability and encourage growth of communities in and about National Forest areas.
(e) Facilitate more economical administration of public land programs.

Financing at the level indicated is essential to meeting pressing needs for:

(a) Selection and detailed analyses of areas within the National Forests and National Grasslands to determine direction that land exchange and land consolidation should take to best accomplish national and local objectives for rural areas.
(b) Determining and achieving sound transfers of Federal land to or from the National Forest System, including jurisdictional transfers of numerous Federal water control projects important for outdoor recreation to achieve optimum recreation development and use most efficiently at least cost. Recent legislation and revised interdepartmental agreements are resulting in an increasing number of such cases.
(c) Classification of areas in and about the National Forest System as to suitability and justification for establishment of national recreation areas, monuments, wildlife preserves or other special status. Pressures for such classification reflect rising and more general public interest in environment.

Demands for the use of land grow yearly. The increasingly urbanized society with its current prospective growths in population, increased leisure, urban pressures for outdoor space, more frequent water supply crises for heavily populated centers, large programs of water control projects having high public recreation potential, and better roads and other access generate heavy pressures on the existing land bases. This affects public lands, especially the National Forest System which, in many areas, not only receive heavy public and private use but includes valuable resources and outstanding natural beauty.

There is need to continually assess the location and extent of the National Forest System components and the direction land use and ownership patterns should take in relation to changing situations resulting from these diverse

factors. The 154 National Forests and 19 National Grasslands located in 44 States and Puerto Rico include more than 40 million acres of non-Federal land. Programs for consolidations of landownership within existing boundaries of these units need to be based upon sound consideration of both long-time effects on tributary areas and practicalities in order to:

(a) Protect the public and private stake in watershed, forest and recreation resources.
(b) Provide for expanding communities and industries.
(c) Achieve economical management.

Water-oriented recreational use of land at or near Federal reservoirs has assumed large proportions and often is a significant economic factor in the locality. There is an interdepartmental agreement on management of land at Department of the Army reservoir projects and legislation to enable transfers of land at Bureau of Reclamation projects where such projects are located within or adjoin National Forests. Stepped-up action concerning land jurisdiction at more than two dozen reservoirs in and about National Forests must be continued to avoid duplication of plans and programs, take advantage of existing National Forest organizations, and assure timely and economical development of recreation and land use facilities. Elsewhere, expanded activity in transfers of public land jurisdiction based upon joint studies with the National Park Service or Bureau of Land Management is called for in the interest of more economical or effective public and private service.

The land classification program for fiscal year 1971 will be concerned with several million acres of forest, watershed, and recreation lands in the areas of the National Forest System. It will also be concerned with the management and programs for such lands from the national, regional, and local standpoints. Involved will be:

(a) Consolidation of landownership.
(b) National Forest adjustments to exclude lands where National Forest programs are no longer justified and to include areas where such programs for conservation of resources and improved rural economies would be in the national and local interest.
(c) Proposals for establishment of National Recreation Areas.
(d) New National Forest programs for the Potomac River.
(e) Questions of interagency adjustments in land jurisdiction involving national parks and monuments and other Federal lands in and about the National Forest System.

Examples of Recent Accomplishments

An intensive study of natural resources in the drainage of the Big South Fork of the Cumberland River in Kentucky and Tennessee was submitted to the Congress by a team including members of the Corps of Engineers, Department of the Interior and Department of Agriculture. The study presented as alternatives analyses of six different development programs which are feasible for the river and adjoining areas, including an expanded National Forest. The proposed programs were designed to increase economic activity in this economically depressed section of rural America.

Studies of forested rural land in southern Ohio and Indiana were completed and will serve as a basis for extending and retracting National Forest boundaries. The adjustments in boundaries will allow for consolidation of National Forest ownership in areas where cooperative efforts for developing and protecting watersheds are being worked out with local organizations and, as a result of such efforts, many outdoor recreation opportunities are being provided to many of the millions of urban residents living within easy

driving distance. Adjustments of boundaries will help the States and forest product firms to consolidate ownerships and also make valuable contributions to the local economies through better management of recreation and forest resources along with the National Forest.

Numerous interdepartmental transfers of land jurisdiction were accomplished in the interest of economical and efficient management of public land programs. Examples:

(a) A Department of the Army and Department of Agriculture interchange involving about 7,700 acres resulted in transfers of suitable reservoir project lands for resource management as part of the adjacent Kootenai National Forest in Montana and the Daniel Boone National Forest in Kentucky, and transfer from the National Forest of tracts needed for project structures.
(b) Transfer to the Ashley National Forest and extension of its boundary in Utah and Wyoming to include some 109,000 acres from the National Park Service to facilitate public programs by consolidating administration of the Flaming Gorge National Recreation Area under one agency.

In order to better conform National Forest boundary locations with foreseeable needs for National Forest programs, boundaries were extended to include an additional 153,000 acres and retracted to exclude 74,000 acres.

(2) Land Exchange ($3,095,000, a reduction of $50,000)

Properly conceived land exchanges result in alleviating the need to construct certain road segments, the location and marking of property lines, the issuance of certain special-use permits, and other management costs. The consolidation of ownership achieved in 1967 a 10-year cost avoidance conservatively estimated to be at a ratio of $1.50 for every dollar spent in planning, negotiating, and accomplishing a land exchange. Selected examples of estimated cost avoidance which will result during the next 10 years, from the fiscal year 1971 exchange program, are:

Reductions	Units	Amount (in thousands)
(a) Property lines and corners	762 miles	$815
(b) Road construction and maintenance	50 miles	1,500
(c) Use permits and occupancy trespass	170 cases	680
(d) Road right-of-way needs	140 cases	100
Total		3,095

Material revenue increases to the United States Treasury can also result through well planned exchanges. Access road problems can be eliminated and make heretofore inaccessible mature timber stands available for harvest to the mutual benefit of the United States and timber companies in need of timber supplies. The rural economy can also be benefited. Significant benefits can be realized for both the United States and private owners engaged in livestock operations through the consolidation of ownerships, thus reducing costs and improving management of the ranges.

Carefully designed land exchanges can make material contributions in bettering rural America and the communities located within or near the boundaries of the National Forest System. Farmers and ranchers operating marginal operations can frequently acquire the adjoining National Forest System lands suitable for grazing, thus permitting development of an economic unit. Communities are frequently aided through exchanges that provide lands for expansion and development.

Project (7)

The fiscal year 1971 land exchange program will involve the examination and appraisal of 500,000 acres involving an estimated 450 proposed exchanges. The land the Government gives and receives in exchanges must be examined and appraised. Following examination and appraisal, negotiations are expected to be completed and 220 cases approved during the fiscal year involving a total of 235,000 acres.

Examples of Recent Accomplishments

In fiscal year 1969, 211 land exchanges were approved. In these exchanges, the United States will acquire 107,483 acres valued at $33,169,549 and will grant 69,190 acres valued at $31,876,000. A total of 169 land exchanges were fully completed with title to 90,872 acres passing to the United States and 65,955 acres passing to the other landowners. The net increase in National Forest acreage was 24,917 acres.

(3) Land Status Records and Land Line Location ($2,280,000, a reduction of $100,000)

(a) Land status records. This is a systematic search of records and the presentation in plat, tabular record, and supplementary form of all ownership interests, and Congressional and administrative actions which limit or otherwise affect administration of the National Forest System or the use of adjoining lands by the owners thereof. It is the record of what land interests the Forest Service must administer. Significant progress is necessary to meet the expanding need for correct currently available records of Forest Service landownership, use and encumbrances.

The National Forest System was created and altered to meet changing needs by many Acts of Congress and administrative actions in accordance therewith. Some 160 million acres were reserved from the public domain.

Over 27 million acres were acquired by several agencies of Government. Over the years many exchange, acquisition, and disposal actions have occurred. The great number of records of the status of such lands as to ownership, encumbrances, and restrictions on use were never satisfactorily assembled, checked, and placed in a system readily used and currently maintained as changes occurred. As a result the Forest Service has been handicapped in meeting the impact of the vast increase in resource use in recent years.

A system has been developed to assure that accurate status information is assembled and records kept current at a central point and supplied to all field offices of the Forest Service. In converting to this system, all public records are reviewed and entered. Maintenance of records is done in the nine regional offices and supplied currently to some one thousand field offices. The project is about 65 percent completed. The increase requested will materially aid in completion of the conversion job by the end of fiscal year 1974. Thereafter, financing needs will be materially reduced since only current maintenance will be needed.

The systematic search and review of records in the conversion project continues to reveal, and identify more clearly, many parcels and general areas which have previously been misunderstood, identified inaccurately, or overlooked in administration due to inadequate records and poor identifying ties between records and ground location.

Users of the new system records (Forest Service and other Government agencies, adjoiners, and other public users) are enthusiastic about these records. They give confidence in administration and reduce areas of

potential ill-will with adjoiners and users of public and private resources.

Work Proposed for 1971

	1969 Actual	1970 Planned	1971 Estimated
Townships completed	1,700	1,700	1,780

(Total program 17,000. Accomplished through 1969 - 11,000)

Selected Examples of Work Accomplishments in Past Year

The status project continues to uncover differences in ownership, incorrect location of county and other lines, and acreage differences. During the past year, computations and adjustments resulting from the status study indicated a net increase of 91,637 acres administered by the Forest Service.

Requests from the general public for information and copies of the status records are increasing. For example, a private mining company recently ordered a complete set of the mineral status records for Colorado (678 plats and 741 tabular record sheets). In another area private companies requested 386 prints in 8 separate orders.

The following is an example of the type of case the completed status project can resolve before it becomes a serious problem. It involves three mining claims which were located for travertine, a nonmetalliferous mineral. Since 1964 the Forest Service has contested the validity of the claims on the basis that travertine was a common variety of mineral, and therefore, not locatable according to Public Law 167. Claimants contended it was an uncommon variety. This case was contested bitterly for several years and resulted in two Senate subcommittee hearings in an attempt to solve it. This year the status project uncovered the fact that the lands on which the claims were located had been withdrawn earlier as a game preserve under the authority of the Act of June 25, 1910, and were not open to entry for nonmetalliferous mining. Had this been known at the outset it would have saved considerable time and money and avoided adverse criticism and embarrassment to the Government.

(b) Land line location (cadastral program). Accurate plainly marked property lines are essential to effective management of lands and land based resources. It is essential that significant progress in this activity be made so that National Forest lands can be managed to meet Forest Service multiple use-sustained yield policy and contribute to the stability and growth of the rural economy.

An inventory of property corners and miles of property line bounding lands of the United States administered by the Forest Service and those of all adjoining ownerships, as of December 31, 1966, follows:

1,160,472 corners on property lines
210,924 additional corners needed for control
272,487 miles of property lines

Many of the corners were established by proper survey authority 50 to 200 more years ago. Skillful search for corners in recent years indicates that some of these corners were never established. Some of this may be due to fraud by contractors. Some is due to confusing and overlapping grants in the eastern States. Some is due to issuance of patents to

public lands described by aliquot parts of sections. In the public land States, surveys by the United States were mainly of township and section exteriors as a basis for sales and grants of the public lands. Subdivision of sections by cadastral survey was not required to issue patents based on aliquot parts of sections. The succeeding owners were expected to obtain surveyors to subdivide sections in the public land States. In all States they were also expected to maintain the corners and lines of their properties. Since sales and grants from the sovereign were expected to progress, the need for the United States to maintain corners and lines on the remaining Government lands was not present.

This situation was changed by the first large scale reservation of public lands authorized by the Forest Reserve Act of March 3, 1891 (26 Stat. 1103). Over 160 million acres were reserved from the public domain for the National Forest premises. In addition, the United States has purchased some 27 million acres since 1911 and placed them in the National Forest System; thus, the need for the United States to survey and mark the boundaries of its lands in order to develop their full public use under permanent management. However, there was little provision for this work until 1958, when the first modest land line location appropriation was made to the Department of Agriculture. Since then annual appropriations for this program have been made. These are being used primarily to search for corners to determine the true situation and to prevent further loss. The search thus far has revealed that about 32 percent of the corners are missing and must be restored through relatively expensive cadastral surveys. The search phase is also revealing that many corners are in such poor condition that their loss is imminent. These are being remonumented currently, or within a year or two.

The average cost to search out and permanently preserve a corner by remonumentation is $60. The average cost to restore a missing corner by cadastral surveys is $600.

The following has been accomplished since the program was initiated in 1958:

1958 - 1969

Corners:			
1.	Searched		202,054
2.	Found acceptable evidence of corner		138,302
	(a) Do not need remonumentation	29,822	
	(b) Need remonumentation	108,480	
	(1) Remonumented by Forest Service	52,448	
	(2) Remonumented by Bureau of Land Management/Forest Service cooperation	36,765	
3.	No acceptable evidence of corners found, cadastral surveys needed to establish corners		63,752
	(a) Corners established by Forest Service cadastral surveys	15,606	
	(b) Corners established by Bureau of Land Management cadastral surveys	10,551	
4.	Miles of cadastral surveys run to reestablish missing corners and establish new corners required:		
	(a) By Forest Service	6,428	
	(b) By Bureau of Land Management	5,452	

Property Lines:

Miles marked to standard	10,464
Miles marked to interim standard	8,433
Miles inspected and maintained	2,784

The search and remonumentation of "thread hanging" corners have been carried out plan-wise based on most urgent needs, and to the extent possible, on cooperative opportunities with adjoiners. Program levels thus far, however, are inadequate to search out and "rescue" all dilapidated corners. About 10,000 corners are being lost annually. For every corner searched in time and preserved a future expenditure of nearly $600 is saved. This is why most of the appropriation has been used in the "search and rescue" phase. Most of the expensive job of restoring missing corners has been postponed.

Due to uncertain property lines, the Forest Service has had problems in continuing and expanding its high-level of timber sales. Sales are either not being made near uncertain lines, or, to be safe, are being moved back from the estimated location of lines. This leaves buffers or uncut timber which invite trespass, make for inefficient management and cause loss from insects, diseases, and blowdown. Lack of property line location forces concentration of the heavy timber sales program into areas which should have awaited more urgent cutting needs elsewhere to obtain better timber growing objectives. Highly desirable light sanitation-salvage harvests cannot be made.

Since 1966 an annual transfer of part of the land line location appropriation has been made to the Department of the Interior for use by the Bureau of Land Management. This is to obtain urgent cadastral surveys to reestablish corners on public domain lands administered by the Forest Service, that were found to be missing during corner search activities. The Bureau of Land Management has the authority for cadastral surveys of such lands. In fiscal year 1970, $270,000 was transferred. The same amount is planned for transfer in 1971. Most of these funds are used in the States west of the Mississippi River, since this is the area of public domain lands. The Forest Service makes careful search for corners in critical areas where property lines are an issue with adjoiners, or where such lines must be established before timber sales or other public uses may be undertaken. Cadastral surveys to reestablish missing corners are then programed jointly by Bureau of Land Management and the Forest Service.

The work to be done under this program is shown in the following table. This work is carried on in every State in which the Forest Service administers lands:

Work Proposed for 1971 as Compared with 1970 and 1969

	FY 1969 Accomplished	Planned FY 1970	Planned FY 1971
Corners			
Search	28,640	27,500	27,500
Remonument	12,337	12,000	12,000
Establish	1,300	1,050	1,400
Maintenance	400	205	600
Miles			
Locate and mark:			
To full standard	1,953	1,500	1,550
To partial standard	646	800	850
Maintenance	798	1,000	1,200

Examples of Accomplishment

The accomplishment since 1958 in comparison to the total inventory of property corners and lines is as follows:

Corners searched	16 percent of total
Property lines marked	7 percent of total

Under this program nearly 90,000 corners have been saved from obliteration and loss by timely search and remonumentation. This has saved nearly $54 million worth of cadastral survey work to reestablish these corners had they been neglected and lost (Figure 7).

Work has been programed in areas of most urgent need, thus obtaining maximum immediate benefits. In some cases this has reduced efficiency since it would be most efficient to complete a general area as work progresses.

One-third of the corners revealed as missing by the corner search phase to date have been reestablished by cadastral surveys. This work is also done where most urgently needed, thus obtaining maximum immediate benefits.

(4) Geometronics ($994,000)

Multiple use planning requires a particular knowledge of the terrain, the extent and location of the natural resources, and how these resources are related and tied in with existing and planned transportation and recreational facilities. Elevational information is essential in the planning of transportation systems, timber sales and recreational facilities.

Technological advancements have provided new means of improving and extending management of National Forest resources and related facilities. The adaptation and development of such techniques as the analytical approach to control extension for the essential control of remote sensing is being pursued. This promises significant reductions in field-going operations. Remote sensing investigations are underway in providing display mechanisms for interpreting, plotting, digitizing and retrieving of such data. This promises greater speed, greater reliability and comparability of terrain data. This may include material such as tabular data, selected map features, resource classification by imagery characteristics and orthophoto mapping.

These developmental operations are supplemental to and coexistent with the acquisition of conventional line mapping in the quadrangle format for the National mapping program. Shifting efforts and manpower to the development work has necessarily reduced the output of general purpose line mapping (terrain data).

The data are needed on some 640,000 square miles of area within the National Forests for a wide range of engineering planning, timber, range, wildlife control, recreation facilities, and watershed management activities. Approximately 53 percent of this area is adequately covered in National accuracy line mapping. The scale, format, and accuracy of this material would be such that it can be released to the U. S. Geological Survey and form an integral part of the standard topographic mapping program of the United States. Thus, duplication of effort is avoided, costs are reduced, and the availability of standard topographic maps is speeded up.

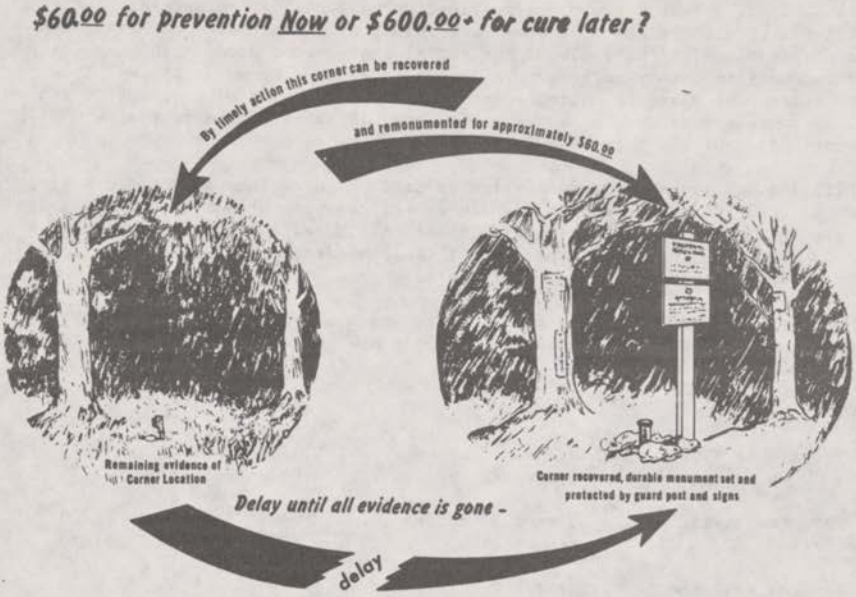
The funds for fiscal year 1971 would be used to secure aerial photography, establish horizontal and vertical control for 0.5 percent or an equivalent of 3,000 square miles of the area for which these data are needed. In

addition, the funds would be used to prepare, from existing terrain data, bases on the scale and format needed for showing the interrelationship of all National Forest resources affecting the multiple use management of the National Forest System. The scale and format of the prepared material must be compatible with the scale of the aerial photographs used in the execution of resource inventory surveys. These data are transferred to the multiple use management plans by photogrammetric means. The area of coverage of the plans to be prepared with the required funds is about 0.5 percent of 4,000 square miles of the total requirements.

Utilizing the terrain data and resource data procured through photogrammetric procedures, it is proposed to prepare several management bases on an adequate scale and format for approximately 14 National Forests. This represents new bases for approximately six percent of those needed, but makes no provision for needed revision to bring others up to date.

The production of quadrangle terrain data units has been reduced due to emphasis on utilizing and learning to apply new techniques and equipment. The production record follows:

		1969	1970	1971
Terrain data	thousands of acres	1,336	1,260	1,190
	square miles	2,088	1,972	1,856
Resource inventory data	thousands of acres	2,440	4,700	4,700
	square miles	3,800	3,000	3,000
General management base	forests	18	16	14



Savings effected by corner search and remonumentation accomplished under this program:

Fiscal year 1969 (12,337 corners remonumented x $600)	$7,402,200
Since start of program in 1968 (89,213 corners remonumented x $600)	53,527,800

Project (8)

FOREST FIRE PROTECTION

1969	$27,966,000
1970	29,210,000
1971	29,210,000

No program increase is proposed.

The objectives of the National Forest Fire Protection Program are to:

(1) Hold fire losses to a level consistent with immediate and long-range land management objectives.

(2) Use fire to increase productivity of National Forest lands.

(3) Reduce to tolerable limits the fire threat to life and resources in rural areas in case of enemy attack.

(4) Accomplish the above objectives economically and with a high degree of personal safety.

These objectives meet the demands of the American public for more beautiful countryside, cleaner air, purer water, and a better life for people who do not fully share the Nation's prosperity. Fire used scientifically can contribute to these needs, but wildfire damages the fixed resource base fundamentally needed to sustain prosperity and good life in both urban and rural communities.

Past efforts to steadily increase fire protection efficiency have provided capability to control most fires at small size, even in severe fire years. Contributing most directly to this progress during the past 10 years has been:

(1) Better training-greater effectiveness.

(2) Intensified fire prevention.

(3) Greater interregional attack crew mobility.

(4) Improved air attack.

(5) More effective fire retardants.

(6) Improved preparedness and initial attack.

Damage from uncontrolled fires becomes less tolerable each year as resource values steadily increase. Lands and resources protected by the Forest Service are subjected to more use by recreationists, loggers, travelers and others for special purposes, collectively increasing the risk from man-caused fires. Paradoxically, response of the land to good management practice often creates combustible fuels where few existed before. In spite of increased fire protection efficiency, some fires do escape and it is these fires -- less than 6 percent of all fires -- that burn most of the acreage and inflict most of the damage.

The challenge, of course, is to meet the burdgeoning problem of increased hazard and risk. Operations in fiscal year 1971 would attempt to hold the line by exploiting short-range opportunities to make improvements wherever possible in fire prevention, preparedness, suppression, and modification of fuels to reduce fire spread potential. All possible productivity would be squeezed from the program in an attempt to hold cost, plus loss, to a minimum. Cooperative efforts with other Federal agencies, States and municipalities would develop maximum total strength to cope with fire emergencies, including defense of rural areas from fire in case of enemy attack.

The proposed budget would extend fiscal year 1970 level of financing into fiscal year 1971. It will finance an effective combination of protection measures in an attempt to hold past gains in face of increasing man-caused fire risks and forest fuel accumulations. It contains no provisions in the long run to reduce the incidence of large, damaging fires by breaking continuity of large areas of dangerous fuels with fuel and firebreaks. It will be used to finance protection measures approximately as follows:

Protection Measures	FY 1969	FY 1970	FY 1971
		(in thousands)	
Fire prevention	$3,824	$3,995	$3,995
Fire detection	3,622	3,780	3,780
Fire attack forces	15,594	16,290	16,290
Air operations	3,413	3,565	3,565
Fuel modification	325	340	340
Equipment development and testing	641	670	670
Studies, surveys, plans, and training	547	570	570
Total	27,966	29,210	29,210

If fiscal year 1971 turns out to be a year of average fire weather severity, the National Forest protection forces financed under this budget would be expected to spare over 1.04 million acres from fire and avert damage to resources in excess of $104 million.

Examples of Recent Accomplishments

1969 fire losses below potential. 1969 was a year of generally high fire danger but the record was good. Drought and high temperatures combined to create extreme fire danger in the Western United States during late summer. In some areas the fire hazard was higher than during the damaging 1967 fire season. Yet, only a few large fires occurred. In spite of the extreme fire danger, acres burned on Forest Service protected area was less than half that of the previous 5-year average. Preparedness and aggressive initial attack by fire control forces were important reasons for this impressive record.

Fire prevention and law enforcement. In 1969 good progress was made in railroad fire prevention. A national level "Statement of Understanding" was agreed to by railroads and forest protection agencies. This is an important first step toward reducing railroad fires and will do much to turn back the increasing number of damaging fires caused by railroad activities.

Through accelerated programs, four regions concentrated their prevention efforts to reduce fires caused by hunters, town dumps, recreationists, and debris burners. Heavy inroads were made into the number of fire starts. These accelerated projects will serve as models for solving prevention problems elsewhere.

Through law enforcement action on fire trespass cases during fiscal year 1969, claims against fire trespassers were settled in the amount of $433,000.

Preparedness. Concentrating on learner-centered training rather than the instructor-centered approach, two national advanced courses were conducted for top echelon fire control personnel. In addition, several master lesson plans and self-instructional texts were published during the year. The year's training program has made significant progress in learner-centered instruction; the payoff is a better trained and prepared fire control personnel.

Cooperation. The Boise Interagency Fire Center was placed into operation under joint management of the Forest Service, Bureau of Land Management, and Weather Bureau. It will provide strong backup forces and equipment for all fire protection agencies throughout the West. An administration building, smokejumper loft, and warehouse were completed in 1969, and construction was started on a barracks-mess hall and a training facility. During the year the Center dispatched more than 400 trained fire overhead to help direct fire suppression activities in Alaska. Suppression crews, firefighting equipment, infrared mapping and transport aircraft were furnished to help in this and other Western States' firefighting efforts.

Hazard abatement. Debris disposal created by timber harvest, timber stand improvement, and right-of-way clearing must be done to minimize the fire danger created by these operations. Prescribed fire was used not only to reduce the hazard on thousands of acres, but to improve productivity of timber, range, and wildlife.

As part of the hazard abatement program, a modest effort to construct firebreaks, fuelbreaks and convert dangerous fuel to less flammable conditions was made. These operations will reduce the threat from fire by lowering the rate of fire spread, reducing the blocks of continuous hazardous fuel, and providing improved access for men and equipment. The fuel treatment program is a truly "get ahead" endeavor which, when fully financed, will bring significant payoff in reduced suppression costs and damages.

New methods. Notable advancements in equipment development and use were made in use of liquid concentrate fire retardant solutions on fires in the Pacific Northwest. Tests showed these formulations were not only effective on fires, but reduced manpower handling needs as much as 75 percent. The use of large, modern helicopters with special sling water buckets worked well in delivering firefighters and equipment, and for dousing fires with drops of up to 1,000 gallons of water.

Air quality protection. Prescribed burning is being guided by carefully prepared plans to prevent or minimize air pollution. Conditions have been identified and methods developed to regulate and manage smoke to eliminate or reduce offensive penetration into populated areas. Experience to date shows that accurate weather forecasts are essential to smoke management. There will be a growing need for these services from the Weather Bureau. Work continues to improve knowledge and techniques and extend the periods when the prescribed burning can be safely and effectively accomplished.

Project (9)

CONSTRUCTION AND MAINTENANCE OF IMPROVEMENTS FOR FIRE AND GENERAL PURPOSES (INCLUDING COMMUNICATIONS)

1969	$8,350,000
1970	9,517,000
1971	10,056,000
Increase	+539,000

An increase of $539,000 is proposed as follows:

(1) $441,000 to correct water pollution at the following 24 critical sites:

Site	National Forest	State	Amount
Chevelon	Sitgreaves	Arizona	$50,000
Alpine Work Center	Apache	Arizona	15,000
Pacific Ranger Station	Eldorado	California	40,000
Elk City Ranger Station	Nezperce	Idaho	3,000
Blue Ridge Ranger Station	Coconino	Arizona	29,000
Mirror Lake	Wasatch	Utah	25,000
Steamboat Ranger Station	Umpqua	Oregon	7,000
Smokey Bear Ranger Station	Lincoln	New Mexico	30,000
Powell Ranger Station	Clearwater	Idaho	4,000
Kyle Canyon Ranger Station	Toiyabe	Nevada	25,000
Nine Mile Ranger Station	Lolo	Montana	3,000
Redmond Air Center	Deschutes	Oregon	7,000
Tusayan Ranger Station	Kaibab	Arizona	3,000
Butte Falls Ranger Station	Rouge River	Oregon	13,000
Lakeside Administrative Site	Sitgreaves	Arizona	38,000
Mountain View Ranger Station	Wasatch	Wyoming	25,000
Tonto Basin Administrative Site	Tonto	Arizona	4,000
Summit Work Center	Mt. Hood	Oregon	44,000
Slate Creek Ranger Station	Nezperce	Idaho	6,000
Feathery Camp	Gila	New Mexico	4,000
Island Park Ranger Station	Targhee	Idaho	50,000
Hood River Ranger Station	Mt. Hood	Oregon	7,000
Palisades Office Building	Coronado	Arizona	2,000
Sisters Ranger Station	Deschutes	Oregon	7,000

Immediate treatment of the sanitation facilities at these sites is necessary in order to control or eliminate existing pollution and to meet local health requirements. These projects were identified as projects requiring treatment by the Forest Service and concurred in by the Federal Water Pollution Control Administration.

(2) $98,000 to restore the amount of 1970 construction reductions which were applied to 1970 pay act costs.

The overall program provides for the construction and maintenance of buildings, utilities, airfields, communication systems, and related facilities throughout the National Forests and National Grasslands. Amounts estimated for fiscal year 1971, as compared with fiscal year 1970, are as follows:

	FY 1970 Available	FY 1971 Estimate	Change
Construction	$2,597,000	$3,136,000	+$539,000
Maintenance	6,920,000	6,920,000	- -
Total	9,517,000	10,056,000	+539,000

Project (9)

Construction $3,136,000

Most Forest activities take place in remote areas. Small communities in these areas do not have adequate facilities to support the various program activities. Buildings and other facilities must be provided to:

(1) Furnish office space for Forest Service personnel.
(2) House personnel.
(3) Furnish shop and storage space for maintaining and storing field equipment and supplies.
(4) Furnish adequate communication systems.
(5) Furnish utilities to serve the various structures.
(6) Furnish ground support for aerial operations.

Construction funds are planned for use as follows:

Dwellings and barracks -- Two are to be constructed on the San Bernardino National Forest in California at a cost of $52,000

Fire lookouts -- Three to be constructed at a cost of $49,000

These will be located as follows:

Bitterroot National Forest, Montana	$18,700
Lincoln National Forest, New Mexico	15,900
Umpqua National Forest, Oregon	14,400

Offices -- Four to be constructed at cost of $362,000

These will be located as follows:

Allegheny National Forest, Pennsylvania
Willamette National Forest, Oregon
Umpqua National Forest, Oregon
Challis National Forest, Idaho

More detail is provided below for these structures:

(a) New district ranger office, Allegheny National Forest, Pennsylvania, $123,000. The Marienville Ranger District personnel presently occupy office space in a converted equipment storage building which was constructed 31 years ago. The present office is crowded and presents a poor appearance. The proposed office would be constructed on Route 68 and located to serve the expanding public need for recreation information.

(b) Addition to existing district ranger office, Umpqua National Forest, Oregon, $73,000. The South Umpqua Ranger District area and staff have been merged with the Tiller District to provide a more efficient organization and management unit. Part of the new Tiller District staff continues to occupy the old South Umpqua District office which was constructed in the early 1930's. It has aged beyond the point of economical maintenance. Space will be added to the existing Tiller District Office (constructed in 1961) so that all staff members can be housed in the same building.

(c) Addition to existing district ranger office, Willamette National Forest, Oregon, $66,000. Expanding workload on the Rigdon Ranger District has increased staffing requirements and public use to the extent that additional office space must be provided to accommodate both the public and Forest Service personnel.

(d) New district ranger office, Challis National Forest, Idaho, $100,000. This facility will provide office space for personnel of the Stanley Ranger District and the Sawtooth Valley Ranger District. The structure will be located on U.S. Highway 93 south of Stanley, Idaho. The structure will also meet expanding public need for recreation information.

Special projects -- Two to be constructed at a cost of $250,000
These projects will be located as follows:

Supervisor's Office, Black Hills National Forest, South Dakota
Denver Fire Center, Denver, Colorado

These projects are further described as follows:

(a) Supervisor's Office, Black Hills National Forest, South Dakota, $220,000. Currently Forest Service personnel are housed in five separate buildings in Custer, South Dakota. Expanding programs and public inconvenience dictate the construction of a central office. Planning was authorized for this project in fiscal year 1967. The total project is estimated to cost $1,808,000. The $220,000 will provide for initial development consisting of utilities and grading.

(b) Denver Fire Center, Denver, Colorado, $30,000. The Center will serve as a Regional Fire Control Center and will provide protection for forest lands in Colorado, Wyoming, South Dakota, Nebraska, Utah, Arizona, and New Mexico. The Center is to be primarily an air base with facilities to accommodate planes, materials, and seasonal employees. The total project is estimated to cost $796,000. The $30,000 proposed at this time will be used to construct water and sewer systems.

Service and storage buildings -- Nine to be constructed at a cost of .. $135,000
These will be located as follows:

	No.	Amount
Black Hills National Forest, South Dakota	1	$33,700
San Isabel National Forest, Colorado	1	38,700
Talladega National Forest, Alabama	1	8,500
South Tongass National Forest, Alaska	1	10,200
Grand Mesa-Uncompahgre National Forest, Colorado ..	1	1,200
San Bernardino National Forest, California	1	16,800
Kisatchie National Forest, Louisiana	1	13,100
Chugach National Forest, Alaska	2	12,800

Heliports and helispots -- Twelve to be constructed at a cost of $15,000
These will be located on various National Forests in Arizona and New Mexico.

Airstrips -- One will be improved at a cost of $34,000
This project is located at the Missoula Aerial Fire Depot in Missoula, Montana.

Communications systems (radio and telephone) -- Systems will be improved through the installation of new equipment and facilities at a cost of . $852,000
Major projects will be on the following National Forests:

Flathead National Forest, Montana	$31,300
Routt National Forest, Colorado	43,900
Tonto National Forest, Arizona	77,400
Boise National Forest, Idaho	110,400
Los Padres National Forest, California	177,200
Deschutes National Forest, Oregon	107,200
Fremont National Forest, Oregon	68,600
Miscellaneous projects	236,000

Project (9)

Site acquisition -- Seven administrative sites will be purchased at a cost of $40,000
These will be located on, or immediately adjacent to, the following National Forests:

Chattahoochee National Forest, Georgia
Cherokee National Forest, Tennessee
Gunnison National Forest, Colorado
Rio Grande National Forest, Colorado

Water pollution abatement -- 30 projects are to be undertaken at a cost of $681,000
The following six projects are of high priority and are in addition to those listed under the proposed increase of $441,000:

Lolo Ranger Station, Lolo National Forest, Montana	$25,000
Noxon Ranger Station, Kaniksu, Idaho	26,000
Tiller Ranger Station, Umpqua National Forest, Oregon	125,000
St. Helens Ranger Station, Gifford Pinchot National Forest, Washington	13,000
West Fork Ranger Station, Bitterroot National Forest, Montana	44,000
Lake Wenatchee Ranger Station, Wenatchee National Forest, Washington	7,000
24 critical projects listed in first page of this section	441,000

Water and sanitary systems -- 25 systems are to be constructed at a cost of $396,000
These will be located on the following National Forests:

	No. Systems	Amount
Custer National Forest, Montana	1	$56,300
St. Joe National Forest, Idaho	1	25,000
Kaniksu National Forest, Idaho	1	26,300
Gallatin National Forest, Montana	1	1,900
Rio Grande National Forest, Colorado	2	7,500
Tonto National Forest, Arizona	1	49,500
Shasta-Trinity National Forest, California ...	1	56,800
San Bernardino National Forest, California ...	2	5,600
Cleveland National Forest, California	1	3,500
Sequoia National Forest, California	1	7,000
Klamath National Forest, California	3	32,000
Mt. Hood National Forest, Oregon	1	13,200
Kisatchie National Forest, Louisiana	1	9,400
Davy Crockett National Forest, Texas	1	3,800
Sabine National Forest, Texas	2	7,500
Ozark-St. Francis National Forest, Arkansas ..	1	2,300
Delta National Forest, Mississippi	1	6,000
Jefferson National Forest, Virginia	1	13,100
Monongahela National Forest, West Virginia ...	1	62,500
North Tongass National Forest, Alaska	1	6,800

Quality improvement of existing structures -- Upgrading of structures and miscellaneous site improvement work will be accomplished at various locations throughout the National Forest System at a cost of $270,000

Maintenance $6,920,000
The estimate provides funds for recurring maintenance of all fire and general purpose improvements to an acceptable standard. The replacement value of these improvements is in excess of $250 million. It is economically essential that the physical plant upon which National Forest activities depend be adequately maintained. The plant facility consists of:

Project (9)

No.	Type of Facility
1,500	Fire lookouts/towers and observatories
5,400	Dwellings, cabins, and barracks
800	Field offices
7,000	Storage and service buildings
5,000	Water and sewage systems
19,000	Radio units
500	Landing fields and heliports
8,000	Miles of telephone lines
1,000	Miles of administrative fences

Approximately 50 percent of these facilities need major maintenance to keep them serviceable. Many were constructed 30 years ago. Delay in providing needed repair will result in increased deterioration and overall cost. Maintenance funds are distributed to field units based on number of improvements by classes currently justified by program use and an analyzed unit maintenance cost.

Examples of Recent Accomplishments

Construction -- The following units were constructed during fiscal year 1969:

No.	Units
14	Dwellings and barracks
2	Fire lookout towers
14	Service and storage buildings
3	Field offices
3	Airstrips and heliports
44	Water and sewage systems
2	Major barracks for fire crews
-	Approximately $1,050,000 was used for communications systems and quality improvement of existing structures.

Maintenance -- $5,719,000 was obligated for the upkeep of existing facilities.

Project (10)

PAYMENTS TO EMPLOYEES' COMPENSATION FUND

1969	$1,118,131
1970	1,100,000
1971	1,456,000
Increase	+356,000

An increase of $356,000 is proposed to reimburse the Employees' Compensation Fund, Department of Labor, in accordance with PL 86-767 (5 USC 785), which was enacted September 13, 1960, for benefit payments made from that fund to employees of the Forest Service who are injured while in the performance of duty. The 1970 payment was $1,100,209. The payment for 1971 will be $1,456,376.

Project (11)

WATER RESOURCE DEVELOPMENT RELATED ACTIVITIES

1969	$8,353,000
1970	7,500,000
1971	4,109,000
Decrease	-3,391,000

A decrease of $3,391,000 is proposed for public use, access, and management facilities in order to hold Federal construction activities to a minimum.

The proposed level of funding will help avoid gross misuse of resources in the most sensitive areas and will enable the Forest Service to redeem only the most crucial elements of the Department of Agriculture's obligation to water development projects of other agencies. An increasing number of such developments for power, flood control, reclamation, and general water supply purposes are being planned for, and constructed in and adjacent to, National Forests and National Grasslands by Federal, State, and local agencies and private groups.

The construction agencies, frequently through separate Congressional authorization, initiate the projects and schedule the performance. The Forest Service cooperates in the planning, development, and management of the water and related resource developments associated with National Forest System lands.

Each water development project poses resource problems and opportunities peculiar to the individual site under consideration, to adjacent and tributary lands, and to the associated rural area environment. This requires a comprehensive impact survey by the Forest Service to determine the effect of each water resource development proposal on all the resources, facilities, and the rural areas affected by the project. These surveys determine the best pattern for multiple-use management of project associated land, prescribe the resource management adjustments needed to assure a maximum National Forest contribution to the water project, and identify Department-wide opportunities for utilizing project potential for the enhancement of rural America.

In addition to impact surveys, the work performed under this program includes:

(1) Liaison with the construction agency to assure the benefits of a combined and harmonious interagency effort.
(2) Development of public use and management facilities to assure that project purposes are realized and enhanced as public use increases at the reservoir and on related National Forest lands.
(3) Treatment of lands, tributary to or within the project area to provide improved water yields and reduced sedimentation which will better serve operating requirements of reservoirs, maintain or increase the useful life of the project, and provide for public safety and enjoyment.

Work and financing planned for fiscal year 1971 is compared with that for fiscal year 1970:

	Fiscal Year 1970		Fiscal Year 1971	
	No. of Units	Cost	No. of Units	Cost
(1) Impact surveys and construction liaison	469	$2,555,000	541	$2,555,000
(2) Public use, access, and management facilities		3,933,000		542,000
(3) Land treatment, soil stabilization and cover improvement	71	1,012,000	1/ 76	1,012,000
Totals	540	7,500,000	617	4,109,000

1/ Eighteen of these projects ($225,000) represent Forest Service obligation to

finance land treatments on National Forest lands at those PL-566 projects where work plans have been approved since March 21, 1966.

(1) Impact surveys and construction liaison ($2,555,000)

Impact surveys delineate the effect, define necessary mitigating measures, and identify enhancement opportunities relative to proposed water resources developments associated with National Forests and National Grasslands. Reports resulting from such surveys document measures which are essential to the attainment of National Forest multiple-use objectives and identify how National Forest management can contribute to project purposes to optimize their economic and social contribution to rural America. To be effective, the surveys and reports must be concurrent with the construction agency's preliminary planning to permit their findings to be incorporated in the licensing or authorizing document.

Liaison with the construction agency during the construction period is necessary to facilitate coordination between the construction agency and the Forest Service. Protection of the land and resources, minimizing interference with regular protection and management activities, and facilitating construction agency operations are direct economic dividends derived from this program.

Experience has shown that without adequate analysis and liaison effort such as is provided by this activity, natural resources often suffer from enormous waste and misuse and the project works fail to make their maximum contribution. Natural beauty and high quality water are among those resources most susceptible to loss. The rising value of forest resources and constant increase in demands against the declining resource base requires increased perception, imagination, and thoroughness in the preparation of impact surveys. The impact survey effort and construction liaison work reflects an involvement at 541 projects. Based on an average project construction cost of $29 million these 541 projects represent a total construction cost of about $15.7 billion.

The enormous cost of this construction program associated with the National Forests provides some indication of extent of activity going on. A fiscal year 1971 investment of $2,555,000 by the Forest Service (.017 of 1 percent of construction costs) will help assure that projects are constructed in maximum harmony and minimum conflict with associated land, resource, and human values. Benefits per dollar expended for this program, while not readily or fully subject to measurement, are believed to exceed those for other elements of this budget line item. Although current Federal budget considerations will result in an overall reduction in expenditures for project construction by other agencies, it appears as though few, if any, current projects will be halted altogether. This requires that Forest Service impact survey and construction liaison work continue on all projects at a sustained level of effort.

Fiscal year 1969 accomplishment included preparation of impact survey reports for: Stampeded Reservoir, El Dorado Project, Kerckhoff Project, Oak Grove, Umatilla Basin, Auburn Reservoir, and Garden Valley-Scriver Creek.

(2) Public use, access, and management facilities ($542,000)

This is a decrease of $3,391,000 from the 1970 level and is directed by the requirement to hold Federal construction activities to a minimum.

Project (11)

The Forest Service is responsible for designing and developing public use facilities on National Forest System lands at, and adjacent to, project reservoirs built by other agencies. Impact survey findings and recommendations provide for the protection of water quality and fulfillment of other project purposes by pointing the way to carefully designed public use development tailored to individual project needs. Facilities include sanitation improvements, camping and picnic sites, swimming beaches, boat ramps, and other public use and information facilities. To serve their intended purpose, these facilities should be installed in time to meet the initial impact of visitor use when a reservoir fills. Installation during the construction period is generally less expensive than after completion of the project. Failure to provide such facilities in a timely manner threatens project purposes and denies fulfillment of public use potential -- a potential which has already been purchased at large cost. Such failure also results in damage to prime recreation sites, destruction of natural beauty, pollution of streams and reservoirs, and conditions hazardous to the health and safety of the using public.

A backlog of this work is growing continually, and only in few cases is the work accomplished when it is the easiest and cheapest --before the reservoirs fill. There are presently 115 reservoirs on the National Forests with no recreation facilities. The surface area of these reservoirs exceeds 139,000 acres. Many other reservoirs have only minimal facilities.

The fiscal year 1971 level of financing will provide for no new starts, but will be limited to completion of previously started projects as much as possible.

PLANNED CONSTRUCTION OF PUBLIC USE, ACCESS, AND MANAGEMENT FACILITIES--
FISCAL YEAR 1971 WATER RESOURCE DEVELOPMENT RELATED ACTIVITIES

Continuation of Projects Underway in Fiscal Year 1970

State	Forest	Project	Estimated Cost
Montana	Kootenai	Libby	$45,000
Colorado	San Isabel	Turquoise	100,000
Utah	Ashley	Flaming Gorge	96,000
Indiana	Wayne-Hoosier .	Cannelton Lock and Dam .	14,000
Indiana	Wayne-Hoosier .	Monroe Reservoir	5,000
Pennsylvania	Allegheny	Allegheny Reservoir	282,000
Total			542,000

Fiscal year 1969 accomplishment included construction and planning of facilities at 34 projects -- Libby Reservoir, Hungry Horse, Box Canyon, Fryingpan - Arkansas, Chevelon Canyon, Snow Creek Lake, Flaming Gorge, Lyman, Shasta-Clair Engle Lakes, Union Valley, Wishon, Courtright, Frenchman, Beardsley, Blue River, Cle Elum-Kachees, Mason, Round Butte, Yellowjacket, Crescent Lake, Toledo Bend, Sam Rayburn, Cave Run, Chewalla, Lewis Smith, Bayon Boeuf, Upper North River, South Branch Potomac, Monroe, Allegheny, Middle Fork Anderson, Basin Brook, Chequamegon Waters, and Lake of Egypt.

(3) Land treatment, soil stabilization, and cover improvement ($1,012,000)

Treatment of lands tributary to water resource development projects to reduce sediment yield or to modify the pattern of runoff lengthens the life and increases the utility of the water control structures. This work is done on National Forest System lands tributary to the project, only where hydrologic

analysis and other elements of the impact survey determine that such work is needed and that benefits to the project purpose are clearly established. Treatment programs include the following:

(a) Modifying the vegetation to decrease erosion, to reduce flood peaks, and to increase the annual quantity and improve the timing of water yielded from the tributary lands.
(b) Clearing reservoir areas, where not done as a part of construction, and keeping the reservoir free of debris to make the area safe for public use and to maintain scenic beauty.
(c) Land treatment measures such as contour terracing, gully plugs, headwaters debris and flow retarding structures, and streambank and shoreline stabilization measures.

Essential land treatment and related measures are planned at 76 projects, including 18 PL-566 small watershed projects approved after March 21, 1966. Reservoir sweeping, debris and stump removal, and vector and aquatic weed control will be accomplished on about 40,000 acres at 27 projects in order to provide for public safety and user enjoyment of the reservoir area. At the remaining projects a combination of treatment measures, including some of the above, will be performed to improve water quality and quantity.

Fiscal year 1969 accomplishments included the application of land treatment measures at Sebastian Martin-Black Mesa, Monroe-Annabella, Trail Creek, Vernon, Star Valley-Dry Creek, Cahulgo Creek, South Fourche, Pine Creek and Cottonwood PL-566 projects. About 650 acres of stumps were removed at four projects for protection of the recreationists and for esthetic reasons, and reservoir sweeping and debris removal was accomplished on approximately 65,000 surface acres at eight reservoir projects. In addition, measures such as gully stabilization, sheet erosion control, lakeshore stabilization, and contour trenching aimed at improving water quality and quantity were done at 17 projects.

Project (12)

FIGHTING FOREST FIRES

1969	$24,621,000
1970	4,275,000
1971	4,275,000

This program provides for the National Forests and Grasslands the firefighting forces needed in emergencies which cannot be handled by the regular forest fire protection program. Included are expenditures for men and equipment to control large fires. In addition, when critical conditions present an unusual threat, temporary forces are placed on standby at strategic locations to be available to attack fast-spreading fires.

The volume and scope of emergency forest firefighting (FFF) varies annually according to severity of burning conditions and the frequency of the forest protection program. These two programs are directly related and the cost of protecting the National Forests and Grasslands is the total sum of their respective expenditures. Past experience has shown increased funding for regular forest fire protection programs reduces FFF expenditures so the total fire protection cost is typically smaller.

Calendar Year 1968 Fire Season

The 1968 fire season in the National Forests was marked by wide contrasts in weather severity and wildfire activity. While the year lacked the dramatic aspects of the 1967 Western fire crisis, many areas were subjected to a very serious fire threat for at least a portion of the season.

Protection forces responded to peak burning periods with stepped-up fire prevention programs and increased preparedness for rapid detection and attack. But time and again, weather, topography, dry fuels, and lightning or man's carelessness combined to create fires that defied all efforts for quick control.

With local forces often hard-pressed to handle the situation in the face of severe burning conditions, swift reinforcement by well-trained personnel on a planned basis was the key to holding down losses. One of the most disastrous fires was the Fourth of July Mountain Fire, Wenatchee National Forest, Washington. From August 4 through 7, 1968, this fire spread over 27,000 acres of forest and rangeland. More than a thousand men were mobilized before the blaze could be controlled.

Another devastating fire, the Canyon Fire, Angeles National Forest, California, destroyed 20,200 acres of key watershed, a portion of which contributed to heavy flood damage to homes in the Glendora area.

During the period January through December, 9,731 fires burned 212,420 acres under National Forest protection. Of these, 4,923 were man-caused, a reduction from 4,981 experienced in 1967 and from the previous 5-year average of 5,178.

Calendar Year 1969 Fire Season

The 1969 fire season also found some areas with fire hazard higher than during the damaging 1967 season. Yet, only a few large fires occurred. The Mist Fire in the Superstition Wilderness, Tonto National Forest in Arizona, burned 7,500 acres in June. In August, the San Mateo Fire, originating on the Camp Pendleton Marine Base in California, burned 16,840 acres including 4,930 acres of the Cleveland National Forest. The Rough Ridge Fire began the same day and burned 9,610 acres, 8,660 of which were on the Wallowa-Whitman National Forest in Oregon.

In spite of these fires, the record was good even though drought and high temperatures created extreme fire danger in the Western United States during late summer. For example, it was the driest August in 80 years of record at Walla Walla, Washington. In several places it was also one of the hottest Augusts on record. Helena, Montana, set an all-time high of 105 degrees, and Great Falls equaled its all-time high of 106 degrees.

Through October 31, 9,322 fires burned 90,132 acres of National Forest protected area. Of these fires, 4,630 were man-caused. In spite of extreme fire danger conditions, the burned acreage on Forest Service protected area was less than half that of the previous 5-year average. Preparedness and aggressive initial attack by fire control forces were important reasons for this impressive record.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS
Fighting Forest Fires
1969

Alabama	$17,758	New Hampshire	$5,317
Alaska	233,019	New Mexico	953,370
Arizona	2,551,014	North Carolina	74,947
Arkansas	83,088	Ohio	30,205
California	8,366,256	Oklahoma	6,792
Colorado	355,399	Oregon	2,872,127
Florida	142,940	Pennsylvania	4,767
Georgia	18,459	South Carolina	20,952
Idaho	2,708,679	South Dakota	94,136
Illinois	17,476	Tennessee	80,609
Indiana	7,085	Texas	9,703
Kentucky	62,895	Utah	319,099
Louisiana	30,195	Vermont	244
Michigan	49,909	Virginia	51,256
Minnesota	34,390	Washington	2,056,287
Mississippi	68,881	West Virginia	24,251
Missouri	90,514	Wisconsin	3,922
Montana	950,042	Wyoming	145,909
Nebraska	10,448	Undistributed 1/	600,000
Nevada	132,858		
		Total	23,285,198

1/ $600,000 in 1969 covers repayment to trust fund of loan made in fiscal year 1968.

The amounts for 1970 and 1971 have not been distributed by States. Locations of emergency firefighting funds cannot be forecast with any degree of accuracy.

Project (13)

INSECT AND DISEASE CONTROL

1969	$11,983,000
1970	9,846,000
1971	11,346,000
Increase	+1,500,000

An increase of $1,500,000 is proposed for the purchase of 100,000 pounds of Zectran, a non-persistent, carbamate insecticide that will be used as a substitute for DDT to control spruce budworm. The material is a proprietary product and the manufacturer requires a purchase guarantee for 100,000 pounds to set up production. This is about a two-to-three year supply.

Insects and diseases cause major damage and destruction of the Nation's forestry resources. They are active in all forest types, on lands of all ownerships, and in all sections of the country. In addition to killing trees outright, they lower growth rates and reduce tree quality.

Annual losses caused by forest insects and diseases are estimated to be 4.8 billion cubic feet. This includes both sawtimber killed and growth loss. The total loss approximates 40 percent of the current annual timber harvest or, if converted to lumber, a quantity sufficient to build 2.5 million homes. Losses from physiological disturbances other than insects and infectious diseases are also significant. These losses include those caused by adverse edaphic factors, by atmospheric pollution and by climatic factors such as temperature and moisture extremes.

Aside from the timber product aspects, other segments of the economy incur losses from insect and disease outbreaks. Trees that are killed mar the natural beauty of the countryside. Depredations can disrupt and impair the habitat for fish and wildlife, increase the hazard of forest fires, and degrade or destroy the esthetics of sites used and needed for outdoor recreation.

Bark beetles are the most destructive insect pests. They are responsible for about 90 percent of the timber loss attributable to insects. The aim of the bark beetle control program is to prevent them from reaching the proportions that occurred in the past. Major control efforts are to be continued in:

(a) Douglas-fir stands of Montana, Oregon, and Washington.
(b) Ponderosa pine stands in California, Oregon, South Dakota, and Washington.
(c) Lodgepole pine stands in Idaho.
(d) Engelmann spruce stands in Colorado, New Mexico, Idaho, and Montana.
(e) Southern pine stands in Alabama, Louisiana, Mississippi, North Carolina, South Carolina, and Texas.

Defoliating insects such as caterpillars, loopers, tussock moths, sawflies, and many others, weaken or kill trees by stripping the leaves or needles. Forest defoliators are normally controlled by aerial application of an insecticide. Some are brought under control by natural factors, including the extremes of weather, or the action of pathogens, parasites, and predators. The search for non-persistent pesticides and biological controls for defoliators is continuing. Tests of a new and safe insecticide (Zectran) were conducted in Idaho and eastern Canada in the summer of 1969. Results were promising, and it has been decided to substitute this non-persistent chemical for DDT to control spruce budworm even though costs will more than double. The increased costs are justified because Zectran is non-persistent and the quality of the environment will not be damaged when this insecticide is used. It is estimated that control costs will be within the range of $4-$6 per acre. Therefore, it is economically sound to carry out control efforts. At this time no other effective, non-persistent pesticide is known. There are 3-4 million acres now infested with spruce budworm. Control measures will be initiated on the highest priority areas as soon as supplies of Zectran are available.

Defoliator outbreaks fluctuate greatly and it is difficult to predict their location and scope. Present trends indicate buildup of hardwood defoliators in New York, New Jersey, and Pennsylvania. Spruce budworm is reaching epidemic proportions in Idaho, Montana, and Maine. Suppression will be performed as needed to prevent unacceptable losses.

The dwarfmistletoes are parasitic plants that attack, and kill many coniferous tree species in the West. It is estimated that they reduce productivity by over 600 million cubic feet annually with stumpage losses of $40 million. They are controlled to a large extent by modified harvesting methods and by removal of overstory-infested trees in young stands. Studies show that a high rate of return (10-15 percent) can be realized from control work when done in conjunction with recommended thinning. Plans call for continued emphasis on dwarfmistletoe control in fiscal year 1971.

Evaluations show that control of white pine blister rust is effective and the cost/benefit ratio favorable in the stands of the East and Lake States and in selected stands in California and Oregon. In the East and Lake States most of the valuable white pine stands are in private ownerships. The protection program in these States is financed jointly, with the States contributing the greater portion of the funds. Pre-control evaluations are made and control efforts are limited to those stands that will provide the most favorable cost/benefit ratios.

Studies show that uncontrolled rust will reduce yield of western white pine by about 90 percent through a normal rotation, sugar pine by 70 percent, and eastern white pine by 50 percent. It is estimated that in the East, because of the control program on 6.3 million acres, an additional 47.3 billion board feet of timber will be available for harvest.

Coordination of forest pest control activities on all forest lands of all ownerships is important in protecting the Nation's forests against destructive pest outbreaks. Early detection and sound evaluations by professional entomologists and pathologists enable forest managers to make proper decisions concerning suppression efforts. Prompt suppression action tends to confine outbreaks to small areas. To provide maximum overall surveillance, Federal financial assistance is provided to cooperating States. Twenty-six States are now participating in this program which provides up-to-date evidence of pest activities on more than 300 million acres of non-Federal lands. As additional States are able to participate in these cooperative detection and evaluation efforts, the impact from epidemics should be lessened.

The onset, frequency, and severity of pest outbreaks fluctuate greatly. Accordingly, the cost to check and contain them cannot be accurately predicted. Using past experience as a guide, Federal funds needed for the recurring phases of the pest control job, together with anticipated costs of project operations for fiscal year 1971, as compared with 1969 and 1970, are as follows:

Item	1969	1970	1971
		(In thousands)	
(1) Administration, detection and evaluation	$4,700	$4,645	$4,645
(2) Methods improvement	700	620	620
(3) Purchase Zectran			1,500
(4) Bark beetle control	2,969	1,290	1,290
(5) Defoliator control	1,250	1,280	1,280
(6) Other insect control	110	78	76
(7) Blister rust control	1,715	1,230	1,230
(8) Oak wilt control	76	66	68
(9) Dwarfmistletoe control	390	612	612
(10) Other disease control	73	25	25
Total	11,983	9,846	11,346

See table at end of this section which shows estimated distribution of funds by States.

Examples of Recent Accomplishments

Insect control. To suppress bark beetle populations on the National Forests and on non-Federal lands, some 885,000 trees received direct treatment. However, in most outbreak areas 4 to 20 times as many beetle-infested trees were removed from the woods by sale than were treated. Suppression projects and pilot tests on defoliating insects included treatment of 33,855 acres. Suppression of other insect outbreaks was required on 703 acres.

Disease control. In disease control programs, presuppression surveys were made on 46,702,769 acres--44,886,000 acres for oak wilt, 1,604,820 acres for white pine blister rust, and 211,949 acres for dwarfmistletoe. Some 6,000 trees were treated to control oak wilt. Control operations were performed on 59,481 acres to suppress white pine blister rust and on 24,033 acres to prevent spread of dwarfmistletoe on western conifers.

Biological evaluations pay dividends. Nationwide, several hundred biological evaluations of individual insect or disease outbreaks were made. In making these evaluations trained entomologists and pathologists collected data to determine the need, feasibility, and justification for suppression of forest insect and disease outbreaks. The reports covering their findings and recommendations were given to the land managers to assist them in deciding for or against suppression.

Knowledge gained from pilot tests. Pilot tests were carried out on spruce budworm and hemlock looper to assess efficacy of new non-persistent pesticides and modified application techniques. These tests have provided important information on further development needs in application techniques, carrier deficiencies, spray measurement at target, and sampling procedures.

Forest properties inspected to detect and assess pest outbreaks. Almost one-half billion acres of forest land were inspected by pest control personnel, both from the air and on the ground, to detect and assess forest insects and diseases. Some of this gross acreage involved two and sometimes three inspections of the same forest area where multigeneration insects and summer-long disease infection periods were involved. In addition to the National Forests, inspection covered other Federal lands in cooperation with the land managers and State and private lands in cooperation with 26 of the States.

All-out efforts aid in reducing losses by southern pine beetle. For several years the southern pine beetle has been at a high epidemic level in many localities from Texas to North Carolina. Although some hot spots still occur the overall trend is downward. The decreased beetle activity is attributed to an aggressive combined sanitation-salvage and direct control program in conjunction with unseasonably hot weather. As a result, a number of active projects have been terminated. In Texas, it has been possible to reduce total cooperative project expenditures from an annual level of over $400,000 to $150,000.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS
Insect and Disease Control

	1970 estimate	1971 estimate
Alabama	$127,000	$130,000
Alaska	76,000	80,000
Arizona	142,000	140,000
Arkansas	35,000	50,000
California	1,290,000	1,200,000
Colorado	213,500	220,000
Connecticut	22,000	25,000
Delaware	3,500	3,000
District of Columbia	256,000	342,000
Florida	42,000	60,000
Georgia	50,000	70,000
Hawaii	7,000	8,000
Idaho	1,032,800	2,600,000
Illinois	18,000	18,000
Indiana	9,000	9,000
Iowa	700	1,000
Kentucky	15,000	40,000
Louisiana	220,800	180,000
Maine	280,000	340,000
Maryland	16,000	16,000
Massachusetts	30,000	20,000
Michigan	200,000	200,000
Minnesota	290,000	320,000
Mississippi	255,000	280,000
Missouri	60,000	70,000
Montana	511,000	500,000
Nebraska	35,200	36,000
Nevada	36,000	80,000
New Hampshire	110,000	110,000
New Jersey	75,000	80,000
New Mexico	169,000	170,000
New York	180,000	190,000
North Carolina	250,000	250,000
Ohio	43,000	45,000
Oklahoma	6,000	5,000
Oregon	975,000	990,000
Pennsylvania	118,000	120,000
Rhode Island	4,500	3,000
South Carolina	145,000	110,000
South Dakota	84,000	120,000
Tennessee	36,000	40,000
Texas	325,000	190,000
Utah	279,000	277,000
Vermont	83,000	110,000
Virginia	256,000	180,000
Washington	350,000	270,000
West Virginia	188,000	190,000
Wisconsin	176,000	180,000
Wyoming	720,000	678,000
Total	9,846,000	11,346,000

Note: Estimates of project needs are forecast a year or more in advance of anticipated needs and are always subject to fluctuations. Adjustments are made between projects as necessary, depending on discovery of new outbreaks and expanded needs on approved projects.

Project (14)

ACQUISITION OF LAND, WEEKS ACT

1969	$1,300,000
1970	1,300,000
1971	1,300,000

No program increase is proposed.

The acquisition of key inholdings within the National Forests and the National Forest purchase units becomes increasingly urgent as the demands upon wildlands and farm lands for highway construction, industrialization and summer home development increase. The development program for the National Forests recognizes the need to ultimately acquire about 7 million acres of private inholdings in need of land rehabilitation. This 10-year program (1963-1972) has an objective to purchase 967,000 acres of watershed and timber production lands. Included are lands depleted by repeated fires, poor logging practices, clearing and cultivation of steep and erodible mountain lands, disturbed mineral exploitation areas, and submarginal or marginal farms that should be removed from farming operations and managed for timber production and/or grazing. These are lands located primarily in economically depressed areas. Sound management of acquired areas will contribute to:

(1) Stabilization of the local economy.

(2) Environmental enhancement.

(3) Prevention of stream pollution in rural America.

(4) Improved timber production.

Lands primarily valuable for recreation are not included in this program. Acquisition of such lands are financed under the Land and Water Conservation Fund Act program.

The $1.3 million included in the fiscal year 1971 estimate will be used to acquire an estimated 8,500 acres in the Redbird Purchase Unit in eastern Kentucky at a cost of $560,000. The remaining $740,000 will be used to continue the acquisition programs in purchase units in eastern United States, plus a minor program in Nebraska. Emphasis is given in this part of the program to the National Forests in Arkansas, Illinois, Indiana, Michigan, Missouri, Virginia, and West Virginia.

See the tabulation at the end of this section for more detailed information on actual and planned accomplishments in fiscal years 1969-1971.

Examples of Recent Accomplishments

In 1969 a total of 138 tracts were contracted for purchase under authority of the Weeks Act using regular appropriated Weeks Act funds. These cases involved the acquisition of 26,515 acres at a total cost of $1,296,665. These transactions involve lands suited to timber production and watershed protection in areas where National Forest ownership needs to be consolidated or extended to facilitate these programs. Many of the smaller parcels, 20-40-80 acres in size, are purchases made at a price equal to, or nearly equal to, the cost that would otherwise have been incurred to survey, post, and mark the National Forest boundary surrounding the property.

WEEKS ACT PURCHASES 1969-1971

State and Forest	FY 1969 Actual			FY 1970 Estimated			FY 1971 Estimated		
	Options accepted	Acres	Obligation	Options to be accepted	Acres	Obligation	Options to be accepted	Acres	Obligation
Alabama - Talladega							1	80	9,000
Tuskegee							1	156	13,000
Arkansas - Ouachita	3	404	20,620	3	200	10,000	2	120	9,000
Ozark	8	1,430	55,301	10	1,000	32,000	8	1,363	57,000
Georgia - National Forests in Georgia				2	171	12,000			
Illinois - Shawnee	7	505	41,914	20	1,032	72,000	12	1,000	82,000
Indiana - Hoosier	10	478	30,188	25	1,200	72,000	15	1,300	80,000
Kentucky - Redbird Purchase Unit	31	8,856	310,805	3	8,949	600,000	8	8,500	560,000
Jefferson							2	1,170	33,000
Louisiana - Kisatchie				1	120	8,000	1	40	5,000
Michigan - Hiawatha	4	925	18,150	3	357	25,000			
Huron-Manistee	12	1,140	71,965	17	1,200	30,000	5	380	25,000
Ottawa	6	1,898	20,173	3	300	5,000	3	250	5,000
Minnesota - Chippewa	3	280	5,580	5	240	4,000	3	200	5,000
Missouri - Clark	8	2,550	89,001	10	900	29,000	5	425	15,000
Mark Twain	7	1,283	61,540	8	550	21,000	8	1,000	45,000
Nebraska - Nebraska				2	240	17,000	2	240	17,000
New Hampshire - White Mountain				2	160	4,000			
North Carolina - Nantahala	1	94	37,696						

WEEKS ACT PURCHASES 1969-1971 -- continued

State and Forest	FY 1969 Actual			FY 1970 Estimated			FY 1971 Estimated		
	Options accepted	Acres	Obligation	Options to be accepted	Acres	Obligation	Options to be accepted	Acres	Obligation
Ohio - Wayne	16	2,762	96,126	20	1,000	42,000	16	2,500	90,000
Oklahoma - Ouachita	2	70	2,270						
South Carolina - Sumter	4	214	24,037	2	160	17,000	1	140	20,000
Tennessee - Cherokee	3	1,509	44,436	4	500	21,000	1	116	8,000
Vermont - Green Mountain	2	86	9,500	3	250	8,000	2	150	15,000
Virginia - George Washington	2	234	14,907				1	200	22,000
Jefferson	2	771	28,710	6	900	42,000	5	372	21,000
West Virginia - Monongahela	2	546	12,540	2	1,200	51,000	1	900	40,000
Wisconsin - Chequamegon	2	160	8,618	3	320	9,000	2	200	10,000
Nicolet	3	320	10,700	4	320	9,000	3	300	10,000
Subtotal	138	26,515	1,014,777	158	21,269	1,140,000	108	21,102	1,196,000
Surveys and related acquisition costs			281,888			160,000			104,000
Total obligations			1,296,665			1,300,000			1,300,000

SALES ADMINISTRATION AND MANAGEMENT

Mrs. HANSEN. You are requesting an increase of $5,260,000 for timber resource management. Justify this request.

Mr. NELSON. We have $2,700,000 that will be for the timber management plans. That will be an increase of $396,000. That is where we take the photo, interpret the data, take plots on the ground to see what our growth is, and prepare the plan for each working circle. One of the reasons that we propose to increase the part used for planning is so that we can take advantage of work that has been done, or investments made in the land, which would contribute to increased allowable cut. In the past we have redone each management plan at about 10-year intervals. We are looking at ways of updating that more often.

In the preparation of sales, $26,213,000 of the total will be used. That will be a little less than the previous year. For the administration of sales, $22,902,000 of the total will be used during fiscal year 1971, which covers all phases of the administration of the cut of national forest timber. We also would expect to continue with $495,000 for the enforcement of the log-export restrictions.

Mrs. HANSEN. What are the cost factors involved in the $495,000 requested for enforcement of log-export restrictions?

Mr. NELSON. Inspections, plus holding of hearings. The act requires us to hold some hearings to determine if some species may be surplus to domestic needs. We have held hearings in the Northwest regarding cedar. We also held hearings in Alaska concerning yellow cedar. As I recall, in one case we determined from hearings that it was not in excess, and therefore should not be exported, and in another case it was excess to the local needs, and was therefore allowed to be exported.

DECREASE IN COMMERCIAL THINNING AND SALVAGE PROGRAM

Mrs. HANSEN. You are requesting a decrease of $1,040,000 for your commercial thinning and salvage sale program. Justify this decrease. I thought this was part of your management technique for increasing timber production?

Mr. NELSON. The area that we can successfully cover, with a salvage program, is based upon our accessibility. We were able to increase that program where we had roads. We are in a position now where we don't have the opportunities, until we get additional roads built in advance, to carry on that program at the same level that we had planned or have been in the past.

Last year, of course, you know, because of the high lumber prices, the President asked us to offer for sale an extra billion feet. We did. Most of that, or a large part of it, was from thinning and salvage that was available at the time. Now we are dropping back on our preparation. The billion feet puts us back to about the level that we were before the allowable cut level.

Mrs. HANSEN. Were any of the funds for thinning and salvage placed in reserve?

Mr. NELSON. No. They involved only the recreation and roads that were for support of resources other than timber on the national for-

est. I should make it clear, as I have told this committee other times, that most roads are multiple-use roads and benefit all activities. Some roads we consider benefit the timber activity first. Other roads, like a campground road or a road going into a recreation development, we give first priority to recreation. We have a few roads that are in support of such things as fire program, range management, or watershed program.

Mrs. HANSEN. Are you coordinating your timber sales work and your research work in remote areas?

BALLOON AND SKYLINE LOGGING

Mr. NELSON. Yes, we are. Dr. Arnold may want to talk to that a little bit more, but one of the research projects that hold great promise is balloon and skyline logging. National forest administration personnel are sent to Dr. Arnold's research center in Seattle to work with them and university people in order that the Forest Service will be able to put these things into effect just as fast as they are developed. That includes not only national forests but State and private people working with the research people in order to put development into effect on private lands as well.

Mr. ARNOLD. The Boise-Cascade Lumber Co. has recently purchased a balloon logging system to apply results developed in engineering research. During this past year a symposium was held at Oregon State University with 500 loggers and timberland owners in attendance to learn about the new logging-by-skyline systems. It is estimated that eventually about 16 percent of the timber will have to be logged in this manner.

Mrs. HANSEN. Insert in the record the acreage involved, and the amount of funds that you have spent in research to develop logging techniques.

(The information follows:)

There are 135 million acres of commercial forest land in the West. Funds allocated for logging techniques research for this area are as follows:

Year	*Estimated funding*
1962	$26,600
1963	98,500
1964	88,950
1965	208,650
1966	156,300
1967	174,200
1968	300,100
1969	308,000
1970	318,000

IMPACT ON ROAD SYSTEM

Mrs. HANSEN. Isn't it also true that in the remoter areas your cutting has less of an impact upon the general public than in other areas?

Mr. ARNOLD. The general public, of course, is moving back into remote areas, and there is a lot of flying over remote areas. I believe that the pressures that we experience come from remote as well as areas close to cities, particularly in areas adjacent to wilderness areas, as

you know, so that the skyline and balloon logging systems are not related to remoteness as much as to steepness of slope and to fragile soils needing protection.

Mrs. HANSEN. Isn't the road system limited in these areas?

Mr. ARNOLD. That is correct, yes.

Mrs. HANSEN. In these areas you also have less erosion and less damage to the terrain.

Mr. ARNOLD. It is the roads that are the source of much of the difficulty in logging critical areas. We also have engineering research designed to improve road development in fragile-soil areas.

Mr. NELSON. Just so the record might be clear on road relationship to balloon or skyline logging, it is not going to take any fewer miles of what we call our regular permanent system roads, because the logs have to be hauled out. It will mean fewer miles and thus less disturbance of the soil by these little side roads. Those are the types of roads that have caused much of our erosion.

While I have the floor, I might say in followup to what I said about sending people to work with the research people, we actually have started special training schools. We have one going on right now where 26 people are being trained by those people that we sent to be trained with the research people on the use and how to lay out skyline logging shows. It is quite a new system. You don't lay it out the same as you used to for other logging. The roads have to be in a little different location. There are a lot of things that have to be done. We are trying to get our own people really skilled to be able to handle and put into effect this new type of logging system.

THINNING AND SALVAGE

Mr. WYATT. Madam Chairman, before we leave thinning and salvaging. Mr. Nelson, your $1 million decrease for fiscal year 1971 in commercial thinning and salvage sales program really is about the amount that this was increased in the supplemental in early 1969, isn't it?

Mr. NELSON. I believe that the supplemental was somewhat less.

Mr. WYATT. This is the preparation item for the thinning and salvaging. So if you would average the whole thinning out and pretend like there wasn't any supplemental for preparation of thinning and salvaging, and move that over to here, we are just about where we started from, aren't we?

Mr. NELSON. I think that is about right.

Mr. WYATT. We gave a little balloon to it there, then we have tapered off. That is responsible then for the fact that in fiscal 1971 you propose to harvest 700 million board feet. You can do that because of the money that has been spent, the extra money that was spent has been spent earlier this year for the preparation.

Mr. NELSON. That is true.

Mr. WYATT. And contrariwise the sales preparation that you are now engaged in, preparing for 1971, would only prepare 600 million board feet for harvest at a later date.

Mr. NELSON. That is right.

Mr. WYATT. As contrasted to 895 million board feet prepared for harvest for fiscal 1970.

Mr. NELSON. Yes, sir.

Mr. WYATT. This is really marching backward then. The total substance of it is marching backward, at a period when anybody with any commonsense knows that we are fairly close to having some demands made upon our wood fiber products. I think this is a very severe problem, and I think it is a very serious question as to whether or not substantial moneys should not be spent in fiscal 1971 for preparation for thinning and salvage for later. I think this is the worst kind of economy.

I wonder, Madam Chairman, if the Forest Service could furnish for us some kind of figures as to their capacity for spending money for preparation for thinning and salvage in the fiscal year 1971.

Mrs. HANSEN. Insert the information in the record.

Mr. NELSON. We will try.

(The information follows:)

Forest Service capacity for preparation of thinning and salvage sales is dependent, to a large extent, on roads to remove such material. Our advanced construction of roads is designed to make more thinning salvage possible. In fiscal year 1971 we estimate that the road system is such that we could prepare for sale 1 billion board feet with total cost of $4 million. The present program is 600 million board feet. Additional volume that could be prepared is 400 million board feet and additional financing needed would be $1.6 million.

NUMBER OF HOMES BUILT

Mrs. HANSEN. You state, on page 22 of your justifications, "It is planned to sell 11.8 billion board feet of regular material and 0.6 billion board feet of thinning and salvage material."

Please insert in the record how many homes this would build.

Mr. NELSON. We would be glad to do that.

(The information follows:)

We really cannot answer how much national forest timber actually goes into home construction. After the logs are scaled and paid for they lose their identity in the national wood production scene. A portion of our timber program is in products other than lumber, dimension, and plywood and a good portion of the lumber, dimension, and plywood goes into construction fields other than homebuilding.

A single-unit family dwelling now averages 13,000 feet of lumber and dimension and 5,500 square feet of plywood products. If this were converted back to log scale, it would average about 13,000 feet log scale. For comparative purposes only we could say that the total national forest timber program is equivalent to about 1 million new homes each year.

SALES PREPARATION

Mr. WYATT. One other thing, if I may. I wonder if also we could be furnished with a little detail as to how much additional capacity the Forest Service could use for sales preparation in fiscal 1971 in its regular harvest program, because again, with the huge, mounting demand staring us in the face, there is a very substantial reduction in the sales-preparation allocation for fiscal 1971.

Mr. NELSON. We can provide something for the record.

(The information follows:)

The regular sale preparation program could be increased by 200 million feet and additional financing needed would be $450,000.

Mr. CLIFF. To be effective, Mr. Wyatt, this has to be coordinated with the road program too. We can't move into sales preparation much

faster than we can get our road system extended. All of these things have to be coordinated—sales preparation and administration, the road program, and other intensive timber-management practices.

Mr. WYATT. Let me put my question this way, if I can, because I think this is something that we really must be prepared for. Certainly it is going to happen by fiscal 1972, and I think before then. Under your sales preparation for your regular harvest program, you are preparing 11,795,000 board feet for sale, is that right?

Mr. NELSON. That is right.

Mr. WYATT. Chief, would this be sensible? Would it be reasonable for me to request you to furnish for the record the increase in sales preparation money that would be required, and the increase in road money that would be required, and any other increase that might be required which would enable you to be prepared to harvest, say, 15 billion board feet in 1971? Could you tie it in that way so that we would have some kind of alternative in the record?

Mr. NELSON. Yes, sir.

That type of information is exactly what we have in the task force that Madam Chairman asked to be put in the record earlier.

Mr. WYATT. Can you put that specifically in at this point?

Mr. NELSON. Certainly we can.

(The information follows:)

The National Forest sawtimber harvest can be expanded through appropriate investments in more intensive management of timber and related activities. Increases of 7 to 8 billion board feet (international log scale) in annual timber harvest can be achieved over the next decade without impairing sustained yield and multiple use objectives:

SAWTIMBER SOURCES OF INCREASES (BILLION FEET—INTERNATIONAL SCALE)

	Fiscal year—					
	1970	1971	1973	1975	1978	1980
Present AAC of NF mature sawtimber	13.6	13.6	13.6	13.6	13.6	13.6
Thinning and salvage sales—sawtimber	.3	1.2	1.4	1.7	2.0	2.4
Intensive silviculture	.1	.2	.6	1.4	2.7	3.4
Present unregulated areas		.1	.2	.3	.8	1.2
Alaska unregulated areas					.3	.6
NF total (international scale)	14.0	15.1	15.8	17.0	19.4	21.2
Sawtimber local scale [1]	11.8	12.7	13.3	14.3	16.3	17.8

[1] Sawtimber conversion from local scale to international scale (1.19).

ESTIMATED FEDERAL COST OF ACCELERATED TIMBER MANAGEMENT PROGRAM ON THE NATIONAL FORESTS, 1971–80

[In millions of dollars]

Program area	Fiscal year [1] 1970 budget	Increases over fiscal year 1970, by year						
		1st	2d	3d	4th	5th	8th	10th
Timber planning and harvest	44.7	13	23	27	32	37	53	65
Reforestation and timberstand improvement	16.0	16	28	46	59	58	58	60
Forest roads and trails	100.0	35	70	105	105	105	105	105
Resource protection from fire and pests	61.0	13	13	14	15	15	14	14
Mitigating impacts and related other costs	8.0	13	16	17	18	19	20	20
Total	229.7	90	150	209	229	234	250	264
Estimated value of timber harvest	298.0	16	47	78	108	150	230	269

[1] Unadjusted for Pay Act 1970. Table prepared on fiscal year 1970 constant dollars.

Recreation—Public Use

Mrs. Hansen. You have requested an increase of $3,132,000 for recreation-public use. Insert in the record the visitor rate in the national forests since 1960.

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

(The information follows:)

Recreation Use of the National Forests

Visits—Calendar year [1]

1960	92,594,500
1961	101,912,500
1962	112,762,200
1963	122,582,000
1964	133,762,300

Visitor-days—Calendar year [2]

1965	160,336,100
1966	[3] 150,728,900
1967	149,647,100
1968	156,665,300
1969	162,838,100

[1] The entry of a person onto national forest lands for some primary recreation activity for an unspecified length of time.

[2] 1965 was the 1st year a new unit-of-measure (the visitor-day as recommended by the President's Advisory Council on Recreation and Natural Beauty) was applied. The visitor-day is recreation use of national forest land and water which aggregates 12 person-hours. It may entail 1 person for 12 hours, of individual or group use, either continuous or intermittent.

[3] Beginning in 1966 a system of statistically measuring recreation use at several hundred major developed sites was implemented. These measurements over a 3-year period of time show actual use of developed sites increasing at a rate of 7–8 percent per year. (The reported rate of increase is lower due to refinements achieving greater accuracy.)

Reduction in Construction Program

Mr. Nelson. While we are considering this item, we must draw attention to the line item of water resources development related activities. In the item for construction of new facilities, there is a reduction of $3.4 million. That amount has to be added to the $3.3 million that is a reduction for new facilities in the recreation line item, in order to have the complete picture.

Mrs. Hansen. Reduced?

Mr. Nelson. Yes, there is actually $6,697,000 less than the previous year for new construction of recreational facilities or quality improvement of existing facilities. There is, of course, an increase of $3.6 million, as we discussed earlier, for the operation, maintenance, and administration portion of this recreation budget.

Water Pollution Abatement

Mrs. Hansen. What percent of the sanitation systems in your national forests are adequate?

Mr. Nelson. I perhaps could answer that better by indicating what our inventory shows is the need for handling our pollution abatement problems. Our present inventory shows it would take $34,098,000 to correct or reinstitute the recreation facilities to take care of water pollution problems. In addition to that we have water pollution abatement problems, if I may speak of some of the others, at our regular

stations. These come under the budget line item for fire and general purpose construction. The cost to correct them is $8.5 million. We have some problems at some of our research stations, over $434,000, and we have some at some of the civilian conservation centers, $619,000.

Looking at water pollution abatement, we have an indicated need of $43,651,000. Most of that is, as you asked here, in relation to recreation.

At the level that we have in this budget for correcting the recreation water pollution, it would take 6.5 years.

Mrs. HANSEN. You need to meet the Federal Government's responsibilities in pollution control.

Mr. NELSON. That is my next point. Executive Order 11507, issued after the budget was prepared, requires that water pollution at Federal facilities be corrected by December 31, 1972.

Mrs. HANSEN. How will this be accomplished at your present funding level?

Mr. NELSON. Between $18 million and $20 million in each of the next 2 fiscal years would be needed to meet the requirements of the Executive order on cleaning up water pollution.

AIR POLLUTION

There is also another section of that order on air pollution. I have only been talking about water pollution. We reported to the Bureau of the Budget on June 30, 1969, that we needed $5.6 million to correct air pollution.

Mrs. HANSEN. In what categories?

Mr. NELSON. I don't have that broken down. Our inventory isn't too good, but most of that is in relation to disposal of solid waste in the national forests, such as garbage and other solid wastes.

We have a serious problem of air pollution at the Forest Products Laboratory plant. Dr. Arnold may have more information on that. I know some of these young people at the university have been marching in protests.

Mrs. HANSEN. Have you requested funds in this budget to meet this need?

Mr. ARNOLD. There is nothing in this budget for construction. As you know, the Forest Products Laboratory had a plan for its renovation with planning funds appropriated in 1967. It is a 38-year-old facility, and it was recognized that there had to be a complete renovation of the heating, lighting, and ventilating systems. The estimated cost of that complete renovation is $1.6 million, which services both the renovation of the old building and the new additions.

Mrs. HANSEN. Don't you think the Bureau of the Budget had better read the Executive order?

Mr. NELSON. The Executive order came out after this budget was prepared.

Mrs. HANSEN. Usually they are not slow about sending up budget amendments if necessary. How much have you requested in this budget for pollution control?

Mr. NELSON. In this present budget for water pollution abatement it adds up to $6,081,000.

Mrs. HANSEN. Out of a total need of $50 million?

Mr. NELSON. Yes; to get started on the $43.5 million problem of water pollution, without consideration of air pollution.

GENERAL COMMENTS ON POLLUTION

Mr. CLIFF. I would like to comment, Madam Chairman, on this problem. This isn't a result of negligence on our part. For years we have been working with the Public Health Service, at both the State and Federal levels. They have approved our sanitary facilities, the designs and so forth. But what we are finding is that systems that were designed 10 to 20 years ago and good enough then no longer meet the Public Health standards. The use has increased so that we can no longer rely in many places on septic tanks. The old pit toilet is no longer adequate in many places where it used to be adequate to meet sanitation standards.

Some part of this pollution abatement problem comes about because of increased use, obsolescence in our older systems, and higher standards. What was good enough a few years ago is no longer good enough to meet the current standards. What we are dealing with here is a problem which has evolved. I don't think that it is due to neglect on our part. We have been working with this for a long time.

Mrs. HANSEN. Mr. Cliff, the population explosion began many years ago. Shouldn't you have been thinking about solutions to these problems years ago?

Mr. CLIFF. I agree with you.

Mrs. HANSEN. No one blames the Forest Service. What we do blame is the budgetary process that doesn't consider the total needs of our lands.

USE INCREASES

On page 29 of your justifications you have a comparison of capacity and use increases at campground and picnic grounds. The rate of increase of capacity over previous years has been decreasing and yet your use has increased.

Mr. CLIFF. The rate of increase of capacity has been declining. For campgrounds in 1965 the increased capacity over the previous year was 11 percent. In 1966 we increased capacity over 1965 by 14.1 percent. But from that point on it has been declining until this year. For fiscal year 1971 our increase in capacity will be practically nothing over the preceding year.

Mr. NELSON. In fact any increase we would have is probably offset by what we lose from the California floods. We lost some areas there. This is another way of saying the same thing I showed on the chart this morning.

Mrs. HANSEN. You are well aware that you have new types of recreation in your national forests, such as snowmobiles. If you do not provide adequate zoning or adequate warnings, a catastrophe might occur on one of your forest trails.

Mr. Cliff, my comments are not meant to criticize the Forest Service. What we are trying to relate to the American public is that if

you are going to meet the current needs you are going to have to be provided with more funds. The Department of Agriculture has to have more funds to manage its affairs. You should be at least as good a landlord as you expect the private sector to be. If you don't, the public will lose confidence in the ability of this Government to govern. We must govern and we must govern well. I think the public should be made to understand the price of making this country adequate for survival.

Mr. NELSON. Madam Chairman, in that connection you referred to earlier years, recognizing what was coming in the recreation field. We looked at future recreation needs when we prepared the national forest program which was presented to Congress in 1961 and first considered in the fiscal year 1963 budget. That program gave our estimates of needs over a 10-year period. The budget before you places our financing at 40.6 percent of what was indicated as probably would be needed by this year.

WILDERNESS PROGRAM

Mrs. HANSEN. What percent of your wilderness work has been completed?

Mr. NELSON. I can better put it in terms of areas. The Wilderness Act requires that each of the 34 primitive areas be studied for wilderness and a report be made to Congress. This is to be done in 10 years with one-third to be done in the first 3 years, and so forth. The first third of the primitive areas studies has been completed and the recommendation made to Congress. Thirteen areas are completed and have been submitted to Congress. Congress has acted on six. We are progressing with the studies on the second third. We have had field hearings on four areas and we expect to meet the statutory time schedule on the rest. We are moving ahead with the wilderness program. We estimate that between 50 and 60 percent of the job is done.

IMPROVEMENT OF EXISTING FACILITIES

Mrs. HANSEN. You are requesting $1,630,000 for quality improvement of existing facilities and new construction, which is a decrease of $3,306,000 from your 1970 funding level. You say on page 32 of your justifications: "Very little increase in capacity results from this kind of work."

Then you go on below: "New construction will continue at 35 sites."

How much are you replacing or upgrading? Apparently very little.

Mr. NELSON. That is right.

Mrs. HANSEN. The result will be that if a bathhouse needs repair it won't be done because funds aren't available.

Mr. NELSON. It could be that the bathhouse, in a miserable condition, might be handled as part of operation and maintenance financing. The new development is where we consider a whole unit or a whole campground.

Mrs. HANSEN. You are requesting an increase of $2,840,000 for water pollution abatement to alleviate the existing pollution problem. You have said these funds are inadequate in view of the total need.

Mr. NELSON. The timetable, as we pointed out, has been changed by the Executive order. You are right, it is a different picture.

Mr. CLIFF. The funds included in this budget will give us a start. We are hopeful that since the Executive order has been issued this will get more adequate attention in future budgets.

Mrs. HANSEN. Every year I see the budget in a more deplorable state than I have seen it before. Items that will help solve your problems are placed in reserve or deleted.

Mr. NELSON. That same Executive order has a little clause in it that says any appropriation made in fiscal year 1971 for pollution abatement "shall not be used for any other purpose."

FUNDS EXPENDED BY HUNTERS, FISHERMEN, AND OTHERS

Mrs. HANSEN. How much is spent by hunters and fishermen per each day's use in the national forests?

Mr. NELSON. The Bureau of Sports Fisheries from time to time makes studies, and we use their information.

Mrs. HANSEN. Insert the information in the record.

Mr. NELSON. Yes.

(The information follows:)

USER EXPENDITURES ON NATIONAL FOREST WILDLIFE ACTIVITIES (1968)

Activity	Use days [1] (in millions)	Expenditure [2] per day	Total (millions)
Fresh and salt water fishing	43.6	$4.98	$217.0
Big game hunting	22.0	9.55	210.0
Small game hunting	4.9	4.79	23.5
Upland game hunting	2.6	4.79	12.5
Waterfowl	1.2	6.44	7.7
Nonconsumptive	10.0	[3] 5.00	57.0
Total	84.3		527.7

[1] Converted to use days from RIM figure reported in annual recreation statistical report.
[2] Cost data from 1965 National Survey of Fishing and Hunting.
[3] Estimated expenditure.

TIMBERLINE LODGE

Mr. WYATT. Madam Chairman, one thing on recreation if I may. I have had all sorts of representations made to me about the situation at Timberline Lodge, and the chairman has too. I wonder if you can furnish figures as to the cost of some of the various component parts of the work that has to be done at Timberline Lodge. I am talking about the lodge addition itself, the employee living quarters, the maintenance building, the day center, and the garage. I wonder if you may want to furnish this for the record?

Mr. CLIFF. I could give it to you now if you would like, or we can supply it for the record.

Mr. WYATT. It is up to Madam Chairman, whichever you prefer. You know of the time problems we have here.

Mrs. HANSEN. Insert the information in the record.

(The information follows:)

STATEMENT ON TIMBERLINE RECREATION COMPLEX, MOUNT HOOD NATIONAL FOREST, OREG.

Timberline Lodge is the hub of a recreation complex. It is a Government constructed lodge building of unique design and workmanship built in the 1930's with skilled workmen of many different crafts. It is operated under a special use permit. Use in the Timberline area has outgrown facilities. A comprehensive plan has been prepared and implementation has started (i.e., the new sewerage treatment plant will be completed this year).

Following is a list of projects needed to complete the plan designed to best serve the using public. The projects are listed in order of Forest Service recommendation of priority for construction:

Forest Service priority and item	*Cost*
1. Day lodge [1]	$1,566,000
2. Lodge addition [1]	561,000
2. Lodge modification [1]	119,000
3. Employee housing [1]	722,000
4. Equipment maintenance building [1]	106,000
Utilities	116,000
Grading and landscaping	110,000
Total	3,300,000

[1] Architectural and engineering plans have been completed to a stage where contract for construction can be awarded without delay.

NOTE.—Besides projects listed above there is need for certain additional parking facilities. These will be constructed with other funds and through cooperation of State and other public agencies.

THE MAZAMAS OF PORTLAND

Mrs. HANSEN. I am quoting from a letter I received from a group in Portland, Oreg. This is a copy of a letter to the President.

However, funding for other National forest resources has been cut. These other resources—watershed, wildlife, and fish habitat, and recreation—are especially important to the people who use them. Recreation use of the national forests in the Pacific Northwest region was 3 percent higher in 1969 than in the previous year. At the same time cutbacks totaling over $1 million were made in the recreation area projects. Cutbacks of over $300,000 were made in recreation roads and trail work. The Mazamas not only climb mountains, hike, camp, ski, and snowshoe, but we organize and teach these activities for the participation of the general public. Most of this activity is carried on in the national forests. We are especially concerned about the cutbacks in such projects as the following:

Sewage treatment facilities, trail reconstruction, and more campgrounds.

This is from the Mazamas Conservation Committee of Portland.

TIMBERLINE LODGE

Mr. WYATT. Chief, on Timberline, I wonder if in particular you could break down the cost of the parking facility?

Mr. NELSON. The equipment maintenance?

Mr. WYATT. I would like to have the garage separated out. The present concessionaire says that in the last two winters that all of his garage facilities have been crushed, and they are just very desperate on this particular item. If that could be broken out separately with the other figures I would appreciate it.

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

Mr. WYATT. I think the present concessionaire has a very good

record, particularly compared to some of the operators in the past, and I don't want him to be too discouraged.

Mr. CLIFF. We are anxious to move forward.

Mrs. HANSEN. Apparently nothing discourages him, not even cutbacks.

Mr. CLIFF. We are anxious to move forward on Timberline Lodge. The needs there are quite substantial. This is primarily a Government investment and it is no longer adequate to meet the needs.

Mrs. HANSEN. It is an excellent investment and there is a great value that is apt to return to nature if you don't do something. I know the Forest Service has a very comprehensive plan in this regard. Furthermore, I think anything that is done in the lodge area is going to enhance the attractiveness of the entire area.

Mr. CLIFF. That is very true.

MOUNT ST. HELENS AND LAVA CAVES

Mrs. HANSEN. I am quoting an article concerning a ski facility at Mount St. Helens, Wash.: "Urge some action to get the Forest Service and Northern Pacific Railway to take steps toward development of more recreational facilities in the area."

What progress have you made?

Mr. NELSON. In the Mount St. Helens area, including the Lava Caves area which, as you know, we have talked about a number of times, we started off with some 9,000 acres of private land that we felt ought to be in public ownership to fully develop it eventually. We have acquired all except 1,780 acres through land exchanges. We also have an exchange with the Weyerhaeuser Co., whereby we will acquire another 1,140 acres within this area. We have an exchange with the State of Washington that we discussed 2 or 3 years ago. It is ready for consummation, except for the 1932 amendment to the enabling act for the State of Washington which may prevent that exchange from going through. There is some action being taken in the Congress, because this affects not only the State of Washington, but Montana, North Dakota, and South Dakota, and I believe this legislation is being considered by the proper committees.

Mrs. HANSEN. This is the enabling act amendment.

Mr. NELSON. Yes. We will have to report that we are coming along pretty well on getting the landownership problem straightened out so as to move ahead with more recreation developments in both the Lava Caves and Mount St. Helens. I don't know of anything directly that we are working on with Northern Pacific on a ski develment at Mount St. Helens. We can find out from the region and put it in the record at this point.

(The information follows:)

MOUNT ST. HELENS SKI AREA DEVELOPMENT

The Forest Service region is continuing to study the Mount St. Helens area for feasibility of some type of winter sports development, although data so far are not very encouraging. They are also negotiating with Northern Pacific Railroad Co. on a land exchange in the area. If the feasibility report is favorable for some type of development, a prospectus will be issued after acquisition of the Northern Pacific lands.

NORTHERN PACIFIC RAILROAD OWNERSHIP

Mr. CLIFF. The Northern Pacific Railway owns the top of Mount St. Helens. This is just part of what happened as a result of the land grant. In these checkerboard sections paralleling each side of the right-of-way happened to locate one of those sections on the top of Mount St. Helens.

SPIRIT LAKE

Several years ago we completed an exchange with Northern Pacific whereby we acquired lands on Spirit Lake, which enabled us to expand that development. I don't know of any current work going on at Spirit Lake, but that is the principal recreation area in the vicinity of Mount St. Helens.

RANGE MANAGEMENT

Mrs. HANSEN. How many acres of land is rangeland?

Mr. CLIFF. There are about 106 million acres, which are included in range allotments.

Mrs. HANSEN. How much of your rangeland is 100-percent efficient?

Mr. CLIFF. I think we would have to supply that for the record. We have completed modern-management plans on something over half of the area and are intensively managing these ranges. We consider that about one-fifth of all the range is in good or better condition. Another substantial part, about 40 percent, is in fair condition. Much of this fair-condition range is on an upward trend. The rest of the range, about a third, is in poor condition and needs considerable improvement. I will supply our latest figures for the record, but this gives you about the overall picture.

(The information follows:)

Condition of national forest system rangelands—1966

	Percent
Excellent	2
Good	18
Fair	44
Poor	36
Total	100

RANGE PROGRAM IN NEW MEXICO

Mrs. HANSEN. Is there anything in the budget this year for upgrading the rangeland in New Mexico?

Mr. CLIFF. Yes, ma'am. The proposed increase for range improvement is to be used in areas such as northern New Mexico to construct water developments, fences, and other improvements which will enable us to upgrade the management of the range resources in areas not only in New Mexico but in other areas where we have a preponderance of small, highly dependent grazing permittees of the lower income class.

Mrs. HANSEN. What is the average income per family on that rangeland in New Mexico?

Mr. CLIFF. It is very low because the average permit in northern New Mexico is only 22 head of livestock and 22 head of cattle will not provide more than a subsistence livelihood for the rancher. Many of them have other forms of income. They work off the farm or they may have other crops, but generally the level of income in that general area is very close to the poverty level or below it.

RANGE IMPROVEMENTS

Mrs. HANSEN. You are requesting a $650,000 increase for range improvements. How many acres of land will these funds manage?

Mr. NELSON. You are referring to the $650,000 increase for range improvements?

Mrs. HANSEN. That is right.

Mr. CLIFF. That has to do with range-improvement work.

Mrs. HANSEN. Why do you have a fence around this land?

Mr. NELSON. This fence divides the allotments up into manageable units. What we would intend to do with that increase is construct 400 miles of fence, 3 miles of stock driveway, and 100 water developments.

Mrs. HANSEN. Is the water for the livestock?

Mr. NELSON. For the livestock, yes. If we could put water development in parts of the allotment where there is no water now, we get better distribution of the cattle. There will also be 100 miles of fence and 50 water developments that will be constructed in cooperation with the permittees, where the permittees will pay for part of the work or do the work. Often the case is we furnish the wire and they build the fence, for example.

RANGE REVENUES

Mrs. HANSEN. What is the amount of revenue from your rangelands?

Mr. NELSON. The range revenue anticipated for 1971 from the national forest lands is $4,415,000, or an increase of $87,000. You might ask why we anticipate an increase when it has been announced that we would hold the same fee level as last year. That increase of $87,000 is practically all due to increased animal unit months that will use the range, because of the expenditure that has been made for developments and management of the range.

Mrs. HANSEN. When you invest in the management of your rangelands aren't you also increasing your revenues at the same time?

Mr. NELSON. That is right.

Mrs. HANSEN. And at the same time you are improving the quality of the land and raising the income level of the permittees.

Mr. NELSON. In addition to that $4.4 million that I mentioned as revenue from the national forests, there are receipts of $2,165,000 on the national grasslands and land-utilization areas, about one-third of which are from grazing. The balance is for minerals and other resources on the national grasslands and land-utilization areas.

SOIL AND WATER MANAGEMENT

Mrs. HANSEN. On page 52 of your justifications you say: "Geological field work is necessary for resource protection requirements and de-

sign services has been completed on 523,000 acres of national forest land in the four Southwest regions."

What percent is completed?

Mr. NELSON. I will have to supply that for the record, Madam Chairman.

(The information follows:)

Our geologic data interpretation program for multiple-use planning on the national forest estimates 120 million acres in need of geological fieldwork. We have done less than 1 percent. We really are only just getting a start on this activity which will give us additional geological information used for planning both development and resource management of the national forest.

Mr. NELSON. Incidentally, that type of work—much of it as you undoubtedly noted—is the type of work that allows us to meet the requirements in the new Environmental Control Act. It is the type of thing that we had started before and which is even more important now.

WATERSHED RESTORATION

Mrs. HANSEN. On page 54 of your justifications you say:

The 390.4 million acre-feet of water produced from national forests is an example of the importance of the water resource. The economic implications and intangible benefits for protecting the clean water resource will result in substantial and varied benefits to all of our citizens.

Insert in the record the usable water supply that you could produce if more funds were available.

(The information follows:)

We are launched into a watershed program where we apply and adapt research knowledge to other watersheds where there is need for more water and/or better timing of water yields. We believe that with a capital investment of $80 million over a 10-year period, an additional 1,552,000 acre-feet of usable water supply can be achieved.

Prescribed treatment	Area to be treated (acres)	Investment dollars
Timber harvest design	575,000	6,200,000
Brushland area management	375,000	52,000,000
Riparian vegetation management	7,500	4,000,000
Alpine snowpack management	300	2,800,000
Noncommercial timber management	138,000	15,700,000
Total	1,095,800	80,700,000

Increased usable water supply

Treatment years:	*Acre-feet*
1	21,000
2	47,000
3	77,000
4	108,000
5	139,000
6	170,000
7	201,000
8	232,000
9	263,000
10	294,000
Total	1,552,000

Mrs. HANSEN. Isn't the search for water, and the necessity to find additional sources of water mandatory?

Mr. NELSON. Yes. Part of our southwest survey that we have with hydrologists and soil scientists conducting this survey is to find out how many acres we have, where it is located, and what it would cost to treat that land in order to increase water yields in this water-deficient area. We are finding in some of our land management that it is possible we could treat the land and get increased yields that would be cheaper than other methods of increasing water yields, such as storing. We have also compared it with the work that is being done with cloud seeding and that type of work.

We have done some experimental work and some pilot testing of managing the snowdrifts through snow fence, to pile up the snow that otherwise might evaporate as it is blown on down into the top of the trees below where the drifts were. This study will give us the basic information on how many acres, how much cost, and so forth could be used and would be desirable from an overall watershed management standpoint.

PRODUCTION OF WATER

Mr. REIFEL. Madam Chairman, I ask in expansion of this paragraph for further elaboration, you mention here, 390.4 million acre-feet of water is produced by the national forest. Is this study you mention going to give you some idea of how much more you can increase that above 390 million?

Mr. NELSON. Yes, sir. Some of the types of things would be how we cut our timber, for example, so that what we do with other resources will also have a beneficial effect upon water yields. This paragraph here also deals with the water quality surveillance. We have some watersheds set up for systematic surveillance. You will remember we talked last year about some of these watersheds. We keep track of just what was going on, and any changes that occurred as a result of some type of management on or within the watershed. We have a benchmark for stopping a management practice that would have a detrimental effect on quality or quantity of water, or encouraging those practices that have a beneficial effect.

Mrs. HANSEN. You will never find solutions to your flood problems until you have a better knowledge of your watersheds.

Mr. NELSON. That is true, and as I mentioned this morning in connection with the California floods, as a result of the Angeles River water project that has been going on now for some 20 years, we know a lot of things, we have done a lot in the way of stream stabilization, roads built with stabilization of soils in mind, better fire protection. In those disastrous floods that occurred just last year, the damage was minor where that work had been done. In fact, last year I traveled with the Public Works Committee in California and actually saw in the adjacent areas where they did not have this flood prevention work done. There was mud clear up to the eaves of some of the $50,000 homes in Glendora, for example. There is a lot known that can be done. We do have the hydrologists and soil scientists and expect to be able, with this overall inventory that we have going now, to give this committee and the administration better facts on what could be done and needs to be done in relation to watershed management.

GRAZING FEES

Mrs. HANSEN. Discuss the Forest Service policies on grazing fees.

Mr. CLIFF. I would be glad to do that, Madam Chairman, although there is not much that can be said right now, because the Secretary of Interior and the Secretary of Agriculture agreed to a postponement for this year of the implementation of the plan to increase grazing fees.

Mrs. HANSEN. Are you waiting until the Public Land Law Review Commission releases its report?

Mr. CLIFF. This was the request that was made, that these fee increases be deferred this year, until such time as the two departments could receive and evaluate the recommendations of the Public Land Law Review Commission. The fees this year are just the same as they were last year. Last year we made an increase which is the first increment of a proposed 10-year increase in grazing fees. This is designed to bring the grazing fees up to fair market value. The fair market value was determined as a result of economic studies by the two departments working jointly for a period of almost 10 years. We have studied this in depth, and we collaborated with the grazing industry in making these studies. The two departments finally agreed on a plan, announced it, and put the first year's program into effect in 1969, but for 1970 it has been deferred.

Mrs. HANSEN. The first step is in effect?

Mr. CLIFF. That is correct.

Mr. NELSON. We will receive about $500,000 less than we would had the second step been placed into effect.

WILD AND SCENIC RIVERS STUDY

Mrs. HANSEN. $385,000 is requested for Wild and Scenic Rivers studies. How many rivers are you going to study and what percent of the total need is this?

Mr. CLIFF. Madam Chairman, I mentioned that this morning or a little earlier today in connection with the recreation program. The Forest Service is given responsibility for the administration and making the plans for four of the original nine rivers designated by Congress as Wild and Scenic Rivers and we share the responsibility on the fifth one, which is the Rogue River in Oregon. The Bureau of Land Management administers the upper half of that river, and we administer the lower half where it flows through the national forest.

The act also provided for making studies on 27 additional rivers, which were listed in the act. Some of these are inside the national forest and some of them are partly inside and some of them are entirely outside the national forests.

The Forest Service has been given responsibility for leading the studies on nine of these 27 rivers. We participate, with the Department of the Interior and the States, in the study of the remaining 18, particularly those that flow through forested lands.

The rivers we are studying include the Chattooga in North Carolina, South Carolina, and Georgia; the Flathead in Montana; the Illinois in Oregon; the Moyie in Idaho, Pere Marquette in Michigan; Priest, St. Joe, and the main stream of the Salmon in Idaho; and the

Skagit in Washington. We have studies going on on four of these rivers, and as we get them well started, we will get into studying the others. We are also cooperating with our sister agencies in Interior and contributing to the studies of rivers outside of the national forests, which involve forest lands.

This is a brand new program and it makes additional drains on our trained manpower. We are not objecting. We welcome this responsibility, but it is an additional burden that we haven't had heretofore.

JOINT MANAGEMENT OF ROGUE RIVER

Mr. WYATT. Chief, how is the joint management of the Rogue working out? Is it working out satisfactorily?

Mr. CLIFF. We think so, Congressman Wyatt, but I say this being fully aware that there is some dissatisfaction with this arrangement. There are many proposals being made by local people in southern Oregon to the effect that this river should be managed by one agency, and the expression has been made by the Governor and others that it should be the Forest Service. We haven't been agreeable to that because we don't think it would work to have the Forest Service managing a narrow strip of land along a river that runs through a solid block of Bureau of Land Management land or vice versa. The agency that manages the larger area through which the river flows, and which is influenced by the presence of the wild river needs to have the control of that part of the river. I think the arrangement is logical. The plans have been well coordinated, and I think it is a workable system the way it is.

Mr. WYATT. You would say it is as workable and as efficient as any other arrangement could be under the circumstances?

Mr. CLIFF. I think it is more efficient than to try to have either agency manage land which is the primary responsibility of the other agency.

WATER YIELD IMPROVEMENT

Mrs. HANSEN. On page 56, of your justifications, you say "Costs of Forest Service water yield improvement work are very favorable when compared with alternative methods for water supply augmentation."

You go on and say: "After the initial conversion has been completed, the annual maintenance cost is only about $9.90 per acre-foot of sustained water yield."

This $450,000 could be a very rewarding investment.

Mr. NELSON. That is what I mentioned a little earlier when I said we had made cost-benefit-type studies in relation to what we could do to improve water yield by management of the land as against other means of getting additional water.

Mrs. HANSEN. On page 57 of the justifications you say: "The Western States have indicated their interest in having the Forest Service complete this program as rapidly as possible. During fiscal year 1969, the field inventory of Forest Service water use was about 50 percent completed." Do you anticipate this program will be completed before 1975?

Mr. NELSON. Actually we are coming along a little bit better on that than 1975. We hope to have completed the inventory, so we can tell

the States by the end of 1972 what we think we would need and will need.

Mrs. HANSEN. Don't you also have to increase your number of watersheds?

Mr. NELSON. That, incidentally, is where part of that maintenance comes in, where we convert a brushfield to grass for watershed purposes. Then it does take some maintenance in order to keep it in a grassy state, which produces more water yield.

RESTORING DAMAGED WATERSHEDS

Mrs. HANSEN. What percent of the damaged watersheds have you restored?

Mr. NELSON. We will put that in the record.

(The information follows:)

The watershed restoration program has a variety of activities in correcting unsatisfactory watershed conditions. We have been able over the years to restore only 10 percent of the deteriorated national forest lands which need attention to put them in satisfactory ecologic and hydrologic conditions. Typical activities are gully stabilization, sheet erosion control, stabilization of dunes and blowouts, rehabilitation of surface mined spoilbanks, streambank and lakeshore stabilization, and rehabilitation of abandoned roads and trails all of which are necessary to improve and enhance the environmental quality of the national forests. At present, there are about 4 million acres where corrective work is still needed.

MINERAL CLAIMS, LEASES, AND SPECIAL USES

Mrs. HANSEN. $2,085,000 is requested for mineral claims and leases. What is the current status of this work?

Mr. NELSON. I will put that in the record. I don't have it right before me.

(The information follows:)

Mineral management activities show a steady increase on national forest system lands. For instance, mining law administration increased from 1,148 claims examined in fiscal year 1968 to 2,300 in fiscal year 1969, an increase of 100 percent. In addition, coordination of surface management on active mining claims increased 21 percent from 14,464 claims in fiscal year 1968 to 17,521 claims in fiscal year 1969. Similarly, mineral leasing activity increased 20 percent to 10,544 leases. This latter activity consists of 70 percent oil and gas lease operations.

Over one-half of our annual resources are aimed at environmental quality management. However, there are 38 national forests on which extensive mineral development activity is taking place and increasing where capabilities to redeem our responsibilities under the Environmental Quality Act of 1969 are deficient. The principal deficiency lies in our inability to examine and assess the environmental impact of these operations, and to design and monitor these activities so as to maintain a practical standard of environmental quality.

SPECIAL USES—NONRECREATION

Mrs. HANSEN. $2,548,000 is requested for special use—nonrecreation. Justify this request.

Mr. NELSON. This includes all of the various types of use by others of national forest system land, with the exception of recreation use. We separate special use for recreational purposes, such as summer homes, resorts, and ski areas into one group. This is the catch all for all the rest of the types of uses which there could be. There are some 60 different types of land use. Actually every year there is some

turnover of permits. There is a job here that we have felt has been lacking over the years, in really administering these other types of uses.

This is also hit with effect of each on the environment. We have to consider whether or not to issue a permit, its effect on the environment, and the other resources of the national forest. It really is a large job.

FEE STRUCTURE

Mrs. HANSEN. What changes in the fee structure, if any, are planned?

Mr. NELSON. We have a special study being made by Case & Co. on fees for special use permits. We already had the study and placed it into effect for the fee structure for recreation special use permits. This was an effort to study our present fee system for these other types of use, in order that we might determine whether it is satisfactory or whether we will make some changes. We will be making some changes. I don't think we are ready at this time to say just what they are.

FEES AT ELECTRONIC SITES

The study that was done on the outside we feel was very good except for one possible exception. That is how to determine fees at these electronic sites. That is a very difficult problem. We at the present charge a fee based upon the investment that the company may have made at the particular site. It isn't a matter of acreage or the value of the mountaintop for this type of permit. Most of them are on mountaintops. We have some objections at the present time from our present fee system for electronics by the American Telephone & Telegraph Co. It is down in the Southwest. They are, I think, appealing to us as kind of a test case in fees for a microwave station down there. We do have a serious problem coming up in relation to the fee structure for electronics.

We will be able to develop a satisfactory fee schedule for the other special uses.

REVENUES FROM MINERAL LEASES

Mrs. HANSEN. Your total revenue from mineral leases and permits was $5,441,284 in fiscal year 1969?

Mr. NELSON. That is correct. It includes receipts from all national forest system acquired lands.

Mr. CLIFF. That is the amount that is credited to the general leases and permits.

Mrs. HANSEN. Mine or well-head value of minerals produced from national forest lands during fiscal year 1969 was estimated to be approximately $103 million.

Mr. CLIFF. That is our best estimate, Madam Chairman. The first figure that you quoted of $5,441,284 is the amount of revenue we get from mineral leases and permits from the acquired lands. These are credited to the account of the Forest Service.

In addition to that, there is a large acreage of national forest lands that was derived from the public domain that is under mineral lease, and the revenue from those leases is credited to the Bureau of Land Management receipts. We estimate them to be $22 million, and this

$22 million doesn't show up in national forest receipts in any place, but it is nevertheless a substantial income from these lands.

We have no particular quarrel with the way these receipts are handled, but we would like to call attention to the fact that the national forests are producing revenue over and above what we show in our revenue tabulations.

Mrs. HANSEN. Why aren't these revenues reflected in your budget?

Mr. CLIFF. Because of the way the mineral leases are handled, and because of the Mineral Leasing Act that applies to public domain lands. Under agreement with the Interior Department, they issue the leases. They collect revenues and deposit them in the Treasury to their accounts. The law requires that certain of these revenues be paid to the States.

We do have the responsibility, however, of managing the surface, we review all of the leases, make recommendations as to the terms of the lease and then we administer the stipulations as they apply to the surface treatment of the lands, so we have a big job here. There are about 16 million acres of national forest lands under mineral lease. Many of them are active and some are not active, but whenever people move on to the national forest to explore for minerals or extract minerals, we have the job of surface management and supervising surface restoration in this phase of the administration of the leases. We do estimate that the mineral activities on the national forests produce total benefits of $103 million, which is quite substantial.

LAND CLASSIFICATION, ADJUSTMENTS, AND SURVEYS

Mrs. HANSEN. You are requesting a decrease of $150,000 for land classification, adjustments, and surveys. What percent of your land classification, adjustments, and surveys is completed?

Mr. NELSON. The land classification part, of course, is something that goes on and will continue.

Mrs. HANSEN. It is continued?

Mr. NELSON. Yes, ma'am. We are about 65 percent complete with the status records project. In land lines we are much less near completing the total job; in fact, only a small percentage in our actual land line and corner restoration work.

Mrs. HANSEN. If the lines and corners aren't restored can't a trespass be very expensive?

Mr. NELSON. There is no question about it.

Mrs. HANSEN. Isn't it very difficult to get your values back once a trespass occurs?

Mr. NELSON. We have some areas where the old land surveys weren't very good, if some of them were actually put in at all. In some of those areas where there is private land mixed in with it, we actually have had townships where we couldn't go in to start managing or selling timber, because nobody really knew where the corners were.

Mrs. HANSEN. Isn't this a basic ingredient in your land sales and your management procedures?

Mr. NELSON. It certainly is.

Mrs. HANSEN. Why have the funds for this activity been decreased?

Mr. NELSON. To be frank with you, after the 1971 budget was prepared, Congress added $150,000 to fiscal year 1970.

Mrs. HANSEN. We thought it was important.

Mr. NELSON. We were pleased that it was added. But in the budget process, it was frozen in before the Congress passed the budget, and consequently this got frozen out, you might say, in this fiscal year.

Mrs. HANSEN. The Interior and Related Agencies Bill was passed relatively early.

Mr. NELSON. Much later than you normally do. This committee always has been really good, but last year it was a little bit later.

POTOMAC RIVER PROGRAM

Mrs. HANSEN. You have a new national forest program for the Potomac River. What is involved in this program?

Mr. DROEGE. What we are talking about is a study of new programs that are needed. Our wording is not too clear on this. We participated with the Department of Interior in the study of what is needed to make the Potomac a model river. The report has been prepared. It called for certain things to be done within the national forests. For example, the report recommended studying the forest areas north of the George Washington National Forest in both Virginia and West Virginia for possible inclusion in the national forests. Another recommendation was that we work with the States to see what can be done to improve the productivity of forest land in this area. The report further recommended studying the recreation potential inside the national forests with possibly the idea of making some of the area a national recreation area. It is that sort of thing that we are talking about.

LAND EXCHANGE

Mrs. HANSEN. Why are you reducing your land exchange program by $50,000?

Mr. NELSON. We had the $150,000 reduction, as I explained a little while ago, to spread, and we felt that this ——

Mrs. HANSEN. This was part of the reduction?

Mr. NELSON. This caught $50,000.

Mrs. HANSEN. What progress are you making on the land exchanges?

Mr. NELSON. It has been real fine progress. Since the administration and the Congress began to recognize the need for this type of work, we have been able to make more and more exchanges each year. In fiscal year 1969 we made more than we ever have made. We expect the curve to go up again in 1970 to about 220 land exchange cases to be approved, whereas in 1964 we were at a level of only about 124 cases. We are making some real good progress in the whole land exchange field. We are appreciative of this committee for getting us started on financing to do that work which we consider very important.

LAND STATUS

Mrs. HANSEN. Are you also reducing your land status records program?

Mr. NELSON. That is the other $100,000.

LAND LINE LOCATION

Mrs. HANSEN. How many property corners and miles of property line bounding lands of the U.S. forest lands need resurvey?

Mr. NELSON. The total number of corners on the national forest system lands is over 1 million, and there are 210,924 additional corners needed for control. This is in unsurveyed country, or country that needs resurvey.

Mrs. HANSEN. At your present level of funding how long is this going to take?

Mr. NELSON. At the rate we have been going, I think it is going to take about 50 or more years to complete this kind of a job, but I will supply that for the record.

(The information follows:)

Estimated time to complete work at present program levels:
68 years for corner search
82 years for remonumentation
208 years to complete the cadastral surveys needed now

FOREST FIRE PROTECTION

Mrs. HANSEN. $29,210,000 is requested for forest fire protection. How many fires did you have last year, and of that number, how many were man made. How much acreage did this destroy?

Mr. NELSON. In 1969, which was our last full year, we had 9,946 fires.

Mrs. HANSEN. In how many States?

Mr. NELSON. This is in the entire national forest system. Perhaps we had some in all States, but in six States we don't have a national forest. Of that total number, 5,249 were man-caused fires.

Mrs. HANSEN. Is that an increase over last year?

Mr. NELSON. In 1968 we had 4,923 man-caused fires, so it is a little increase. Both years were an increase over the 5-year average of 4,894 man-caused fires.

Mrs. HANSEN. What was the value of the acreage destroyed. Also how many acres were destroyed and what was the fire suppression cost?

Mr. NELSON. We will have to supply the damage figure for the record.

(The information follows:)

Fire statistics on man-caused fires within areas protected by national forests, calendar year 1969

Acres burned	76,315
Damages	$2,565,379
Cost of suppression	$12,162,727

Mr. NELSON. To help finish answering your original question; in 1969 we had 95,707 acres burned, which compares with the 1968 burned area on the area protected by the national forest system of 212,420 acres. The 5-year average burned is 201,835 acres.

Mrs. HANSEN. What is the total value of all land destroyed by man-caused fires?

Mr. NELSON. That is a figure that I don't have at hand here.

Mrs. HANSEN. Insert the information in the record?

Mr. NELSON. Yes, madam. Our fire reports do have a damage figure with them.

(The information follows:)

Fire statistics on all fires (man and lightning-caused) within area protected by national forests; calendar year 1969

Acres burned	95,707
Damages	$3,177,194
Cost of suppression	$18,144,070

FIRE PROTECTION MEASURES

Mrs. HANSEN. What do you feel has been the success of your protection measures? Have you been able, through your fire prevention, fire detection, and your faster fire operations, to curtail fire loss?

Mr. NELSON. We certainly have. It is a matter of a whole series of different things that have been done in the fire game. Mr. Cliff mentioned some of them this morning, such as our going in the last few years to more and more air attack.

Of course, one big item was the Forest Service invention really of the smokejumper program. The smokejumper program has been made much more effective in the last few years through the use of helicopters to pick up the smokejumpers after they drop to a fire and stop its spread and then transport them to another fire. Helicopters are often used to retrieve them from remote fires. Two years ago, when we had so many fires, we had some crews that jumped as many as two and three times a day to two or three different fires. They could get the helicopter to pick them up with their gear so they were ready for other fires. The air attack with the tankers has been a factor. The whole field in fire research has been a contributing factor to a better record and less area burned.

In the detection field, we feel that we are getting further along, and will be able to take advantage of additional research that is being done on a pilot state. In the infrared field, for example, we will be able to get to know where the fires are more quickly, especially lightning caused fires, and be able to properly man them fast.

In the last few years this committee has talked about the interregional fire crews who are well-trained, 25-man crews, where we can move them readily from one region or an area to another by a DC–3 aircraft.

AIRCRAFT AND HELICOPTERS

Mrs. HANSEN. How many aircraft do you own?

Mr. NELSON. We own 57 aircraft.

Mrs. HANSEN. How many helicopters?

Mr. NELSON. We own only one helicopter.

Mrs. HANSEN. Do you rent your helicopters?

Mr. NELSON. We contract all our helicopter work. In fact, 85 percent of our aircraft work is with contractor aircraft, helicopters or other types of aircraft, whereas only 15 percent is with our own planes. Most of our aircraft are the smaller type aircraft. Most of

them are the types that we use for lead planes in conducting or directing our air attack program where we have the air tankers.

In fire prevention, I think we have strengthened, in spite of the fact that we have more man-caused fires in the last year. We plan to develop special training material, including a film, to give our employees the newest fire prevention technology.

MAN-CAUSED FIRES

Mrs. HANSEN. What is the principal cause of the man-caused fires?

Mr. NELSON. From all sorts of causes. One that bothered us a lot is that caused by railroads. We worked on that this past year. We are developing an agreement with the Association of American Railroads that we feel is going to help in getting more prevention of railroad fires. Youngsters playing with matches has also been one of our serious causes of fires. We feel the Smokey Bear program and other prevention efforts are helping to reach this type of fire starter. If it hadn't been for that program, I am sure that the number of man-caused fires would be many, many times what it is at the present time. Even though the number of man-caused fires has gone up slightly, it hasn't been in proportion to what we are sure it would be without the strong prevention effort that we have in the field of fire prevention.

Mr. CLIFF. Other major causes are smokers throwing away cigarettes, debris burners, campers, and hunters leaving campfires unattended in dangerous places, and then there are some fires deliberately set by incendiaries. I think in all the categories, smokers cause the most fires, and then either the campfire or the debris burner comes next.

Mr. NELSON. Incendiaries are a pretty high cause of many in the South. It is mostly confined to Southern States.

Mrs. HANSEN. Incendiaries?

Mr. NELSON. Deliberately setting fires.

Mrs. HANSEN. Why do they set fires?

Mr. NELSON. It is a way of life for many of the people that live in the forestry areas. They have lots of reasons that they give—to kill snakes, to kill chiggers, etc. They just feel that some of the forests ought to be burned off every so often. There is some validity to that, as attested to by our own prescribed burning program in the Southern States, where we have learned and do use fire as a tool for forest management by burning.

Mrs. HANSEN. Won't this cause a controversy?

SLASH BURNING

Mr. NELSON. That is going to be and is already one of our serious problems. It is going to become more and more of a problem in connection with fire control and slash burning. You see it used to be when it came slash burning time, our whole effort was to do it at the time we could burn it safely. Now we have added to it, doing it at a time that the smoke will disperse. We do it tied with the local weather forecast at the particular time. The effort is to do it at the time that the smoke will rise rather than at a time when the weather conditions

cause it to settle in the valleys. It makes it a more difficult problem, because that time is not always when it is the safest time to burn.

Mrs. HANSEN. I notice in the State of Washington that they are doing less and less slash burning. They leave a lot of the material for cover.

If you were to leave the slash on the ground in the summer, would this help cause a fire?

Mr. NELSON. It is certainly true that if we get a fire started, it gives us a more difficult problem of putting it out, and more costly. The more acres we have of slash on the ground untreated, the more chances are that we may have some large and costly fires.

Mrs. HANSEN. Is there anything you can use chemically to dissipate the smoke?

Mr. NELSON. I don't know of anything. Dr. Arnold may have some ideas. Have our boys been working on that?

Mrs. HANSEN. Are they working on anything?

Mr. ARNOLD. Not on the smoke dissipation, because at the time that you can burn slash safely, that is the time that the fire doesn't burn as completely as it normally does, and there is no chemical treatment that would do anything but add more to the smoke pollution.

SMOKE ELIMINATION

Mrs. HANSEN. In London they are putting some ingredient into their fuel that eliminates the smoke from their chimneys. This type of pollution is going to be a problem in many small towns. You have to develop a way to dissipate this smoke.

COMPLETE UTILIZATION OF RAW MATERIALS

Mr. ARNOLD. In forest areas the ultimate solution is going to be in more complete utilization of the raw material, and, of course, there is considerable effort going into that. Then there are some other means of slash disposal. At the Forest Products Laboratory and at Houghton, Mich., we are working on making use of even the limbs, looking for ways to increase the percentage of bark in pulp and for ways to separate bark chips for other uses. If you look at trends in utilization in the past, we should be able, in a few years, to come up with ways to utilize the complete tree material from the roots through to the limbs.

Mrs. HANSEN. What are you doing to prevent the brush from the trees in many of our forests from igniting and causing a fire?

Mr. ARNOLD. That is going to have to be part of the new intensive timber culture that will be developed over the next 10 years.

MECHANICAL CHOPPERS

Mr. NELSON. They are working on mechanical choppers and doing some tests on those that would go through the woods, chop it and get that type of material down into the ground where it wouldn't be piled up higher and be the flashy fuel that it is at present.

Mrs. HANSEN. Your big logging companies can absorb this kind of cost, but your small logger will not have the funds to do this type of maintenance.

Mr. NELSON. On national forest lands that problem would have to be handled by our doing that type of work, rather than having the little logger have this special type of equipment, like a chipper.

Mrs. HANSEN. Will this be built into your future appraisal costs?

Mr. NELSON. That is right. Cooperative slash deposits are a built-in cost now, where they pay so much per thousand toward the disposal of the slash. In some areas we take on the responsibility of the disposal of the slash or the treatment of the slash, whatever it might be.

SLASH BURNING IN WILLAMETTE VALLEY

Mrs. HANSEN. Are you familiar with the slash burning in the Willamette Valley?

Mr. NELSON. As near as I know our slash burning in the Willamette Valley area was done reasonably successfully without adding smoke down in the valley because of the days that we did it. We are going to have times when we are going to get caught with the wrong weather. We will get some slash fires going with unfavorable air currents and we will be accused of polluting the air down through the valley.

Mrs. HANSEN. The fog comes in rather suddenly in those areas.

Mr. NELSON. That is right. That is why I mean we are going to get caught some days. Last year we did pretty good.

CONSTRUCTION AND MAINTENANCE OF IMPROVEMENTS FOR FIRE AND GENERAL PURPOSES

Mrs. HANSEN. You are requesting an increase of $539,000 for the construction and maintenance of your facilities in the national forests. Justify this request.

Mr. CLIFF. This item will be discussed, questions answered by Mr. Schultz, who is in charge of this phase of our work.

Mr. SHULTZ. Of the $539,000 increase over last year's level, $441,000 is to correct water pollution at 24 sites. These are principally at ranger stations. The balance of the increase, $98,000, is to restore the amounts of the 1970 construction deferrals which were applied to the 1970 Pay Act cost.

FOREST FIRE PROTECTION

Mrs. HANSEN. You are not requesting an increase for forest fire protection. Is this reflective of the needs?

Mr. NELSON. Actually, Mrs. Hansen, the budget takes into account increased pay costs. In forest fire protection we have a lot of equipment that is used, and the cost of equipment has been going up. The cost of the rental of aircraft has been going up, both helicopters and fixed wing. Consequently it means that we will have a lower level of actual protection with the same amount of money in 1971 as we had in 1970.

Mrs. HANSEN. You have no way of forecasting your 1971 fire suppression costs?

Mr. NELSON. We can't. So much depends upon the weather that we just have to use averages. Sometimes the weather treats us reasonably well and we look like a pretty good firefighting organization, and other times it treats us bad, and we have some pretty bad losses.

Last year we felt pretty good about our record, considering the fact that in August it turned very hot and dry in much of the Northwest. The weather wasn't any better from our standpoint than some of the bad seasons a year or two ago when we had losses two and three times as much as we had this past year. Parts of the area we only had 10 percent of the normal rainfall. Walla Walla was an example of some of the driest years and over Montana was some of the hottest weather on record last August.

HELICOPTER RENTAL

Mrs. HANSEN. Isn't the Alaskan pipeline work going to cause the cost of helicopter rentals to increase?

Mr. NELSON. It probably will up in Alaska. It could. I don't think it will have any particular effect on our helicopter rental down in the lower 48 States. Incidentally in this helicopter rental field, we have somewhat of a problem. We can, of course, when weather conditions get critical, place helicopters on standby. It is good business to do it. We think that it might be very good business if we were able to place these helicopters under contract prior to that time, in order to have them available and ready for fires.

Mrs. HANSEN. Prior to the price increase.

Mr. NELSON. Yes. That was done. You will remember we talked 2 years ago, I think it was about air tankers, about getting them under the P. & M., or this line item, rather than waiting until the fire started and the weather got so critical that we were then authorized to use the forest firefighting fund or the emergency fund.

We can, of course, and we are placing some of them on standby when the critical situation arises, using the emergency firefighting fund. We think it would be good business to use up to $1 million or $1.5 million precontracting and have them really available in advance.

Mrs. HANSEN. This committee will view with dismay any increase in burned acreage due to your failure to have enough funds for proper protection. This would be like taking part of your national inheritance and setting fire to it.

FUEL BREAK PROGRAM

Mr. NELSON. Another phase in our fire control business for which there is nothing in the 1971 budget, is breaking up these large areas of fuels through what we call fuel breaks and that type of work. We are sure that carrying forward a program of that type will save us lots of money over the long period of time by keeping us from having

these tremendously large catastrophic fires. That will give us a better chance to catch them at a reasonably small acreage.

Mrs. HANSEN. There is nothing in the 1971 budget for this program?

Mr. NELSON. There is nothing in this budget for carrying forward with that program.

Mrs. HANSEN. This does not make sense.

Mr. NELSON. Actually one way of measuring where we are in fire control, Madam Chairman, is like I have mentioned with other programs in relation to the national forest program that was previously developed. In 1971 we will be at 61.6 percent of what we indicated that we felt would be needed to carry on an adequate fire protection on the national forests.

Mrs. HANSEN. I think you should remember, Mr. Nelson, that nearly every national forest adjoins private property or State property. So if you don't provide enough funds for fire suppression you will destroy not only national forest lands but also private lands.

CONSTRUCTION

You are requesting $52,000 for the construction of some dwellings and barracks at San Bernardino, Calif. What will be the cost per square foot of this construction?

Mr. SCHULTZ. Approximately $15 per square foot.

Mrs. HANSEN. Insert in the record how this compares with your land management cost per square foot and BIA's construction costs per square foot.

(The information follows:)

The estimated construction cost per square foot is $20 for the dwellings and $13.24 for the barracks.

The design and construction branch of the Bureau of Indian Affairs in Albuquerque, N. Mex. reports a cost of $23.50 per square foot for three-bedroom dwellings.

FIRE LOOKOUTS

Mrs. HANSEN. What is the cost per square foot to install fire lookouts?

Mr. SCHULTZ. Those are not based on square footage. They are towers with a cab on top.

Mrs. HANSEN. Do you keep a permanent employee there during the fire season?

Mr. SCHULTZ. During the fire season, yes.

OFFICES

Mrs. HANSEN. You are requesting $362,000 for construction of four offices. Where will the offices be located?

Mr. SCHULTZ. The one in Pennsylvania will be located on the Marienville District.

Mrs. HANSEN. In what section of the forest will the Willamette office be located?

Mr. SCHULTZ. It is on a tributary of middle fork Willamette, on the west side of the forest.

Mrs. HANSEN. Umpqua National Forest.

Mr. SCHULTZ. The town of Tiller. The remaining project is to be constructed on the Challis National Forest in Idaho. It will be located on U.S. Highway 93, south of Stanley, Idaho.

Mrs. HANSEN. Insert in the record the cost per square foot of these facilities.

(The information follows:)

The estimated square foot cost for each proposed project is as follows:

Allegheny National Forest, Pa., (Marienville Ranger District Office)	$23.76
Umpqua National Forest, Oreg., (Tiller Ranger District Office)	23.83
Willamette National Forest, Oreg., (Rigdon Ranger District Office)	22.00
Challis National Forest, Idaho, (Stanley and Sawtooth Ranger District Office)	16.67

OFFICE AT BLACK HILLS NATIONAL FOREST

Mrs. HANSEN. You are requesting $220,000 for construction of a supervisory office in the Black Hills National Forest. What will be the cost per square foot? Insert the information in the record.

(The information follows:)

The cost of constructing the Black Hills Supervisor's Office is estimated to be $46.30 per square foot.

Mr. SCHULTZ. This one, Madam Chairman, is just to do the preparatory work and get the public utilities in and the site preparation job done. The total cost of this supervisor's office will be $1,808,000 and this $220,000 will do the initial site preparation.

Mrs. HANSEN. How many acres of national forest will this serve?

Mr. SCHULTZ. It will serve the acreage of the Black Hills National Forest—about 1.5 million acres.

DENVER FIRE CENTER

Mrs. HANSEN. Justify your request of $30,000 for the Denver fire center.

Mr. SCHULTZ. Madam Chairman, the site plan for the project has been developed, and we are proceeding with the final design plans. We expect the design to be completed by September of 1970. The $30,000 would be for site development work including construction of the water and sewage systems which we could expect to get underway by August.

SERVICE AND STORAGE BUILDINGS

Mrs. HANSEN. You are requesting $135,000 for service and storage buildings. Insert in the record the acres of national forest that this will serve.

(The information follows:)

NATIONAL FOREST ACREAGES

Project	National forest	Ranger district Federal acreage
Dwellings and barracks:		
Arrowhead dwelling	San Bernardino	24,300
Arrowhead barracks	do	24,300
Fire lookouts:		
Magruder lookout	Bitterroot	460,800
Sacramento lookout	Lincoln	147,200
Cottage Grove Lookout	Umpqua	87,000
Offices:		
Marienville ranger district	Allegheny	125,300
Tiller ranger district	Umpqua	322,900
Rigdon ranger district	Willamette	232,700
Stanley-Sawtooth ranger districts	Challis and Sawtooth	756,800
Service and storage buildings:		
Custer warehouse	Black Hills	196,000
San Carlos warehouse	San Isabel	196,000
Mesa powder cache	Grand Mesa-Uncompahgre	149,500
Tuscahoosa chemical storage	Talladega	89,500
Evangeline chemical storage	Kisatchie	96,900
Ketchikan oil and paint storage	South Tongass	3,324,000
Anchorage oil and paint storage	Chugach	1,777,700
Anchorage powder cache	Chugach	1,777,700
Arrowhead laundry building	San Bernardino	24,300

	National forest	National forest Federal acreage
Special projects		
Supervisor's office	Black Hills	1,220,100
Denver fire center	Serves 18 national forests and 2 national grasslands.	24,694,200
Communications System		
Major projects	Flathead	2,341,800
Do	Routt	1,125,200
Do	Tonto	2,979,500
Do	Boise	2,635,300
Do	Los Padres	1,723,900
Do	Deschutes	1,587,800
Do	Fremont	1,208,400
Miscellaneous projects (replacement of worn-out radios, etc.)	Regions 1, 8, 9, and 10	70,006,300

LOW COST HOUSING FOR DEMONSTRATION PURPOSES

Mrs. HANSEN. Your low cost wooden housing development is very interesting. Why can't you build some of these models at selected locations, to serve as demonstrations to potential purchasers and contractors, and thus help gain an understanding and acceptance of these plans?

Mr. SCHULTZ. This idea has real potential, and we do have an opportunity to build such demonstration residences.

Mrs. HANSEN. What are you going to do?

Mr. SCHULTZ. We expect that we could construct approximately 200 as a pilot project in locations that would serve both for demonstration purposes and for needed housing of employees. We now have about 900 residences which are antiquated and obsolete that have been amortized.

Mrs. HANSEN. Some of these facilities are very substandard.

Mr. SCHULTZ. They are very substandard. Some of these could be replaced by this low-cost housing. Also we need about 1,400 new residences. Out of all of these needs we have a real opportunity to select some key locations.

Mrs. HANSEN. When will you start this program?

Mr. SCHULTZ. We have no proposal to begin on it. The start on it would cost about $1 million for 200 residences.

ILLUSTRATIONS OF LOW-COST HOUSES

Mr. ARNOLD. Madam Chairman, we do have some illustrations of these low-cost houses if you would like to take a minute to look at them. These are only four examples of the 11 plans. These are from Forest Products Laboratory designs. These are fairly small. This one is large, 2,200 square feet for a large family. It was built for a low cost per square foot, but in a small house of 700 or 800 square feet you still have to put in standard plumbing and wiring, and so the per square foot cost, even though the total cost is low, is about $12 a square foot in the completed design, because you have the standard things.

Mrs. HANSEN. What is the cost per square foot of the other houses?

Mr. ARNOLD. This house below per square foot comes out at $14. This was commercially built and they added vinyl tile and other extras to make it a more deluxe house in this particular case. These houses are designed as low-cost housing for families with an income of $5,000 to $7,000. Some of these designs are appropriate for Forest Service residences and some are not. This is what Mr. Schultz was referring to as requiring some study.

Mrs. HANSEN. Here is a chance to develop your imagination and creativity. It gives you an opportunity to develop some imaginative programs.

Just because someone's income level is only $5,000 doesn't mean that he has to live in substandard housing. There can be just as much beauty in a low-cost house as there can in an expensive house, providing you utilize the materials imaginatively.

Mr. ARNOLD. We recognize the problem of the rebuilding of houses, particularly wartime construction. Some of our research groups have developed a new way to replace floors. The floors go out first. You mentioned the plumbing and the flooring.

(Discussion off the record.)

Mr. NELSON. Madam Chairman, besides the work that is being done by the Forest Products Laboratory, architects in California were assigned the job of making some designs particularly suited for Job Corps people to develop and make modular parts at their camps during the winter off-season. They could then be taken to a site to be put up. They have some innovative designs in modular construction both for offices, crew houses, and that type of work. These modular parts can be used in a number of different ways, depending on what the need is.

Mrs. HANSEN. That is good.

CIRCULAR AND TUBULAR HOUSING

Mr. CLIFF. Madam Chairman, I know that there is room for innovation in this field. We have developed some houses that I think would please you from the standpoint of innovation. Our Southeastern Forest Experiment Station is working on low-cost housing design too. Our architectural engineers there have designed a circular house made of wood that is very attractive and is creating a lot of attention, also a tubular house made of wood. They have developed new construction ideas both at the Forest Products Laboratory and the Southeastern Station. Here is a picture of the circular house that is a low-cost house made entirely of wood. It is a very attractive house.

Mrs. HANSEN. A small house and an inexpensive house doesn't need to be unattractive.

JOB CORPS BARRACKS

Mr. SCHULTZ. Madam Chairman, I might add to Mr. Nelson's remarks on this design that he was talking about for the Job Corps Center, that just recently the Department of Labor has authorized us to build five more barracks onto existing centers to increase their capacity. We feel we have an opportunity to use that new design for those barracks.

Mrs. HANSEN. A man designed that kitchen. He has the stove to the right of the sink and anybody with good sense knows you should have the sink to the right of the stove. That is what I mean. The average person isn't left-handed.

Mr. CLIFF. I think that leads to the conclusion we should hire some women architects.

Mrs. HANSEN. I have said for a long time the Government with its equal opportunities program ought to begin to hire some women. There are some very competent women in the field of housing, and there should be more.

AIR STRIP

You are requesting $34,000 for the construction of an airstrip. Justify this request.

Mr. SCHULTZ. This is an improvement of the airstrip that now exists there.

Mrs. HANSEN. Insert in the record the length of the airstrip.

(The information follows:)

The length of the airstrip to be improved at Missoula, Mont., is 1,500 feet.

COMMUNICATIONS SYSTEMS

Mrs. HANSEN. Justify your request of $852,000 for your communications systems.

Mr. SCHULTZ. That is the installation of new equipment facilities, primarily conversion from low band to high band frequencies which we discussed last year. We have had to replace outmoded old equipment. The equipment has been amortized. This is very desirable and necessary in connection with our fire protection program.

SITE ACQUISITION

Mrs. HANSEN. You are requesting $40,000 for site acquisition. Why do you have to acquire sites if they are in a national forest?

Mr. SCHULTZ. One location is on the Chattahoochee for the Cohutta district office. Chatsworth is a small community that has no suitable rental housing. Therefore a site for the ranger's house is required. In this case the nearest national forest land is 10 miles from the district headquarters. We felt it was desirable to locate the ranger's house near his office within the central community which his office serves. Another one on the Cherokee National Forest in Tennessee is $15,000. At present the Ocoee district office is at a site soon to be flooded by a TVA project. We have to acquire a site in the town of Benton, Tenn., with a population of about 2,000. It is also centrally located to the district activities.

Another one is the Gunnison Forest in Colorado, 16,000 acres. At the present time we have the supervisor's office and four district offices located in Gunnison. These units are using storage facilities located on the national forest land about 10 miles from the office. We feel that a site is required near the existing office for equipment storage and a service and storage building. We anticipate that this will result in an estimated annual savings of $3,000 in reduced travel .The last one is on the Rio Grande National Forest in Colorado, $5,000. In this case the Creede ranger district office is located in Creede, Colo., a little town with a population of 400.

The increasing recreation activities and other district growth require the development of a new office, a service and a storage building, crew quarters and related facilities. This site should be located on Highway No. 7 near Creede, in order to better serve the public. There are no suitable national forest lands in this area

Mr. NELSON. I think the wording "immediately adjacent" might bother some. It isn't really immediately adjacent. That is a relative word and these are all pretty well out a ways from actually owned land.

WATER POLLUTION ABATEMENT

Mrs. HANSEN. Next time get your semantics organized. You are requesting $681,000 for water pollution abatement. Justify this request.

Mr. SCHULTZ. It is primarily sewage treatment. These are old, antiquated systems that don't meet today's standards. They are receiving heavier use and are projects that have been determined by the Federal Water Pollution Control Board as high priority for correction at our sites. These are in addition to the 24 that we had listed in the budget increase for the same thing.

WATER AND SANITATION SYSTEMS

Mrs. HANSEN. Justify your request of $396,000 for water sanitation systems.

Mr. SCHULTZ. This also includes water service systems to administrative sites.

MAINTENANCE OF EXISTING FACILITIES

Mrs. HANSEN. Justify your request of $6,920,000 for maintenance of existing facilities.

Mr. SCHULTZ. For the maintenance of existing facilities? This is for routine maintenance and periodic painting.

Mrs. HANSEN. Do you have a maintenance standard so that when it is no longer feasible to maintain the facility you construct a new facility?

Mr. SCHULTZ. We would like to have a standard of this nature, but we aren't able to meet it because of the cost of replacing the facility. On some of them where they have long since gone beyond the point of economical maintenance, we would much prefer to replace them.

Mrs. HANSEN. I think you should develop a good schedule, because after a while maintenance becomes more costly than construction.

Mr. SCHULTZ. This is true, particularly when a building has amortized itself over a period of years.

WATER RESOURCES DEVELOPMENT RELATED ACTIVITIES

Mrs. HANSEN. You are requesting a decrease of $3,391,000 for water resources development and related activities. Justify this decrease.

Mr. NELSON. Madam Chairman, that is well over 50 percent of the item that is being cut back. This is the part dealing with construction of recreation facilities at reservoirs constructed on the national forest by other agencies, such as the Corps of Engineers, the Reclamation Service, Federal Power Commission and so forth. Last year we had $3,933,000 for this type of recreation development. This year the budget proposes only $542,000.

I mentioned that it was to be considered with the recreation work that we have under the line item of recreation-public use, or a total of $6,697,000 less than we had the year before for new construction.

Mrs. HANSEN. In spite of additional visitors?

Mr. CLIFF. In spite of 7 percent increase each year in additional visitors at developed sites.

Mrs. HANSEN. In spite of your statement on page 82 of your justifications:

> Experience has shown that without adequate analysis and liaison effort such as is provided by this activity, natural resources often suffer from enormous waste and misuse, and the project works fail to make their maximum contribution.

Mr. CLIFF. That is correct. As these resources are constructed, there is going to be use. If we don't have the facilities to take care of the people at these reservoirs, they are going to create pollution that should better really be taken care of by the construction of the necessary facilities. This is a matter of holding down construction budgets. That is the real cause of the situation.

Mrs. HANSEN. On page 83 of the justifications you say:

> A backlog of this work is growing continually, and only in a few cases is the work accomplished when it is the easiest and cheapest—before the reservoirs fill. There are presently 115 reservoirs on the national forests with no recrea-

tion facilities. The surface area of these reservoirs exceeds 139,000 acres. Many other reservoirs have only minimal facilities.

Won't this just add to your present costs?

CAVE RUN, KY.

Mr. NELSON. That is very true in this particular case. An example is Cave Run in Kentucky, where the Army Engineers have their approval now and are going ahead with the dam project that will create a lake or reservoir. It will be some 8,000 acres in size in a very attractive setting. There are 13 different sites that are in the plan for development on that new reservoir. Development is the responsibility of the Forest Service. The lake is so situated that it has irregular shores and the logical time to do much of the work is to place some of the waterline system under what will become part of the lake. It is also more economical, of course, to build such things as boat ramps and fishing piers before the water is completely up. Some of the beach development has to be done. We have other reservoirs being constructed that have that similar type of a problem. This is deferring the problem for future years. Some of them will become more costly by not being able to do them before the water comes up.

INSECT AND DISEASE CONTROL

Mrs. HANSEN. You are requesting an increase of $1.5 million for insect and disease control. You propose to purchase 100,000 pounds of Zectran to replace DDT. Who manufactures Zectran?

ZECTRAN

Mr. BACON. Madam Chairman, the Dow Chemical Co. is the company that manufactures Zectran. It is the proprietary chemical. However, to set the stage for discussion of this problem I think it might be better if Dr. Arnold would discuss some of the research aspects.

Mr. ARNOLD. About 6 years ago the forest pest control and insect research people set up an insecticide screening project in Berkeley, Calif. That program screened several hundred chemicals as possible substitutes for DDT. There was evidence that some of our insect pests were becoming resistant to DDT and other chemicals. One of the chemicals that this group screened was Zectran. It had been made on a test basis by Dow Chemical for agricultural and other purposes, and in checking it, this was one that stood out in effectiveness. At an insecticide screening laboratory you have to have colonies and groups of insects to use in biological testing. You actually test their behavior against various formulations and quantities of chemicals. Zectran stood out as one of the very best for spruce bud worm, one of our more difficult and wide-ranging insects. Following that there were more intensive screenings and some pilot test work in the field in Idaho and Montana. We went into a final test program last year.

Also, our scientists have determined that there may be 40 or 50 other modifications of Zectran that may be appropriate for other forest insects. We haven't tested those yet because we are in the process

now of coming to the point where we can use Zectran operationally in forest insect control work for spruce bud worm.

There is one other development. In some of these formulations, particularly Zectran and some of our new biological measures that are showing great promise, we will be applying very small quantities. Instead of gallons per acre, it will be ounces per acre. We have to have new spraying techniques in order to apply the chemical in very small quantities. We are doing that work at Corvallis now as part of this overall program of developing safe chemicals and biological measures, and developing the appropriate means of applying them at the time and place that will be effective.

Mr. BACON. Speaking to the operational problems we face, the fact that Zectran is an extremely limited spectrum chemical means that there is no supply available. It was initially made in a "glass" production operation in a laboratory. If we are to have it produced for this purpose, we need to provide a large enough order to justify the construction of the necessary plant and facilities for its production. This is why we have to contract initially for this large a quantity.

Mrs. HANSEN. Do you have to subsidize their laboratory?

Mr. BACON. In a sense, since a laboratory is required, it might be described that way. There is no other market for the chemical at this time.

PENDING RESTRICTION ON DDT USE

Mrs. HANSEN. I am quoting from a letter I received from Mr. Richens, the vice president of Northwest Timber Operations. He says:

> About two-thirds of Crown Zellerbach holdings are in the Oregon and Washington coast range. At infrequent intervals the population of the needle-eating larvae of hemlock looper builds up to epidemic proportions.
>
> The only known effective control agent for this insect is DDT. A method for applying this chemical was worked out and carefully documented in the control project in 1963.
>
> For the maintenance of good water yields, the opportunity for people's use and the maximum production of wood products from the forest, we need to retain the infrequent and careful use of DDT as a continuing tool for all timberland managers until such time as an equally effective agent is developed.

Is there an effective agent for this?

Mr. BACON. It is our position that there is, Madam Chairman, and I believe the pesticide is Malathion. We do maintain there is an alternate to DDT for hemlock looper. For the Douglas-fir Tussock moth, however, there is no alternative. In our discussions in setting standards with the Department, we have insisted that we do need to maintain the use of DDT for the Douglas-fir Tussock moth.

Mrs. HANSEN. Have they been advised that they will have to use another chemical?

Mr. BACON. These projects are always undertaken cooperatively with at least a third of the cost sharing from the Federal financing that comes through this program, for which we are seeking funds. Our tests have shown that in view of the impact of DDT, we will use Malathion which, while not quite as effective, will effectively control the epidemics.

Mrs. HANSEN. Why is the cost of Zectran so high; $15 a pound?

Mr. BACON. Fortunately we only need fifteen one hundredths of a pound per acre. Thus, the total application cost when it is applied would be just over twice as expensive as DDT, even though DDT costs 15 cents a pound.

LAND ACQUISITION, WEEKS ACT

Mrs. HANSEN. You are requesting $1.3 million for acquisition of land under the Weeks Act. This is a 10-year program. How much of this land has been acquired and why do you keep buying land when you haven't adequate funds to manage what you have now?

Mr. NELSON. Madam Chairman, quite a lot of what we are buying under the Weeks law is located in and adjacent to lands that we already own. Consequently the additional administrative costs are not great. For example, in the Redbird Purchase Unit we have enough land purchased where we have set up the basic organization, the ranger, the protection organization, his staff people, and adding additional acres there cuts down the cost per acre rather than increasing the cost of managing that particular unit. So, it isn't a relationship of additional costs in relation to the additional acres that we would buy. In fact, fire protection-wise, in these eastern national forests, we protect the land anyway even though it is private land in order to keep the fires from burning onto national forests ownership, as an example.

Mr. CLIFF. I think it is a good question, Madam Chairman. I think in order to answer it, you need to analyze the kinds of land and the location of the land that we are purchasing under these programs. The Redbird Purchase Unit is in an area in the headwaters of the Kentucky River. It is severely damaged, creating floods, causing the Government, the State, and the local people heavy losses. Here, the State and local government agencies requested that this area be put into the national forest. In many other areas, as Mr. Nelson indicated, we are purchasing to round out areas that we already have. In many cases, we can actually reduce the cost of administration by eliminating in-holdings, eliminating the need for landline surveys, and reducing other administrative costs. The value of these lands to society, I think, are quite great. We can buy them now at a cheaper price than we will ever be able to get them again. The real question is should they be administered and improved, and if so, by whom? In this particular case, that question has been answered in the affirmative, that they should be managed for public purposes. The second question, by whom, has been answered in the affirmative or in favor of national forest management, because they are located in national forest areas.

Mrs. HANSEN. Will this 10-year program complete your land acquisitions?

10-YEAR ACQUISITION PROGRAM

Mr. CLIFF. The 10-year program only provided for purchase of part of the land that should eventually be acquired to round out national forest ownership. This is the part that was included in the 10-year program. Actually there are about 38 million acres of in-holdings in the national forests. We are acquiring some of these by

exchange. We don't intend to acquire all this land. Our present plans provide for acquiring only about a sixth of it. The acquisition of that one-sixth will probably extend over a 20- or 30-year period, and longer than that at the rate we are going now.

Mr. NELSON. Referring back again to our 10-year plan for development of the national forests, this item is lower in percentage of being financed than any other item. As of 1971 it will be only 17 percent. We haven't been moving ahead nearly as fast as we thought might be desirable. This is really a minimum program I would say.

Mrs. HANSEN. Why aren't you moving faster?

Mr. NELSON. Acquisition of land is not popular. I presume that is why you get the questions from the Congressmen that you mentioned a minute ago. Consequently we haven't been able to sell the Budget Bureau or others on what we consider our needs in moving ahead with the land acquisition program, especially the purchase of land here in the East under the Weeks law program for timber production and watershed protection.

Mrs. HANSEN. The committee stands adjourned until 10 a.m. tomorrow morning.

TUESDAY, MARCH 24, 1970.

FOREST RESEARCH

Mrs. HANSEN. Insert pages 94 through 125 of the justifications in the record.

(The pages follow:)

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS

Forest Research
(includes Projects (15) through (28) on following pages)

State	Headquarters or Project Location	FY 1970 estimate	FY 1971 estimate	Change
		(in thousands)		
Alabama	Auburn	$262	$337	+$75
Alaska	College	289	289	
	Juneau	513	553	+40
		802	842	+40
Arizona	Flagstaff	566	566	
	Tempe	526	526	
	Tucson	172	172	
		1,264	1,264	
Arkansas	Crossett	177	177	
	Harrison	209	209	
		386	386	
California	Arcata	152	152	
	Berkeley	2,320	2,362	+42
	Fresno	153	153	
	Redding	147	147	
	Riverside	1,142	1,142	
		3,914	3,956	+42
Colorado	Fort Collins	1,337	1,368	+31
Connecticut	Hamden	695	695	
District of Columbia	Washington	620	673	+53
Florida	Lehigh Acres	132	132	
	Marianna	133	133	
	Olustee	592	592	
		857	857	
Georgia	Athens	994	994	
	Macon	723	723	
		1,717	1,717	
Hawaii	Honolulu	156	156	
Idaho	Boise	259	323	+64
	Moscow	752	783	+31
		1,011	1,106	+95
Illinois	Carbondale	615	615	
Iowa	Ames	106	106	
Kentucky	Berea	408	408	
Louisiana	Alexandria	1,235	1,235	
	New Orleans	611	757	+146
		1,846	1,992	+146

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS

Forest Research -- continued
(includes Projects (15) through (28) on following pages)

State	Headquarters or Project Location	FY 1970 estimate	FY 1971 estimate	Change
		(in thousands)		
Maine	Orono	$119	$119	
Maryland	Beltsville	328	328	
Michigan	East Lansing (including Ann Arbor)	231	256	+25
	Houghton	207	303	+96
	Marquette	274	274	
		712	833	+121
Minnesota	Duluth	337	266	-71
	Grand Rapids	302	302	
	St. Paul	1,119	1,172	+53
		1,758	1,740	-18
Mississippi	Gulfport	1,121	1,121	
	Oxford	310	310	
	State College	200	225	+25
	Stoneville	743	743	
		2,374	2,399	+25
Missouri	Columbia	262	262	
Montana	Bozeman	351	351	
	Missoula	1,496	1,496	
		1,847	1,847	
Nebraska	Lincoln	129	129	
New Hampshire	Durham	515	515	
New Mexico	Albuquerque	215	215	
New York	Syracuse	133	133	
North Carolina	Asheville	1,001	1,054	+53
	Franklin	217	217	
	Research Triangle (near Durham)	695	720	+25
		1,913	1,991	+78
North Dakota	Bottineau	234	234	
Ohio	Delaware (includes Columbus)	1,267	1,267	
Oregon	Bend	189	189	
	Corvallis	1,549	1,549	
	LaGrande	369	369	
	Portland	967	1,082	+115
		3,074	3,189	+115
Pennsylvania	Upper Darby	673	715	+42
	Warren	132	132	
		805	847	+42

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS

Forest Research -- continued
(includes Projects (15) through (28) on following pages)

State	Headquarters or Project Location	FY 1970 estimate	FY 1971 estimate	Change
		(in thousands)		
Puerto Rico	Rio Piedras	$302	$302	
South Carolina	Charleston	277	277	
South Dakota	Rapid City	259	259	
Tennessee	Sewanee	145	145	
Texas	Nacogdoches	189	189	
Utah	Logan	527	527	
	Ogden	508	611	+103
	Provo	141	141	
		1,176	1,279	+103
Vermont	Burlington	320	320	
Virginia	Blacksburg	144	144	
Washington	Olympia	340	368	+28
	Seattle	603	603	
	Wenatchee	284	284	
		1,227	1,255	+28
West Virginia	Morgantown	311	311	
	Parson	246	246	
	Princeton	949	949	
		1,506	1,506	
Wisconsin	LaCrosse	101	101	
	Madison	5,837	6,007	+170
	Rhinelander	567	567	
		6,505	6,675	+170
Wyoming	Laramie	189	189	
Total		43,920	45,066	+1,146

Project (15)

TIMBER MANAGEMENT RESEARCH

1969	$9,317,000
1970	10,125,000
1971	10,319,000
Increase	+194,000

An increase of $194,000 is needed as follows:

(1) $78,000 to strengthen research on techniques for intensive timber culture at three locations: Olympia, Washington ($28,000) for fertilization and culture of second-growth Douglas-fir; Research Triangle, North Carolina ($25,000) for fertilization and soil management for southern pines; and East Lansing, Michigan ($25,000) for intensive culture of improved types of northern timber trees.

(2) $54,000 to accelerate research on forest regeneration and seed problems at two locations: Boise, Idaho ($29,000) to solve critical regeneration problems in Rocky Mountain Douglas-fir and ponderosa pine; and State College, Mississippi ($25,000) for research on production of seed of timber trees in a newly completed laboratory.

(3) $62,000 to speed research on prediction of timber growth and yield at two locations: Fort Collins, Colorado ($31,000) for computerized system of predicting and scheduling future timber harvests; and Moscow, Idaho ($31,000) for improved techniques for determining timber growth, yield, and site productivity.

Timber management research develops more productive and more reliable methods of establishing and tending forests for timber and timber-related products. It deals with:

(1) Reproduction of forests both naturally and artificially.

(2) Intensive culture measures for increasing the yield and improving the quality of forest stands.

(3) Methods for evaluating and increasing the productive capacity of forest soils.

(4) Stand treatments to perpetuate valuable species.

It includes breeding trees for rapid growth, good form, desirable wood qualities, and pest resistance. It includes research in such timber-related crops as maple sap, naval stores, Christmas trees, and decorative and medicinal plants which provide supplementary income to small landowners in rural areas. The program develops better techniques of measuring forest trees and stands, more reliable predictions of future growth and quality of forest products, and improved techniques to weigh alternatives in management of large public and private timber holdings.

Emphasis in the program is shifting toward more intensive timber culture for the most productive sites, and methods of forest and tree culture for multiple use management and environmental improvement. Modifications of timber culture are being developed to harmonize timber production with recreation, wildlife management and other uses. More effort is going into the use of trees to improve the environment for agriculture and for rural and urban living. Ecological studies are planned to determine how the overall productivity and environmental quality of forest ecosystems can be enhanced under management for timber production and other human uses.

Examples of Recent Accomplishments

Intensive culture means faster growth for slash pine. Slash pine trees may attain 35 feet in height and 8 inches in diameter in only 9 years under intensive culture. In a Florida study, selected slash pines planted at wide spacing responded to irrigation, fertilization, disking, and cover cropping. The most effective treatment combination was irrigation plus cover cropping. Flower and cone production was increased by fertilization. Such results indicate that by selective breeding and intensive culture trees can be developed that will grow rapidly, have good form, possess desirable wood characteristics, and resist insect and disease attacks.

Both deer and timber possible with multiple-use silviculture. An important objective in the multiple-use management of many forest areas is the production of sufficient browse to feed the deer population. Experiments in the Appalachians show that both weeding operations and timber harvests are effective in producing essential wintertime deer food. When a large enough area was treated, more stems than needed of preferred species were developed to support the deer herd without deer causing appreciable damage to the desirable tree production. Thus, where the deer population is not excessive, deer and timber can be managed together without serious conflict.

Forest management planning assisted by computers. A computer program has been prepared that simulates the behavior of even-aged forest stands using extensive research data for Black Hills ponderosa pine to illustrate the method. Changes that may be made in the simulated forest include tree growth, harvest cuts, periodic thinnings, random catastrophic losses, and management objectives. Results are presented as yield in board-foot and cubic-foot volume and money value. Two other computer programs provide yield tables based on changes in stand diameter resulting from various proposed intensities of thinning. Simulation by these three programs will enable comparison of future outcome of numerous silvicultural alternatives, to providing information on which sound management decisions can be based and reduce the cost of timber management planning.

Summary handbook for upland hardwood management. Upland hardwoods in the central United States respond best to even-aged silvicultural systems for timber production. Results of many years of research in this hardwood region have been summarized in a handbook for forest managers and landowners. It recommends complete removal of mature central hardwoods stands for regeneration, regular thinnings during the rotation, and suggests ways to improve species composition and timber value. If these practices were applied to only 1 percent of the commercial forest land of the Central States area, the annual income from timber might be increased as much as $8.8 million.

When to harvest yellow birch. The timber grower needs to know at what rate his trees are increasing in value, and at what point in their growth they cease to bring him the rate of return he expects. In a study of yellow birch financial maturity, in which the expected rate of value increase was calculated for trees of various sizes, growth rates, grades, and merchantable heights, it was concluded that yellow birch trees grown beyond 22 inches in diameter in New England do so at a diminishing rate of return. And, where surface defects rule out the possibility of top-grade saw or veneer logs, a maximum size of about 18 inches is more reasonable.

Pine hybrid useful in converting brushlands. Large acreages of potential forest sites in California are covered with brush. Many of the sites can economically produce wood products on a short rotation and all of them are important for esthetics. Establishment of trees is difficult and expensive. The knobcone x Monterey pine hybrid has demonstrated good survival and growth on these sites. The hybrids grow much faster than the knobcone pine parent and are more frost hardy than the Monterey pine parent. The hybrids appear to be particularly useful as an initial

tree crop in brush conversion programs since their rapid juvenile growth keeps them ahead of brush competition.

Gum yield successfully evaluated in juvenile trees. The first significant result of breeding in southern pines was the production of a high-gum-yield strain of slash pine. The progeny are now mature gum producers, and four consecutive years of commercial tapping resulted in yields of 48.7 barrels per thousand improved trees, or nearly twice the average yield. Furthermore, the results confirm tests made on these same trees by micro-tapping methods when they were only a few years old. This confirmation will permit early progeny testing and shorter breeding cycles in the future. It is expected that gum yields from the next generation of "high gum" strains will surpass the superior yields reported here.

Shelterbelts redesigned for irrigated farms. Sprinkler irrigation in circular quarter-section-sized areas is a new concept for agricultural production in the Great Plains. Recommendations have been developed for the design and species composition of shelterbelts around these circular fields. In north-central Nebraska cattle are confined to feed lots in the summer while corn is grown on the irrigated areas and then the cattle are grazed on corn stubble during the winter months. Belts of trees around the irrigated area provide crop protection, reduce evaporation, and aid in uniform water distribution. The non-irrigated triangular areas in the corners are surrounded by trees which protect cattle during the severe winter weather or can be devoted to such specialties as Christmas tree production.

Model for pollen dispersal aids planning of seed orchards. A study supported by PL 480 funds in Finland produced an important finding on conifer pollen dispersal that will be helpful in seed orchard management in the United States. The study demonstrated that under some conditions pollen may be dispersed 200 miles or more from its origin. Pollen was also found to be as abundant or even more so at altitudes of 1000 feet above the forest as in the forest itself. As a result of this study a theoretical model of pollen dispersal from natural stands was developed. This model will aid in the placement and management of seed orchards to minimize outside contamination.

Project (16)

WATERSHED MANAGEMENT RESEARCH

1969	$4,031,000
1970	4,341,000
1971	4,416,000
Increase	+75,000

An increase of $75,000 is needed to accelerate research on techniques to control sedimentation on forested and logged watersheds in Alaska ($40,000) and in Idaho ($35,000). This will make available Douglas-fir timber in Idaho on unstable soils while lengthening reservoir life, protecting salmon spawning grounds, and improving fishing in Alaska.

Watershed management research is concerned with problems of pollution of soil and water, with techniques for increasing streamflow, and with methods for stabilizing soil. Almost one-third of the wildland watersheds provide less than satisfactory protection of soil and water quality because of misuse in the past. Soil erosion has seriously impaired the productivity of many of these lands. Opportunities exist for restoring many of these lands to favorable conditions by revegetation, but continuing research is needed to gain control of sites where soil is infertile and the climate is hostile.

One of the most promising opportunities for adding to water supplies is through management of the forest lands that produce the bulk of our water. Research will continue on methods for managing vegetation to save water and for delaying snowmelt to provide more summer water. It is conceivable that action programs resulting from this research could increase yields of usable water in the United States by an average of 12 billion gallons per day.

Specific research objectives in fiscal year 1971 will be:

(1) Increase streamflow from alpine snowfields in Colorado, from timbered slopes of the Rocky Mountains, Sierra Nevada, and Cascade Range, and in the eastern hardwoods of New England and southern Appalachian chain.

(2) Control sediment in salmon-spawning streams of Alaska, Pacific Northwest, northern California and interior reaches of the Columbia River.

(3) Develop criteria for safe use of herbicides and fertilizers to protect against pollution of forest soils and streams of the Pacific Northwest.

(4) Rebuild protection against erosion on severely depleted rangelands of Utah, Arizona, and New Mexico.

(5) Rehabilitate strip-mined areas of the Appalachian Mountains to curtail stream pollution and to restore a productive and pleasing environment.

(6) Improve management of water supplies and promote better timber growth in bogs of northern Lake States, in wetlands of the Southeast Coastal Plains, and in shallow ground-water zones of the Southern Coastal Plains.

Examples of Recent Accomplishments

Rime ice as a source of water. Rime ice and hoar frost precipitated on trees at high altitudes in winter may contribute as much as 3 to 4 inches of water for downstream use. Scientists studied this phenomenon on the eastern slopes of the Cascade Range in Washington, where fog is common. Time-lapse photographs recorded the formation of ice on trees and other objects in the airstream. It was found that the amount of rime ice formed in one day was equivalent to 1,300 to 1,600 gallons of water per acre in moderately dense lodgepole pine. This totals about

80,000 to 100,000 gallons throughout the winter season. Perhaps tree plantings and artificial devices can be used as rime ice collectors in proper locations to increase water supplies. (See Figure 16.)

New ski slopes require fertilizer

A starter fertilizer is needed to establish erosion-controlling ground cover on ski slopes. Crested wheatgrass did not survive without fertilization when tested on newly developed ski slopes near Wenatchee, Washington. Seedlings emerged but did not develop once the seed energy had been exhausted. However, the same soil, treated with a fertilizer to offset its chemical deficiencies, produced up to 1.7 tons per acre of oven-dry grass. This represents a density of cover sufficient to protect soil under any conditions. Fertilization, thus, may be the key to successful control of erosion on newly constructed ski runs as well as some older ones that continue to erode.

Engineering new watercourses

Conversion of gullies to grassed waterways dramatically reduced soil loss on mountain slopes in Colorado. Three years after treatment the four converted gullies tested by researchers lost only 9 percent as much soil as comparable untreated gullies. Treatment consisted of sloping steep banks, installing check dams and seeding with grass. Keys to success were careful engineering survey and design, close supervision of construction, and good response to revegetation measures.

Project (17)

RANGE MANAGEMENT RESEARCH

1969	$1,318,000
1970	1,420,000
1971	1,420,000

No program change is proposed.

One billion acres of rangeland represent about one-half of the Nation's total land area. This complex natural system is capable of producing a wide variety of goods and services for man--water and clean air, recreation, forage for livestock, habitat for wildlife, open space, and other products. In some instances two or more products of the range can be produced at high levels with complete harmony. More often the uses or products are competitive.

In the past, range management research has emphasized livestock production. This goal will be retained. In the future, greater emphasis will be placed upon the total range environment and the interrelationships of its multiple outputs. The knowledge thus gained will provide management alternatives for achieving an optimum state of the range ecosystem for man's use and benefit.

The current research program encompasses such diverse systems as the subtropical ranges of Florida, the desert ranges of Arizona, and the forested ranges of Oregon. With a mixture of basic and applied research, long- and short-term studies, the current program emphasizes:

(1) Determination of forage values.

(2) Understanding the structure and function of range ecosystems including the physiological requirements of major species.

(3) Developing technology for maximizing the sustained production of livestock on rangeland, and seeking management practices that optimize the productivity of range ecosystems.

Examples of Recent Accomplishments

Cattle gain satisfactorily on cheatgrass range. A 3-year study of Idaho's cheatgrass ranges showed that yearling cattle can gain as well there as on crested wheatgrass range. Gains averaged 1.43 lb. /head/day over a 7-month grazing season. Both rotation and continuous grazing systems produced like daily gains, but carrying capacity was reduced by the rotation system's lack of synchronism with the growth cycle. Grazing capacity and beef production increased under continuous heavy grazing, but possible adverse vegetation changes make heavy grazing undesirable.

Spring deferment improves semidesert ranges. On the Santa Rita Experimental Range in Arizona, the density of perennial grasses tripled under spring deferment--suggesting that grazing in the March-June period is more critical to the well-being of the range than summer or winter grazing. If the results of these small-plot studies are confirmed by further research, spring deferment may be the key to improving extensive areas of semidesert range.

Sagebrush reinvades semiarid ranges. On semiarid livestock ranges in Wyoming the initial benefits of sagebrush spraying began to decrease within five years after spraying, and within 14 years they were nullified. Seventeen years after spraying, sagebrush stands were denser than before spraying. Even when protected from grazing, the increase in herbage production was nullified within 6 years after spraying, and sagebrush reached its original density within 14 to 17 years.

Management recommendations for crested wheatgrass ranges in Utah. Crested wheatgrass used for spring grazing in the intermountain region should be managed under a rotation system--utilizing about 65 percent of the herbage produced. This procedure allows maximum livestock gains per acre and maintains the forage resource. At the same time it allows some fall grazing, particularly in pastures grazed during the first part of the spring season.

Deferment may be omitted after sagebrush control. On mountain ranges supporting an understory of perennial grasses, moderate grazing may continue after sagebrush control without retarding the revegetation process or hastening the reinvasion of sagebrush. By omitting a period of grazing deferment, returns on the investment in sagebrush control are increased.

Remote sensing aids range inventory. Interpretation of large-scale 70 mm. color and color infrared photographs shows many potential applications to inventory and management of range resources. By virtue of the high-resolution and color dimensions of these aerial photographs, trained interpreters can:

(1) Detect and identify range plants.

(2) Identify soil surface features such as surface erosion, rodent burrows, and animal dropping.

(3) Quantify plant and soil surface features such as forage abundance and soil disturbance.

More sophisticated photointerpretation techniques are being developed.

Project (18)

WILDLIFE HABITAT RESEARCH

1969	$1,018,000
1970	1,238,000
1971	1,238,000

No program increase is proposed.

The Nation's forest, range, and associated waters provide a home for millions of big-game animals and countless other wildlife including songbirds, small game, waterfowl, and fish. These wildlife resources provide recreation, income and beauty for a broad spectrum of the Nation's population. Rural and urban residents alike generate mounting demands on both public and private land for increased wildlife resources. National Forests alone contain over 180 million acres of upland and marsh habitat, 80 thousand miles of fishing streams, and nearly two million acres of lakes. These forests are enhanced for fish and wildlife species only if the delicate balances and subtle changes in the plant and animal communities are understood.

Knowledge to increase habitat productivity is needed by landowner-manager groups varying from the small farm woodlot operation to extensive commercial and public properties. Wildlife resource values are rising sharply and returns to private landowners through sale or lease of hunting and fishing privileges has become a substantial source of income. The wildlife habitat research program of the Forest Service involves active cooperation. Federal and State fish and game agencies and educational institutions help meet the most critical knowledge deficiencies. The Forest Service program cannot adequately serve the important needs of all segments. It seeks solutions to the most urgent problems in managing wildlife habitat of forests, rangelands, and associate water areas. It will develop critically needed interim practices, while long-range multi-resource solutions are being developed.

Special effort will be made in 1971 to define habitat requirements for endangered and esthetic wildlife. Cooperative studies with the Bureau of Sport Fisheries and Wildlife will add to our understanding of the life requirements of the timber wolf. Efforts will continue to increase game food and cover plants by seeding, planting, burning, spraying, and fertilizing. Competition between wildlife and livestock will be studied to find ways of integrating wildlife and livestock grazing. Likewise, effects of silviculture and timber harvesting on food and cover plants used by wildlife will be determined.

Examples of Recent Accomplishments

Clearcutting in strips increases deer use. Colorado clearcutting of lodgepole pine and spruce-fir forest in strips 1, 2, 3, and 6 chains wide, with alternating uncut strips of the same widths, doubled the use by mule deer 10 years after logging. The increased use was in the clearcut strips.

Thinning aspen groves for game use. Thinning aspen groves in Arizona resulted in large increases in forage production. But fallen timber in the thinned groves prevented deer, elk, and cattle from effectively utilizing the more abundant forage. Natural aspen groves were important habitat for elk and deer-producing six times the forage of mixed conifer forests. Provision for an interspersion of aspen groves in mixed conifer forest should effectively improve habitat for deer.

Livestock management affects game use. Elk use decreases as the rate of cattle stocking increases on Oregon ranges; rate of stocking has little effect on deer use. Of two management systems tested, deer prefer deferred-rotation ranges somewhat more than season-long ranges. Neither system has much effect on elk use. For management of the total resource, conservative cattle stocking gives good overall production from multiple use ranges.

Literature review of prairie chicken and sharp-tailed grouse. A comprehensive review of 329 references summarizes much of the literature on the greater prairie chicken and sharp-tailed grouse. The review enables careful planning of new research to provide needed information and avoids duplication of past research.

Project (19)

FOREST RECREATION RESEARCH

1969	$855,000
1970	904,000
1971	904,000

No program increase is proposed.

Forest recreation research will continue to provide information for land managers and environmental policy makers to guide sound use and development of forest and related resources for outdoor recreation. Emphasis will be upon environmental quality, characterizing recreation use, determining present needs and use, estimating future needs, coordinating these needs with other requirements of forest resources, and in finding the place of outdoor recreation as a benefit to society. Research will continue to:

(1) Develop techniques for environmental analysis and planning in which physical, biological, esthetic and historical values are considered and coordinated.

(2) Characterize and project the ever changing trends, patterns, users, and uses of outdoor recreation.

(3) Better determine how and where forest recreation can be abundantly provided and be part of a balanced system of resource use.

(4) Determine how the forests of America can help contribute to today's and tomorrow's social needs.

Examples of Recent Accomplishments

Use of computers to make visibility maps faster and cheaper. For years map makers and land resource managers have been making overlay-visibility maps to delineate areas which can be seen from a fire lookout, a mountaintop, or a scenic highway. In the past these maps have been made the hard way--slow and expensive--by hand drawing profiles from a contour map. Only a few alternatives could be considered. Now, selection can be made inexpensively from many alternatives with a computer program developed for the purpose by Forest Service scientists in California. Input consists of data on elevations, by coordinates, which can be obtained rapidly from maps or aerial photos. The computer produces an overlay that shows the areas visible from any road location or observation point.

Improper visitor behavior in outdoor recreation areas--greater public cooperation needed. Campgrounds throughout the United States, not unlike other heavily populated communities, are experiencing increasingly serious problems of theft, vandalism, rule violation, and even more serious crimes. A research team studying depreciative behavior in northwestern National Forests, National Parks, and State Parks is finding the problem much more extensive because of indifference, and inconsiderate and irresponsible attitudes on the part of many visitors. The researchers point out that non-involvement by well-behaved campers is self-defeating. Visitors must assume more responsibility for their own property, that of their neighbors, and public property. Likewise, administrators must recognize that our urban oriented population needs more education in the care and use of the natural environment.

Quantifying landscape values--communicating ideas and preceptions of forest landscapes in terms resource managers can apply. Recognizing that clear communication is a must when considering the relationships between resource management and the visual impressions, means for recording and expressing the landscape were developed in a California study recently published--a first of its kind. The publication is already a "best seller" and its methodology is receiving widespread on-the-ground

application. To do so, the landscape is considered as a visual, physical entity and not as a state of mind or abstract emotional quality. Six factors of scenic analysis and observation were described, graphically presented, and discussed using a broad span of examples. Three of the factors--form, spatial definition, and light--though he can do little to alter, man can recognize in his planning. Then, through manipulation of the other three--distance, observer position, and sequence--profound visual enhancement of the landscape is possible.

Commercial campground owners should find their "heavy-half." It is a well established marketing fact that most purchasing is done by a fraction of the total market. In a New England study, the same pattern was found in camping. Half the campers do three-fourths of the camping. "Heavy-half" campers camped a minimum of 21 days. They averaged 34 days--three times as much as the light-half, and spent three times as much money. As might be expected, heavy-half campers have much larger investments in equipment. To increase their best customers, the heavy-half clientele, private campground owners can:

(1) Ask their campers how many days they camp each year and send extra mailings to those who camp more than 20 days.

(2) Advertise through equipment dealers and at equipment shows.

(3) Advertise in camping magazines which have a large portion of heavy campers among their subscribers (as determined by readership surveys).

Project (20)

FOREST FIRE RESEARCH

1969	$3,418,000
1970	3,821,000
1971	3,821,000

No program change is proposed.

In the United States, 1.2 billion acres of forest and watershed lands require protection from fire. Each year, the cost of fire prevention and control amounts from one-fourth to one-third of the total expenditures for developing and managing these lands. Despite these expenditures ($316 million in fiscal year 1968), some 125,000 forest fires still burn an average of 5 million acres annually. Losses of this magnitude are intolerable to a nation facing a timber shortage, suffering large damages from mass fire-generated floods and urgently needing to safeguard remaining wilderness, forest recreation sites, and communities and industries threatened by wildfires.

Forest fire research in fiscal year 1971 will be directed primarily at strengthening forest fire control operations. Research will develop knowledge and technology needed to improve operational systems in the areas of:

(1) Fire prevention programs.

(2) Forest fire detection and reconnaissance.

(3) Coordinated air-ground attack systems.

(4) Air quality protection measures for use of prescribed fire in forest management.

Examples of Recent Accomplishments

Cloud seeding cuts number of cloud-to-ground lightning discharges 70 percent. Lightning causes 10,000 to 15,000 forest fires annually in the United States, including 65 percent of all fires on Federally protected forest lands. Analysis of 26 lightning storms in an experiment on the Lolo National Forest, Montana, shows that cloud seeding, when properly conducted, can make spectacular reductions in lightning occurrence. The average number of cloud-to-ground lightning strikes from 12 seeded storms was 19, compared to 60 strikes from the average unseeded control. In addition, the duration of current flow from each lightning stroke was reduced 40 percent by seeding. Since the ability of lightning to start fires depends on a sustained flow of current, seeding reduces not only the number of lightning strikes, but also the fire-starting potential of strikes that may occur despite seeding. (See Figure 20.)

Slash burning guidelines improve air quality. In the Western United States, logging operations result in the creation of 74 million tons of woody residue annually. Virtually all landowners meet State legal requirements for slash reduction by burning the debris. In the fall, slash fires are the most easily observed sources of air pollution in the Western United States. As a result, the general public and air pollution authorities increasingly insist that slash burning stop or be performed in a manner to reduce smoke hazards. Fire research is developing prescriptions that make it possible to safely and economically burn logging slash under weather conditions that limit smoke accumulation in the lower atmosphere. Trial application of new burning methods was highly successful, and additional pilot operations will test other forest conditions in the Northwest.

Project (20)

Mass fires successfully modeled. Fire research progress now permits use of mathematical models for planning control of forest fires in their early stages. But the behavior of large, fiercely-burning fires has remained largely unpredictable. Such mass fires have been resistant to modeling because their excessive convection activity makes them three dimensional in character, unlike smaller fires that move essentially in only two dimensions. Recently an experimental computer model has been developed which takes convection into account. This research development shows promise of permitting accurate prediction of the direction and rate of advance of explosive watershed fires of the Southwest. Such prediction is essential for fire control operations to prevent the type of fire disasters that triggered southern California floods in 1968-69 which caused over $100 million in damages and claimed more than 50 lives.

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Project (21)

FOREST INSECT RESEARCH

1969	$4,424,000
1970	4,783,000
1971	4,783,000

No program increase is proposed.

Destructive insects each year take a severe toll of the Nation's timber supply: 2.4 billion cubic feet or 20 percent of the annual cut, $320 million stumpage value, and $9.2 billion end-product value. Additional losses to wood in storage and use add to the economic burden and further limit the supply. Impacts on other forest uses and values cannot be so measured, but they are nonetheless significant.

The current forest insect research program is directed strongly to ways of minimizing these economic and ecological impacts. Special emphasis is being given to improved techniques of detecting and evaluating insect occurrence and damage, and to biotic and ecological means of control. Increased awareness of, and concern for, the hazards of the broad-spectrum, persistent insecticides, such as DDT require rapid progress in finding alternative materials and methods. Approximately three-fourths of the entire forest insect research effort is aimed in this direction. On-going studies include insect population dynamics, insect pathology and microbial control, parasite and predator ecology, bark beetle attractants and repellents, male sterilization techniques, host resistance, remote sensing and aerial survey techniques, new approaches to termite control, and other key research problem areas with immediate and long-term applications to the dual objective of obtaining effective control and protection with minimal effects on other organisms and the forest-related environments involved.

Target pests include the spruce budworm (in western forests, primarily), western bark beetles, Douglas-fir tussock moth, western hemlock looper, jack-pine budworm, pine sawflies, southern pine beetle, pales weevil, seed and cone insects, Nantucket pine tip moth, forest tent caterpillar, gypsy moth, and the smaller European elm bark beetle (carrier of the Dutch elm disease). Internal adjustments have been made in the program to better meet the needs and opportunities for meaningful progress.

Examples of Recent Accomplishments

Mass purification of insect viruses now possible. A highly efficient technique has been developed by Forest Service scientists for mass purification of virus polyhedra from infected larvae of the Douglas-fir tussock moth, European pine sawfly, gypsy moth, and other insects susceptible to this type of disease-causing virus. A joint effort with the Oak Ridge National Laboratory has produced very concentrated, purified polyhedral preparations in quantities adequate for direct control use. Further work is aimed at automation of the process.

Western bark beetle attractants are put to work. A field procedure has been developed by a scientific team of Forest Service and University of California entomologists for delivering and assaying natural and synthetic attractants of the western pine beetle. Combinations of the female-produced sex attractant and other compounds were shown to be very effective in field-trapping tests this year. This technique will permit detection and assessment of western pine beetle populations prior to the appearance of dead trees, thus facilitating preventive action.

Project (21)

Natural feeding stimulants for elm bark beetle identified. Two formulations have been isolated and identified from elm twigs as feeding stimulants of the smaller European elm bark beetle, the primary carrier of Dutch elm disease. This work, a cooperative effort of scientists at the Forest Insect and Disease Laboratory in Delaware, Ohio, and chemists at Ohio State University, confirms and extends prior findings of researchers at the University of Wisconsin. Investigation is now underway to find chemical antagonists to these stimulants, so that feeding (and thus inoculation of healthy trees with the fungus) can be masked or blocked.

Bark beetle survey by aerial color photography. Large-scale color aerial photographs (1:8000) and a stratified two-stage probability sampling design were utilized to obtain estimates of timber losses caused by the Douglas-fir beetle in California. Compared with current standard methods of obtaining tree mortality data, this procedure provided more accurate estimates, required less time, and cost about one-half cent per acre.

Project (22)

FOREST DISEASE RESEARCH

1969	$2,536,000
1970	2,810,000
1971	2,810,000

No program increase is proposed.

More than 90 percent of forest disease research is directed toward finding ways of eliminating or reducing the impact of diseases on the productivity of the Nation's forests. Air pollution injury to forest trees and deterioration of wood in use or storage, account for the remaining funds. In general, the approach is to study both the disease organism and its host in a search for weak links in the disease cycle. From this information, biologically sound and economically feasible control methods are developed.

About 25 percent of the nationwide effort is allocated to disease problems in the northern United States. In recent years, the effort has been shifted toward hardwood disease problems and away from conifer diseases. Research on plantation and nursery diseases of conifers will be continued with emphasis on the Scleroderris canker problem in the Lake States. This year, research was started on hardwood virus diseases at the new laboratory at Delaware, Ohio.

The South received about 35 percent of the forest disease research effort. In this region, the emphasis is on diseases of southern pine plantations and southern hardwoods. Research on soil-borne root diseases at Athens, Georgia, and on hardwood diseases at Stoneville, Mississippi, was strengthened this year. Research on air pollution injury to forest trees and deterioration of wood in storage and use is conducted in the South, but has nationwide application.

The remaining 40 percent of the disease research dollar is spent in the West. The great majority of the Nation's softwood sawtimber is produced here, and essentially all the disease research effort is directed at conifer problems. As the old-growth forests of the region are replaced with younger stands, disease problems and research have shifted, too. Research to determine the nature and extent of air pollution injury to western conifers is also conducted in this region.

Examples of Recent Accomplishments

Reduced mortality in pine nurseries. A serious foliage disease caused the loss of millions of red and scotch pine seedlings in Lake States nurseries from 1966 through 1968. Even before the fungus causing the disease was definitely known, research on control was started. In 1969, Forest Service scientists perfected a fungicidal spray method which gave excellent control and practically eliminated losses from this disease during the year.

Sensing of air pollution injury to forests. A Forest Service research team successfully tested a new remote sensing technique for appraising extensive air pollution damage to forests. Using large-scale aerial color photography, special filters, and sampling systems, the team detected injury on an average of 13 ponderosa and Jeffrey pines per acre throughout 161,000 acres in the San Bernardino Mountains 60 miles east of Los Angeles. Trees could also be rated as to severity of injury. Eighty-two percent were severely damaged, and 3 percent were dead. The survey was carried at a cost of only 3 cents per acre.

Antibiotics from trees to people. Certain fungi which grow in close association with the roots of southern pines have been shown to produce powerful antibiotics and in this way may protect tree roots from diseases. The same antibiotics also inhibit a wide variety of harmful fungi and suggest a new source of antibiotics potentially useful in both agriculture and medicine.

Air pollution increases bark beetle damage. Air pollution injury was shown to predispose ponderosa pine to bark beetle infestations. As the severity of air pollution injury increases, the amount of infestation also increases. This is doubly serious since the bark beetles building up on injured trees are then able to move on and kill healthy trees.

Weather information assists reduction to tree rusts. In the Gulf States, weather favoring infection of pine nursery seedlings by fusiform rust is produced by high-pressure systems off the southeast coast. It is now possible to predict weather conditions favorable to rust infections 5 days in advance. By confining control efforts to these high-risk periods, rust losses in pine nurseries are minimized and pesticide hazard and cost reduced.

Project (23)

FOREST PRODUCTS UTILIZATION RESEARCH

1969	$7,403,000
1970	8,057,000
1971	8,227,000
Increase	+170,000

An increase of $170,000 is needed at the Forest Products Laboratory, Madison, Wisconsin, to strengthen the research program on new wood pulping processes and on improved utilization of wood-derived wastes. The additional funds would be used to accelerate research on the development of pulping processes capable of converting a larger proportion of the tree to usable fiber, and on finding better ways of economically utilizing the large quantities of waste lignin in pulp mill effluents, the unused tree tops, branches and stumps from harvesting operations, and the discarded paper and wood products concentrated in urban municipal refuse. This research is aimed at conserving and expanding the timber resource and diminishing serious waste disposal problems.

The current forest products utilization program is directed toward extension of wood supplies by increasing the efficiency of wood utilization, low cost housing, and reduction of pollution generated in the processing of wood. It stresses the increased use of raw materials to extend existing supply of timber. The research is keyed to improving the economic health of the many thousands of communities dependent on forest-based manufacturing operations. The research program is building a sound technical basis for filling the significant gaps in knowledge of wood and timber characteristics, in engineering data, and in suitable construction and evaluation systems that hinder the more efficient use of the timber resource. Broadly, the overall forest products utilization research program seeks to provide knowledge and technology to:

(1) Conserve standing timber by expanding the use of little-used species, low-grade trees, logging wastes, lumber and plywood mill wastes and discarded paper products for pulp, board, and panel products.

(2) Alleviate pollution problems by developing non-polluting and high-yielding chemical pulping processes and profitable uses for wastes from pulp, paper, and woodworking operations.

(3) Develop the engineering concepts and design criteria required for the more efficient use of wood in structural applications, with strong emphasis on low-cost house construction.

(4) Improve wood and timber quality characterization and develop processing and automated grading systems for channeling each piece of wood into its highest use.

(5) Provide inexpensive ways to prolong the service life of wood by preventing deterioration and destruction by fire, rot, termites, and weathering through improved techniques for preserving, drying, gluing, and finishing wood.

(6) Characterize the properties of under-utilized tropical wood species in order to facilitate their expanded use, thereby relieving demand pressure on domestic species.

Examples of Recent Accomplishments

Soil properties contribute to wood color. Wood color differences, as measured by a spectrophotometer, between black walnut trees were found to be related to geographic location and were associated with soil properties. These findings suggest the possibility of controlling wood color of highly valued species, such as walnut and cherry, by manipulating soil properties.

Project (23)

New grading systems for six species. Nine new log grading or tree grading systems were developed and approved. Species involved are Sitka spruce, Engelmann spruce, inland Douglas-fir, red pine, eastern white pine, and hardwoods. Although these systems were designed especially to serve high-priority needs of the Federal timber sale program, they will serve important commercial needs as well.

Manual to aid homebuilders completed. A publication especially useful to the small homebuilder and the do-it-yourself public is now available. Agriculture Handbook No. 364, "Low-Cost Wood Homes for Rural America--Construction Manual" has over 100 pages of information covering important details on building low-cost wood homes. Latest construction techniques are emphasized and all phases from foundation to final finishing are covered.

Economical fire retardant for wood. Tests on inexpensive ammonia-base liquid fertilizers show them to be effective fire retardants for wood. When used in place of the ammonia salts now commonly used, savings of 30 to 40 percent in chemical and treatment costs can be realized. Economical, improved fire retardant treatments for wood in building construction contribute greatly to enhanced safety and reduction of costs.

New treatment controls pulpwood deterioration. Pulpwood chips, stored in outside piles, are subject to serious losses of wood substance due to fungal attack and spontaneous combustion. Laboratory-scale studies have demonstrated that "green liquor" chemicals recovered from the kraft pulping process, when applied to fresh pulpwood chips, effectively prevent such losses. These results suggest that kraft green liquor can serve as an economical fungicide and an enzyme inhibitor in commercial applications. Full-scale tests under commercial conditions are underway.

Efficient use of wood in house construction. Eleven house plans with from two to five bedrooms have been developed. Eight of these plans, though largely conventional, feature up-to-date wood construction principles and most efficient wood use to provide suitable homes at minimum cost. The remaining three are innovative designs (round, tubular, and hillside duplex) that provide maximum space utilization and livability while featuring unconventional building techniques and appearance. Numerous experimental features in the innovative plans provide for most efficient use of wood and minimal cost.

A 32-page brochure has been issued to provide brief descriptions of the eleven houses as to construction types, size, floor plan, and materials. The brochure and detailed building plans for the eleven Forest Service designs are available through the Government Printing Office.

Hardboard I-beams conserve wood and reduce cost. A study on the design of built-up I-beams incorporating wood flanges glued to a tempered hardboard web has developed information valuable to architects, engineers, and home builders. Strength tests on prototypes, over a 30-foot span, showed I-beams with hardboard webs to be as strong as comparable wood beams while utilizing about a third less solid wood.

Longer life for timbers. Methods were developed for preventing the splitting and checking that occurs in drying of timbers. Splits and checks reduce load-bearing capacity, detract from appearance, and trap water that may lead to decay. Millions of dollars are lost annually in replacements, and the Nation's timber resources are unnecessarily depleted. Checks can be prevented by bonding a single sheet of veneer with a waterproof glue to the upper surface. This method will be especially useful for railroad ties and bridge stringers. It can also be used as a repair procedure, particularly useful for nonreplaceable structural beams.

New approach to drying hardwoods improves yields. Traditionally, green lumber is kiln dried directly after sawing. Studies showed that it is more economical to plane the green lumber, cut to length, grade, and remove defects before kiln drying. Savings result from shorter drying times, less degrade (checking, splitting, warping), more efficient use of kiln space, and opportunities for automatic stacking and handling. The techniques, developed for drying red oak and beech, may also be applicable to drying other commercially important hardwood species.

Grading lumber by computer. The use of computers for grading hardwood lumber has been successfully accomplished with unerring accuracy and far faster than by visual grading. The standard hardwood grading rules were interpreted mathematically and programed for the computer, as were the descriptions of the board characteristics. Scanning devices now being researched will permit reading flitch defects directly into a computer which would control the sawing in edging, ripping, and trimming operations. Potential value gains are estimated to far exceed computer service costs.

New protective finish for weatherexposed wood. Better protection against weathering results from a newly developed finishing system for wood. It combats microorganisms and screens out ultraviolet light, is inexpensive, easily applied, and long lasting. It is a penetrating-type natural finish that will probably find widest use on farm buildings, fences, summer cottages, and other structures where rough or low-grade lumber and plywood are commonly used. Special coatings can be applied on smooth surfaces to give a varnish-like appearance.

Study of chemicals in jack pine bark completed. More than 100 chemical compounds have now been isolated from jack pine bark and fully identified. They include fats, waxes, resins, and sterols. Nineteen of the chemicals found are natural products that have not been previously reported. This comprehensive study of pine bark chemistry will provide a broader technical basis for evaluating the feasibility of bark chemical utilization and will contribute to a better understanding of the disease resistance, insect resistance, chemistry, and biosynthetic processes of wood and other natural products.

Project (24)

FOREST ENGINEERING RESEARCH

1969	$768,000
1970	909,000
1971	1,080,000
Increase	+171,000

An increase of $171,000 is needed as follows:

(1) $96,000 for research at Houghton, Michigan, to strengthen a cooperative program with industry for development of bark-chip separation and segregation process required for whole tree utilization systems.

(2) $75,000 for research at Auburn, Alabama for mechanization of regeneration and harvesting systems to increase productivity of rural woods workers and help meet timber supply goals in the South.

Major breakthroughs are needed:

(1) In providing new concepts and mechanization of harvesting, transport, and planting operations to make available increased supplies of wood raw material.

(2) To raise productivity of workers to overcome the impacts of the critical shortage of woods labor.

(3) To provide materials handling systems for low cost, reliable delivery of raw materials.

(4) To permit removal of timber from sensitive areas where water, recreation, and soil values inhibit conventional harvesting operations.

(5) To reduce the physical drudgery and danger of woods operations.

(6) To provide rising incomes for woods labor.

The engineering research program is designed to make rapid advances toward solution of critical timber harvesting and production problems through use of systems engineering techniques and through interdisciplinary research programs. The benefit/cost ratio for this engineering research work is very high. The following are among some of the foreseeable benefits:

(1) Capture of a billion board feet of annual allowable cut now lost on timberlands of the Douglas-fir region and Alaska, and from steep sensitive slopes of the interior West because conventional logging and transport systems are unsuitable.

(2) Reduction in mileage of timber haul roads in the West. A $16.5 million savings annually is expected through use of balloon and skyline logging systems in the Douglas-fir subregion alone.

(3) Ten percent reduction in costs and greatly increased opportunities for regenerating intensively managed timberlands in the South--which means an earlier availability of new growth.

(4) Capture of up to 2.5 billion cubic feet of wood annually from logging residues, low quality, stagnated stands, and whole tree utilization systems from use of economic bulk harvest and transport systems.

(5) A 50 percent reduction in the cost of harvesting gum naval stores and creation of stable rural job opportunities in this field.

(6) A major reduction in the costs to society of the high logging accident rate--one of the highest in industry.

Examples of Recent Accomplishments

Symposium forecasts "explosion" in skyline system. A skyline logging symposium at Corvallis, Oregon, was conducted in cooperation with Oregon State University and University of Washington. Over 500 loggers, land managers, equipment manufacturers, forestry consultants, and research people attended the three-day session. Skyline logging was shown to be extremely useful new technology with prospects of great impacts on land management and on obtaining access to billions of board feet of annual allowable cut not now loggable with conventional systems.

Better roads on steep sensitive slopes. An engineering investigation of forest road failures in the deeply dissected, steep, erosive drainages at Zena Creek on the Payette National Forest in Idaho produced standards valuable for the design of more stable roads in this area of the Idaho Batholith and for similar areas throughout the Rocky Mountain area.

Mechanized thinning of southern pulpwood stands. A study of mechanized pulpwood harvesting indicates that efficiencies approaching those in clear cutting operations can be obtained in thinning harvests through use of a felling system which considers equipment capabilities. This information opens new possibilities for overcoming critical labor shortage problems in pulpwood harvesting in the South and for obtaining increased supplies of timber from thinnings.

Project (25)

FOREST SURVEY

1969	$2,370,000
1970	2,680,000
1971	3,115,000
Increase	+435,000

An increase of $435,000 is needed to accelerate and intensify national and regional inventories of forest resources to determine ways of providing the timber supplies needed to meet the Nation's housing and other economic goals. This work will:

(1) Guide public and private timber growing programs.

(2) Indicate development opportunities for forest-based industries.

(3) Provide the base for a new appraisal of the timber situation and outlook in the United States.

Of the proposed increase, $53,000 would be used for a new national appraisal of the timber situation, $85,000 would be used for surveys on the Pacific Coast, $53,000 in the Rocky Mountains, $53,000 in the North Central region, $42,000 in the Northeast, $53,000 in the Southeast, and $96,000 in the South.

Commercial forest lands in the United States, totaling some 510 million acres, vary greatly in productivity, in availability for industrial use, and in opportunities for management intensification. These forests also show widely divergent and rapidly changing trends in growth, timber harvests, and opportunities for industrial development. Continuing appraisals of these forest land and timber resources provided by the forest survey helps determine the adequacy of forestry programs and changes in policies or programs needed to provide adequate timber supplies in future years. Federal and State forestry agencies, forest industries, and other business and conservation groups rely on survey appraisals of the Nation's timber situation to guide plans and business decisions. The information obtained in this research includes:

(1) The area, condition, ownership, and management opportunities on forest lands.

(2) The volume, quality, location, and availability of timber resources for industrial and other uses.

(3) Trends in timber growth, mortality, and potentially available harvests.

(4) Trends in cutting of timber for industrial and other uses.

(5) Prospective amounts and kinds of timber supplies in relation to future demands for timber.

Examples of Recent Accomplishments

Field surveys conducted in 10 States. During the past year the equivalent of approximately 45 million acres of commercial forest land was inventoried. Field surveys were conducted in Arkansas, California, Florida, Maine, Nevada, New York, Oregon, South Carolina, Washington, and Wisconsin. Reports appraising the forest situation were issued for 8 States or portions of States.

Forest survey of Humboldt County, California completed. After 100 years of harvesting old-growth stands in the county, the harvest of such stands is coming to

an end. If present cutting rates continue, the county's annual cut can only be maintained for about 25 years, followed by an abrupt decrease to levels of allowable cut on public lands and sustainable levels of cut on private lands. Some opportunity exists to ameliorate declining cutting rates by converting hardwood and brush forests to fast-growing softwood species.

Forest resource conditions in East Oklahoma changed appreciably between 1956 and 1966. As part of a continuing program to evaluate the timber resource situation in the Midsouth, a third survey of the timber resources of East Oklahoma was completed. Growth of softwood timber was high enough between 1956 and 1966 to support industry's needs for timber and at the same time permit a sizable buildup in pine volume--a 31 percent increase. The outlook is for further gains in pine resources. The hardwood situation is much less encouraging. There is 7 percent less volume now than a decade ago and without more intensive management, prospects appear dim for any substantial hardwood timber supply improvement.

Forest area and growing stock volume increasing in Vermont. The second forest survey of the forest resources of Vermont shows commercial forest land now totals 4.3 million acres--73 percent of the State, compared with 57 percent in 1948. Most of the State's commercial forest land--91 percent--is privately owned. Although the volume of growing stock totaled 3.7 billion cubic feet in 1966, compared to 3.4 billion cubic feet in 1948, this increase failed to keep pace with the increase in forest area. Furthermore, the volume of sawtimber declined 1 billion board feet over the same period. Quality of the timber is generally poor with only about one-third of the sawtimber volume qualifying as standard lumber log grades 1 and 2.

The South's pulpwood industry again had a record-breaking year in 1967. A total of 33.6 million cords of wood was produced. This amounted to nearly 63 percent of the Nation's total. Significant gains were noted in the use of chips, whereas roundwood receipts at pulp mills showed a slight decrease for the first time in 10 years. Southern pulpwood went to 92 mills in the 12 southern States and 8 mills outside of the South. With the addition of new mills and expansion of existing mills that occurred during 1967, the South's pulping capacity increased from 66,726 tons per day to 70,527 tons per day. In addition, 8 mills under construction will add 5,300 tons per day.

Project (26)

FOREST PRODUCTS MARKETING RESEARCH

1969	$1,561,000
1970	1,664,000
1971	1,664,000

No program increase is proposed.

The information provided by forest products marketing research indicates ways of improving the use of the Nation's timber resources through more effective processing, distribution, and consumer use of forest products. Studies of factors influencing the use of wood and competing materials in construction, manufacturing, shipping, or other end uses help determine potential demands for timber products and thus serve to guide forestry programs. Other studies point to ways of reducing costs in harvesting, processing, distribution, and thereby help make more efficient use and wider markets for available timber resources. Research on opportunities for expanding wood-based industries provides guidelines for local development of forest resources and improvement of the rural economy of the Nation.

Examples of Recent Accomplishments

Production of plywood from Black Hills ponderosa pine found feasible. About three-quarters of the volume of sawtimber and poletimber in the Black Hills have been found suitable for the production of construction grade plywood. Estimates of production profitability indicate that a modest return on investment could be realized from an annual production of only 24 million square feet (3/8-inch). Profit potential rises sharply as this minimum production level is exceeded.

Similar studies now underway indicate that it might be feasible to produce construction grade plywood from eastern spruce and lower grade hardwood logs. Production of plywood from this under-utilized timber could substantially increase incomes to a large number of timber owners in addition to helping supply the construction materials required to meet the Nation's needs for new housing.

Break-even point determined for defective sugar maple logs. The lower portions of fire-scarred hardwood trees frequently contain rot or associated defects. Loggers usually buck off these defective sections and leave them in the woods, even though they often contain some of the highest quality material in the tree.

Research has now shown that sugar maple logs with heart rot can be profitably sawed into lumber if they contain as much as a six-inch collar of sound wood. Harvesting and processing such material reduces logging costs and provides the sawmill with a source of scarce, high grade sawlog material.

Thinnings are a potential source of additional timber. Results of a recent study in the Pacific Northwest show that there is a growing market in many parts of that area for small sawlog size thinnings. Delivered prices for such material average somewhat lower than those for conventional woods-run logs, but frequently are high enough to support any modest amount of road building that may be required to reach thinning sales. Thinnings add to the timber resource base in two ways--the volume loss from mortality would be reduced, and the trees remaining in the stand would be released for faster growth.

Market for wood siding and wood windows generally strong, but varies by region. Wood is the preferred type of house siding in the United States. For the Nation, about 4 out of 10 new houses have wood siding, compared to about 3 for brick and one for aluminum. Wood windows lead in popularity for all houses except those selling for less than $20,000. Both wood siding and wood windows are most popular in the North and Northeast and least popular in the Southwest.

Fiberboard is the most widely used type of wood siding. This preference reflected favorable cost and performance characteristics. Appearance and insulating qualities are major factors favoring wood windows.

Hardwood bark can be a profitable sawmill product. At most hardwood sawmills, disposing of bark is becoming an increasingly costly and troublesome problem. New and more restrictive air- and water-pollution codes are causing operators to seek disposal methods other than burning and dumping. Increasing operating costs also encourage mill managers to minimize all types of residues and to seek markets for those that are unavoidable.

A recent study report provides production and marketing information about a variety of products such as protective and decorative mulches, soil conditioners, poultry litter, and cattle bedding that can be manufactured from bark. Data on costs, prices, and profit possibilities are also included.

Project (27)

FOREST ECONOMICS RESEARCH

1969	$1,027,000
1970	1,097,000
1971	1,269,000
Increase	+172,000

An increase of $172,000 is needed to evaluate opportunities for increasing production of timber and associated benefits on different classes of ownership in the Pacific Northwest ($30,000), South ($50,000), and Interior West ($50,000). These are all important timber-producing areas, each with special problems involving competing uses of forest land, including a strong need for information on economic opportunities for increasing timber growth and harvest. In addition, a fourth project in Berkeley ($42,000) will develop mathematical and computer appraisals to guide multiple-use decisions.

Research in forest economics provides information on the costs and benefits of using forest lands for timber, water, recreation, wildlife, and other purposes, including:

(1) Development of economic guides for efficient management of timber stands and achievement of optimum investments in forest management activities.

(2) Development of economic criteria for efficient allocation of the hundreds of millions of dollars spent for forestry programs throughout the Nation.

(3) Determination of the size and combination of forestry programs that will most effectively and efficiently supply future demands for timber and other forest products.

(4) Identification of the most effective programs for stimulating the millions of owners of private lands to adopt more productive and efficient forestry practices.

(5) Development of guidelines for integrating and balancing multiple uses of forest land to meet rapidly expanding demands for timber, water, wildlife, recreation, and other forest goods and services.

Examples of Recent Accomplishments

Conversion of red alder stands to Douglas-fir in the Northwest. Economic analysis has shown that it would be profitable to convert at least three-fourths of the 2.5 million acres of red alder in the Pacific Northwest to Douglas-fir plantations. Investment in conversion is most attractive where sites are good, timber prices high, and terrain and stand conditions permit low conversion costs. Other critical variables are the interest rate, present age of existing red alder stand, and annual management costs. Conversion of these red alder stands would substantially and permanently increase the timber supply of the Pacific Northwest within 30 to 50 years.

Analyses of stand improvement and reforestation opportunities in Appalachian forests. Investment opportunities on National Forests in Appalachia were evaluated to indicate the kind of projects to favor in planning stand treatment programs. Among the projects evaluated, rates of return ranged up to 13.7 percent. Financial returns are sharply affected by site productivity, existing stand conditions, and markets for products. These types of guidelines are increasingly needed for programs to improve timber supply and raise rural incomes in many Eastern depressed areas.

Economics of road construction programs. Economic analyses of forest road construction programs indicate that on the Umpqua National Forest in Oregon accelerated road building would earn from 2.9 to 3.6 percent on the investment. These roads would provide access to old growth for salvage and thinnings. Because road construction is the major timber management cost in the Douglas-fir region, this type of economic analysis is exceedingly helpful in guiding forest development programs.

Factors influencing landowners to practice forestry. Four-fifths of the commercial forest land in North Carolina is held in small tracts by farmers and other non-industrial private owners. Lack of management on these holdings limits the supply of timber and retards industrial development. Promotional activities by forestry agencies to encourage landowners to practice forestry could be made more effective by concentrating efforts on those categories of owners most responsive to undertaking certain kinds of practices. Studies have shown that owners of share-tenant farms are most inclined to plant trees and improve woodlands. Owners of idle farms, who are predominately business and professional men, often are receptive to planting trees but are less inclined to upgrade existing forests. Knowledge of the attitudes and inclinations of various types of small owners is critical to improving programs to aid private forestry.

Economics of scheduling commercial thinnings. Study of the economics of commercial thinning on large ownerships has developed procedures to plan, evaluate, and test systematically thinning programs, incorporating economic analysis, multiple-use considerations, and operational constraints. The procedure provides for:

(1) Continuing evaluation of existing timber stands in terms of expected future as well as immediate returns.

(2) Establishing thinning priorities based on financial returns, multiple use objectives, and budgetary, manpower, and timber cutting restrictions.

(3) Scheduling thinnings to obtain the greatest financial return consistent with objectives and restrictions.

(4) Testing the effects of competing objectives and of operational restrictions on financial returns.

This study provides the methodology for evaluating the many economic alternatives involved in commercial thinning on large public and private ownerships.

Timber leases and long-term cutting contracts in the South. Few of the South's wood-using industries own enough timberland to supply their raw material requirements. Industry has attempted to supplement its holdings by long-term leases and cutting contracts. A survey has found that nearly 4 million acres are under leases, most of which have been made since 1955. These arrangements include provisions to manage the land to assure greater yields of timber in the future. Solution of legal, tax, and other problems associated with long-term arrangements would help expand leasing arrangements.

Project (28)

RESEARCH CONSTRUCTION

1969	- -
1970	$71,000
1971	- -
Decrease	-71,000

The 1970 appropriation provided for the following non-recurring items:

Location	Facility	Amount
Duluth, Minnesota	Planning--Forest Marketing and Utilization Laboratory	$71,000
Nacogdoches, Texas	Construction--Wildlife Habitat and Silviculture Laboratory	360,000
Corvallis, Oregon	Construction, 1st stage of addition--Forestry Sciences Laboratory	500,000

Construction at Nacogdoches and Corvallis has been deferred in accordance with the Government-wide policy to reduce Federal construction to help combat inflation and reduce expenditures.

Savings of $860,000 in fiscal year 1970 because of construction deferrals are proposed to be applied to following activities to cover increased pay costs:

Timber management research	$642,000
Watershed management research	218,000

During fiscal year 1970 progress was made in the design and construction of laboratories for which funds were appropriated in 1968 and before. Those buildings completed in 1969 and identified below will provide modern research facilities for 43 scientists.

Appropriation Year	Location	Facility	Added Capacity Scientists
1968	Delaware, Ohio	Forest Insect and Disease Laboratory	18
1968	Madison, Wisconsin	Wood Chemistry Laboratory	25

The preparation of architectural plans and specifications will be completed by the close of fiscal year 1970 for laboratories at following 15 locations:

Appropriation Year	Location	Facility	Estimated Cost of Construction
1968	Moscow, Idaho	Forestry Sciences Laboratory	$920,000
1968	Gulfport, Mississippi	Forest Insect and Disease Laboratory	730,000
1968	Franklin, North Carolina	Coweeta Hydrology Laboratory	740,000
1968	Research Triangle, North Carolina	Forestry Sciences Laboratory	1,490,000
1968	Rhinelander, Wisconsin	Institute of Forest Genetics	690,000
1967	Durham, New Hampshire	Forestry Sciences Laboratory	1,100,000
1967	Corvallis, Oregon	Forestry Sciences Laboratory	3,260,000
1967	Nacogdoches, Texas	Wildlife Habitat and Silviculture Laboratory	410,000
1967	Provo, Utah	Shrub Improvement Laboratory	650,000
1967	Burlington, Vermont	Sugar Maple Laboratory	890,000
1967	Madison, Wisconsin	Forest Products Laboratory Remodeling	$4,560,000
1967	Berea, Kentucky	Forestry Sciences Laboratory	1,030,000
1967	Lincoln, Nebraska	Shelterbelt Laboratory	590,000
1965	Albuquerque, New Mexico	Forestry Sciences Laboratory	800,000
1965	Radnor, Pennsylvania	Forest Service Building	3,880,000

General Statement

Mrs. Hansen. Dr. Arnold, I understand you have an opening statement.

Mr. Arnold. Yes, ma'am.

Since this is my first opportunity to appear before this committee, I would appreciate it if I could say just two or three things to introduce Forest Service research.

Mrs. Hansen. Very good.

Mr. Arnold. The concerns for the environment and for increasing the productivity of forests strike a welcoming note in forest research, because I think we have an unusual capability that has been achieved of necessity over the past 10 to 12 years to do both.

As you know, with appropriations made by this committee, we started wildlife habitat research about 10 years ago, and outdoor recreation research long before it was recognized as a critical national problem. Forest Service recreation research is the largest scientific effort of any Federal agency in this area.

Our engineering research effort is dual purpose, to produce more timber from more fragile sites safely and protect them.

We have some of the special laboratory facilities required to do both kinds of research. We have the 15 laboratories where planning has been completed. A significant relationship that we just learned came from an analysis of our entire research program about 3 weeks ago. Over half of it deals directly with both environment and the increase of products. It was a little surprising that so large a proportion dealt with both environment and production; for example, fire research, insect research, disease research, engineering research, improvement of water yield and water quality, our silvicultural research, forest economics and forest resource surveys, remote sensing—these kinds of activities.

REMOTE SENSING

Mrs. Hansen. Wasn't the Forest Service planning to participate with the Department of Interior on the Eros program?

Mr. Arnold. Yes. We do the remote sensing research within our regular research program and we participate in the Department of Agriculture and Interior programs with NASA.

TIMBER AND ENVIRONMENT

The half of our research that is both timber and environment makes it possible for us to increase the supply of timber as well as to protect the environment. It would be very difficult to say that insect research is related to one or the other. In this point we haven't lost sight of the need to improve the supply of timber. I would like to show one chart, which is very interesting. The level of average growth of natural stands roughly is a little less than 50 cubic feet per acre per year.

The better plantations on better sites now, without intensive timber culture, produces more than double that to just under 150 cubic feet per acre per year. This production is what we are able to do now. Our research in genetics and in intensive culture has opened up new doors. We have insights from research to know that with fertilization and

other intensive cultural methods and protection, we can add about 20 percent. The top line combines intensive culture with genetic improvement to assure the ability to produce 300 cubic feet per acre per year on better sites by the year 2000 if research and applications are implemented. The product of the high yield rice and wheat in the tropics is a similar development. This is not a simple problem. We know that some trees, for example, react to fertilization. Others don't. Some soils do and some don't.

FERTILIZATION RESEARCH

Mrs. HANSEN. How much fertilization research is the Forest Service conducting? I was out on a couple of tree farms last winter, owned by two private corporations, to look at the work they are doing on fertilization. They thought that the Forest Service was not doing enough of this type of work.

Mr. ARNOLD. I would have to agree that we are not doing enough research. This budget provides small increases for fertilization research at Olympia, Wash., and at Research Triangle. We are doing some fertilization and related soil improvement research at nine other locations. This chart of productivity shows that we can combine both the breeding and intensive culture, including more fertilization, weeding and other measures and more than double productivity to over 300 cubic feet per acre per year. Stands planted in this decade would have a yield more than twice those growing now on the better sites in the west coast and South areas. We will have corresponding increases in other areas.

AVERAGE RATE OF GROWTH

Mrs. HANSEN. What is the average rate of tree growth in the South as compared to the Northwest?

Mr. ARNOLD. On the better sites they are just about equal.

Mrs. HANSEN. What is the rate of growth on your average sites?

Mr. ARNOLD. I think even on ordinary average sites, the growth of stands is roughly equal in the South to comparable stands in the West.

Mrs. HANSEN. Is this largely pine?

Mr. ARNOLD. Yes, and, of course, there are hardwood areas in the South on the bottom lands.

HARDWOOD RESEARCH

Mrs. HANSEN. Don't you also have some hardwood research going on in the Middle West?

Mr. ARNOLD. Yes, ma'am. We do have some hardwood research going on at several locations in the Middle West with concentration on specific problems of silviculture, protection, and utilization of key species.

BLACK WALNUT RESEARCH

Mrs. HANSEN. I have a letter from the American Walnut Manufacturers Association and they are very interested in accelerating this type of research. They say:

> Shortages of top-grade hardwoods are not impending—they already are here and have been for the past few years.

They want $100,000 to strengthen research to protect the black walnut at Carbondale. Is this included in this year's budget, Mr. Cliff?

Mr. CLIFF. No, it isn't.

Mrs. HANSEN. Why not?

Mr. CLIFF. It is just one of those things we couldn't stretch our ceilings to cover.

BLACK CHERRY RESEARCH

Mrs. HANSEN. Have you included in this year's budget $335,000 to strengthen research in the culture and the protection of Allegheny hardwoods, including black cherry at Warren, Pa.?

Mr. CLIFF. There is nothing in there for that either.

Mr. ARNOLD. Mrs. Hansen, I appreciate the opportunity to point out that a large part of our research is looking at increasing the supply of timber, water, and other resources, and at the same time looking at the improvement of the environment. It isn't either/or.

Mrs. HANSEN. I understand. That is why I think it is so important that you have the necessary funds to do this research. If you don't do the research now, and don't get your trees planted, you are not going to have any trees.

Mr. CLIFF. We are not going to have enough, that is sure.

Mrs. HANSEN. The population is increasing, so you are going to have to have more houses and more recreational facilities. If some of those shortsighted accountants in the Bureau of the Budget would get their minds off their ledgers and on this country's needs, they would understand what we are talking about. I am going to visit one of the largest private nurseries in the Northwest and I will compare some of your methods with theirs. BOB does not hamper their operations. You are requesting $194,000 for timber management research. Justify this increase.

TIMBER MANAGEMENT RESEARCH

Mr. ARNOLD. Madam Chairman, the $78,000 is the amount of the $194,000 increase which is related to intensive timber culture. We have tried to place that at the most strategic locations for the current period. One is Olympia, Wash., where there is a lot of potential for fertilizer in industry. This strengthens our efforts there. The same type of effort is going on in North Carolina at the Research Triangle. We need to know a great deal more about the reaction of various soils and various species as well to fertilization.

In East Lansing, Mich. it is the same problem in the northern types. We see the opportunity to bring intensive culture to bear.

The second group of research projects—$54,000—that we propose for this budget deals with regeneration problems. We are looking at the very critical inland Douglas-fir area, which is a very large area in which it is difficult to regenerate timber crops on the fragile soils. As you know, at State College, Miss., we have a new seed laboratory where we are looking at the problems of hardwood seeds as well as pine seed. Hardwood is much more difficult to handle and to protect and get germination. This will improve the effort in the area of hardwood seed.

DURHAM, N.H., LABORATORY

Mrs. HANSEN. The New Hampshire people are very interested in the development of some additional forest research facilities. If such a laboratory were provided, on what would it focus its attention?

Mr. ARNOLD. That is at Durham, N.H.

Mrs. HANSEN. That is right.

Mr. ARNOLD. There we are looking again at multiple use and protection of timber, water, and recreation in the Northeast.

NATIONAL FORESTS IN NEW ENGLAND

Mrs. HANSEN. How many acres of national forest do you have in the New England States?

Mr. CLIFF. About 1 million acres.

Mrs. HANSEN. As you are well aware, there was a lot of cutting done in the last century in New England. Have the forests in this area been regenerated?

Mr. ARNOLD. Yes; the forests have come back on the lands that have gone out of agriculture. The problems there are heavily related to people. We discussed yesterday environmental forestry, protection of the watersheds that provide the water for the large populations, and the specialty timber products that are needed in the Northeast.

FERTILIZING SKI SLOPES

Mrs. HANSEN. You have an interesting item on page 101 of your justifications about the new ski slopes that require fertilizer. Would you please discuss that for us?

Mr. ARNOLD. Yes. The ski slopes go in on the north slopes where growth is much slower, the temperatures are cooler and seasons shorter. They do need special attention in order to provide cover to prevent erosion in the spring and summer. We found that one application of fertilizer will take care of this, because the growing season is quite short. It is much shorter on the ski slopes facing north than it would be on the comparable slopes in that country facing south or west.

RANGE MANAGEMENT

Mrs. HANSEN. You are requesting $1,420,000 for range management. Insert in the record the tabulation of locations where these funds will be used, and indicate the amount allocated for each location.

Mr. ARNOLD. Yes, ma'am. There are no increases in this budget.

Mrs. HANSEN. I notice that.

Mr. ARNOLD. We will be glad to indicate the locations where the research is now carried on.

(The information follows:)

Forest Service range research locations

	Fiscal year 1970 funding (in thousands)
West:	
Arizona, Flagstaff-Tucson	$158
California, Fresno-Berkeley	194
Colorado, Ft. Collins	147
Idaho, Boise	62
Montana, Bozeman	61
New Mexico, Albuquerque	28
Oregon, LaGrande	141
Utah, Logan-Provo	213
Wyoming, Laramie	45
North:	
Missouri, Columbia	55
Washington, District of Columbia	66
South:	
Florida, Lehigh Acres	116
Louisiana, Alexandria	134

Wildlife Habitat Research

Mrs. Hansen. $1,238,000 is requested for wildlife habitat research. Please insert in the record a tabulation of locations where these funds will be used, indicating the amount of funding for each location.

(The information follows:)

Forest Service wildlife habitat research locations

	Fiscal year 1970 funding (in thousands)
West	
Arizona, Tempe	$111
California, Berkeley	68
Colorado, Ft. Collins	38
Idaho, Boise	31
Montana, Missoula	54
Oregon, LaGrande	242
South Dakota, Rapid City	121
Utah, Provo	53
Wyoming, Laramie	85
North	
Pennsylvania, Warren	44
West Virginia, Morgantown	130
Wisconsin, Rhinelander	31
South	
Texas, Nacogdoches	159
Virginia, Blacksburg	71

PRAIRIE CHICKEN AND SHARP-TAILED GROUSE

Mrs. Hansen. You state in your justifications that one of your recent accomplishments is a literature review of prairie chicken and sharp-tailed grouse, what is this all about?

Mr. Arnold. I think that is an indication of how research even just beginning can contribute to improved management. Based on that literature review, there are already some guides developed for habitat management, information that was buried in many years of individual research findings from a large number of university and Federal scientists. Even just in the beginning of this research they were able to develop improved guidelines for the management of that habitat.

Forest Recreation Research

Mrs. Hansen. $904,000 is requested for forest recreation research. How does this coordinate with extensive recreation research activities of the Bureau of Outdoor Recreation?

Mr. Arnold. Our work is coordinated completely with the Bureau of Outdoor Recreation research. Their research deals largely with determining what research is done and publishing summaries and bibliographics of research findings. The BOR does not have a direct on-the-ground research program dealing with the ecology of recreation areas, recreation management requirements and planning, or the studies of esthetics and other amenities related to recreation.

VANDALISM

Mrs. Hansen. You say in your justifications: "A research team studying depreciative behavior in northwestern national forests, national parks, and State parks is finding the problem much more extensive because of indifference, and inconsiderate and irresponsible attitudes on the part of many visitors."

We talked about this yesterday. I would like to emphasize something about good manners in the forests that might be very helpful. Which area of the country has the most vandalism?

Mr. Arnold. This would be difficult. I don't know the specific answer, but I would suspect, and ask Mr. Nelson to correct me, that probably southern California has as much vandalism as any area of the country. Is that correct?

Mr. Nelson. I don't know for sure whether that is correct or not. Where we get lots of people use, we tend to have more vandalism. Our areas are very heavily used in southern California. On the other hand, in those areas where we have patrolmen, and have people managing our recreation uses, we tend to hold down vandalism. Likewise, we have had some serious vandalism cases in the mountain country like in the Ozarks. We have had some very serious cases in Arizona and New Mexico, where large groups have moved in and occupied whole campgrounds. We have also had some very serious cases in national forests in Utah. Some of us wonder about that at the time these real serious cases came in, including the one in Utah where they were apparently transacting in dope. Kentucky has also had vandalism cases.

Mr. Cliff. I don't think any part of the country has a monopoly on this. It seems to be pretty widespread.

Mr. Nelson. Even Alaska.

Mr. Cliff. This is related to the intensity of use.

TOTEM POLES IN ALASKA

Mrs. Hansen. Have you been able to save the totem poles in Alaska?

Mr. Nelson. Not all of the totem poles in Alaska. We did some of the original work in saving totem poles with the CCC program in the 1930's. We did most of the work to establish the Totem Pole Park out of Ketchikan which has many totem poles and an Indian community house they used for the ceremonials. That park has been turned over to the State of Alaska.

Mrs. HANSEN. There are many totem poles in Sitka, Alaska.

Mr. NELSON. That is the Park Service that has those at Sitka, Mrs. Hansen. It is a national monument. We did do much of the work restoring totem poles at Sitka under the relief programs of the 1930's.

Mrs. HANSEN. You also have totem poles on Forest Service land.

Mr. NELSON. We may have some. We have an inventory of the various villages or former villages where there are still some totem poles. The regional forester has been working with the State and others toward doing what we can. The State museum is working very hard on this problem.

Mrs. HANSEN. They should be saved.

Mr. NELSON. That is right.

Mr. GREELEY. Mrs. Hansen, there have been projects with the University of California at Los Angeles and two other California institutions of higher learning for both research, scouting out and pulling into one location information on all the totem poles that are salvable.

Mrs. HANSEN. Some of the totem poles are extremely interesting, and some of them are in extremely bad condition.

DOCUMENTARY PROGRAMS

Mr. ARNOLD. Mrs. Hansen, the recreation research on depreciative behavior is aimed at developing specialized educational and management design techniques to reduce the destruction. It is like the fire prevention research. We need a broad overall national program, but you do need to identify the kinds of people and the nature of the damage they do, and the nature of the educational process that will reach those people before they do the damage. Part of this research is aimed directly at the special problems.

Mrs. HANSEN. There have been many documentaries on television about the problems of the United States. I think you had better talk to the networks about getting them to do some documentaries on the public destruction of your facilities. The average person thinks, "I am only one." The Johnny Horizon program is working very well.

Mr. CLIFF. It is a very good program.

Mrs. HANSEN. It is an excellent program, but the people have got to be made more aware of the necessity to protect our lands. For instance, it appears a careless camper set a fire in the Kenai Moose Range and did $1,200,000 worth of land damage, and $15 million worth of timber was burned.

ARCHEOLOGICAL AREAS

Mr. NELSON. Besides the totem poles, we have a lot of other archeological areas. We are charged with certain responsibility by the Antiquity Act. Our southwest region has employed an archeologist. Our recreation people have just had a meeting and one of their recommendations is that we employ an archeologist here in Washington. That would lead toward a better understanding in handling the type of problem you are talking about.

FOREST FIRE RESEARCH

Mrs. HANSEN. $3,821,000 is requested for forest fire research. Will you please describe your major achievements in this area during the past year?

LIGHTNING PREVENTION RESEARCH

Mr. ARNOLD. Yes, ma'am. We have an illustration of one of them. It is a little hard to put in pictures, but in the lightning prevention research, and lightning causes half of the forest fire damage on commercial forests of the West, we now know that we can reduce the number of cloud-to-ground lightning strikes by two-thirds. We reduce the duration of the stroke by one-third.

Mrs. HANSEN. How will this be accomplished?

Mr. ARNOLD. This is by cloud seeding that has been developed in the past few years. It has been in the last year that experiments established this relationship.

Mrs. HANSEN. What effect does cloud seeding have on the neighboring argicultural area?

Mr. ARNOLD. Most of the lightning research is on the dry lightning storms that cause difficulties in the forest fire area. These are seeded only in places where there is a high lightning potential. We have learned also which clouds produce the cloud-to-ground lightning, and it is only this specialized and narrow seeding in the particular areas. It is not widespread.

Mrs. HANSEN. What are some of your other improvements?

INFRARED REMOTE SENSING

Mr. ARNOLD. I think the other very important development is in detection, using infrared remote sensing. We have developed specialized equipment. In cooperation with fire control people we are now pilot testing that research. It has been used and is now used in fire mapping. We are getting into the detection that will be automated and available in the system within a few years.

Mrs. HANSEN. Insert in the record the total amount of funds you have spent in the last 10 years on your forest fire research, and the estimated number of acres that you may have saved through this research.

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

(The information follows:)

The appropriations to the U.S. Forest Service for fire research during the 10-year period fiscal year 1961 through fiscal year 1970 were as follows:

Fiscal year:	
1961	$1,029,000
1962	1,349,000
1963	1,500,804
1964	1,819,000
1965	1,897,000
1966	2,860,000
1967	2,912,000
1968	3,077,000
1969	3,418,000
1970	3,821,000

The average annual area burned during each of the last two 10-year periods is as follows:

Period:	*Average annual acres burned, all forest lands*
1949–1958	10,541,773
1959–1968	4,318,406

The Forest Service fire research program is the only effort of its kind in the United States and serves all private, State, and Federal forest protection agencies. Reduction of the average annual area burned by more than 5 million acres during the 10-year period 1959-68 has resulted from the application of research knowledge and technology by fire control forces. However, the increasing fire risks and hazards from intensified use of forest lands and the rapidly accelerating values of forest resources are making fire control more difficult, expensive, and important. Total costs of fire control on all forest lands, exclusive of damage, now amount to some $300 million annually.

Values impacted by forest fires are not expressed adequately by acres burned or even by the dollar amount of forest resources destroyed. Forest fires create air and water pollution, directly increase flood hazards, destroy scenic beauty, disrupt transportation, communication and industrial activities, and threaten the lives and property of forest visitors and residents alike. Adequate safeguarding of all of these values in the face of increasingly difficult fire control circumstances requires a stronger fire research program for development of new knowledge and technology to meet current as well as future protection requirements.

RESULTS OF FIRE RESEARCH

Mr. WYATT. Madam Chairman, at this time I would like to observe, studying the record of the cost of pre-fire suppression and of fire-fighting last year, and the damage done last year, comparing all of these statistics with previous years, it is obvious that the fire suppression research has been quite effective. I think they have done an excellent job during the past year. It is obvious in the figures we have before us, under the forest management section.

Mr. CLIFF. Thank you. I am sure this is true. If we had not developed these new techniques of fighting forest fires, we would be completely swamped, under today's labor and employment conditions. If we had to use the old methods that were in vogue when I first came to the Forest Service, we just couldn't cope with the problem. The research that has been done deserves a great deal of credit for enabling us to keep on top of this job. We still have too many losses. We still have a job to further reduce the current number of fires, and to reduce the losses that occur from forest fires generally.

Mr. WYATT. The research has been good, and the use of the results of that research I think has been excellent, and I am encouraged by the additional potential that remains to make it even better.

FIRE STATISTICS

Mr. NELSON. We look back in the record, as we were asked in the Senate, to some of our bad fire years. In 1929 before we had these new techniques, we burned over 1 million acres; a little less than 1 million acres in 1931; over a half million acres in 1942.

Mrs. HANSEN. Insert the information in the record.

Mr. NELSON. We will be glad to do that. It goes back to 1910, which, of course, was our largest loss.

(The information follows:)

WILDFIRE STATISTICS

Areas Protected by the National Forest Years With High Reported Fire Loss

Year:	*Acres burned*
1910	4,947,172
1917	1,214,674
1919	2,277,131
1929	1,059,772
1931	775,278
1942	542,494
1951	395,695
1960	424,295
1966	332,921

NATIONAL FIRE DANGER RATING SYSTEM

Mr. ARNOLD. I believe this highlights one other result of research that is just now coming into use. We are ready to pilot test the national fire danger rating system. For the first time we have two index numbers of a multiple index system ready for testing. This will give us a relative measure of fire danger for different years. Right now we can look at a bad year in terms of a large acreage burned, but cannot say how much of this was due to the difference in the weather this year in comparison with other years. National fire danger rating will allow us to compare between different areas of country, to compare years, and to get a better measure of where fire control performance has been good or whether it has been weak. This is ready for application now in the beginning phase.

USE OF FIRE RESEARCH ON PRIVATE LANDS

Mr. BACON. Madam Chairman, I can't help but observe that our discussion of the uses of research have related so far to the national forests. I would emphasize that for the 59 percent of forest land that is in private ownership great use of the same research is made.

FOREST INSECT RESEARCH

Mrs. HANSEN. $4,783,000 is requested for forest insect research. What is the current status of insect infestation, and have you had any major breakthroughs in this area?

Mr. ARNOLD. We will be glad to do that. Would you like a brief discussion now or have it presented for the record?

Mrs. HANSEN. Please discuss it now.

Mr. ARNOLD. I think Mr. Bacon can give us the status of the insect infestation and the critical problem areas. I can point out several breakthroughs that are now ready to be applied or that need more research.

Mr. BACON. Our major problems as far as the control program is concerned are due to several insects and diseases in the Douglas fir stands of Montana, Oregon, and Washington. Bark beetles in the ponderosa pine stands in California, South Dakota, and Washington also cause heavy losses. Probably our most serious, from the stand-

point of current loss and cost of control, are in the lodgepole pine forests of Idaho. We also have recurrent infestations of the spruce bark beetle in stands in Colorado, New Mexico, Idaho, and Montana. Continuing infestations of the southern pine bark beetle are also serious. These are found generally throughout the South. Currently, however, most of our problems are in Alabama, Louisiana, Mississippi, North Carolina, South Carolina, and Texas. The levels of the infestations generally throughout the South are currently lower than they have been in the recent past.

Mr. ARNOLD. Research scientists at Corvallis and Hamden, Conn., have been working on biological controls. We now have a polyhedral virus and a bacillus which appear to be effective on some of our insects. We have achieved a breakthrough, as you know, in the development of attractants for two bark beetles. They will be pilot tested on the Sierra Forest near Bass Lake this summer. These same opportunities exist for most of the major insect pests. We have now learned enough to know that a greater research effort aimed at the other pests can produce similar results.

The loss of use of DDT has put us in great need of understanding more about the physiology and the ecology of the insect pests themselves. We are going to have to rely more on management practices and of creating environments in the forests that are unattractive or unhealthy to forest insects.

FOREST DISEASE RESEARCH

Mrs. HANSEN. Mr. Stone has written a lengthy letter on forest research. He is urging increases for environmental research for the Pacific Northwest Forest and Range Experiment Station. He says: "This station has, as you know, a fine research facility at Corvallis. The personnel at this laboratory have close working relationships with Oregon State," and so on. He is urging more money in the total field of research, which lends itself to environment. You are requesting $2,810,000 for forest disease research. You make a statement in your justifications that air pollution damages trees. Give us a statement on your ability to contain forest diseases and discuss any major breakthroughs in research in this area during the past year.

Mr. ARNOLD. The state of forest disease technology is quite similar to that of the technology in the control measures against forest insects. We have not yet learned enough about many of them to be able to detect them early. To get the control measures going before the epidemic is in full swing, we need to do a lot more research in diseases and insects, to learn how to detect potential buildup before the trees start dying.

In disease research, we have some new information building on excellent work done by the University of Wisconsin. We have determined the feeding stimulus for the bark beetle that transfers the Dutch Elm disease. We think we may have some hope that within a year or two we can suggest some control measures that will be effective.

What we are finding is that as timber culture becomes more intensive, quite often diseases which have not shown up before begin to appear. The first example of disease research accomplishments illus-

trates the problem. This was a foliage disease that had not appeared in the North, but appeared there very suddenly. It was related to the brown spot disease in the South. We were able to develop controls for that before we knew completely what it was.

The problem of air pollution injury to forests is that the quality of the air makes trees susceptible to insect and disease attack. That is why it is important for us to study air pollution effects on the trees, in order to find out and develop trees that are less susceptible to air pollution, and to determine areas where susceptible trees cannot be grown.

SUSCEPTIBLE TREES TO AIR POLLUTION

Mrs. HANSEN. What are the most susceptible trees to air pollution?

Mr. ARNOLD. Conifers, particularly the pines are the most susceptible of trees. Among the hardwoods, the more susceptible are ashes, populars, and maples.

MAJOR POLLUTANT

Mrs. HANSEN. What are the major pollutants?

Mrs. ARNOLD. Sulfur dioxide is one of the most serious pollutants. Sulfur dioxide comes from powerplants. Overall, oxidants, including ozone, particularly from automobile exhaust, are the most serious general pollutants as we have seen in southern California, where the smog problem has existed longer in a more intensive way than in other parts of the country.

CORVALLIS LABORATORY

Mr. WYATT. Madam Chairman, could I inquire at this point? It doesn't have to do with the construction of the Corvallis Forest Science Laboratory. Dr. Arnold, could you tell us how the work of the Corvallis Forest Science Laboratory is related to the high priority items and problems of protecting forest environment, and also increase timber supply?

Mr. ARNOLD. The work at the Corvallis Laboratory is a good example of research designed both to protect and enhance the environment and to increase the timber supply. There we have four insect research projects studying the destructive insects of the Pacific Northwest. We are studying insect life histories and developing new biological control measures, some of which will be applicable to insect problems elsewhere.

There we have the headquarters of the research program which is aimed at studying the disease of western forest insects. That is the research project that has come up with the polyhedral virus that is now in the testing phase. We are also studying forest insect physiology and behavior. We have a new project there dealing with the application of biological control agents from the air. Disease research at Corvallis seeks controls for forest diseases of the Pacific Northwest and another project concentrates on western root disease and soil microbiology.

Other research efforts at Corvallis are tree improvement, the breeding of Douglas-fir trees for desired resistance and more rapid growth and the intensive culture of the west side timber types which, as you know, now makeup one tenth of the standing timber of the United

States. Probably the most critical research in Corvallis, and the most important in this field of quality, is that dealing with the behavior and impact of chemicals on the forest flora and the forest environment. Also in Corvallis is the work on soil stability, on environment, and runoff of water from forest stands. It is the combination of these timber programs and the environment programs that is so important. This picture for example, is another use of remote sensing. We were handicapped until we started to use photography from the air to study the spread and location of the root rot called Poria-weirii. From the air you can identify the areas where timber has been killed by this root rot. We can use aerial detection to determine the rate of spread. We can use this as a means of studying how we can develop better control measures for the Douglas-fir root rot. It is also interesting that in our remote sensing research we hope to be able to determine areas where the disease is going to have an impact before it is actually visible to the eye.

PRIORITIES AT CORVALLIS

Mr. WYATT. Doctor, to what extent could you further implement the high priority activities at the Corvallis Laboratory during fiscal 1971?

Mr. ARNOLD. At the Corvallis Laboratory the programs dealing particularly with the quality of the environment, with the effects of chemicals on the forest environment, with the watershed and erosion quality, with insect diseases and the insect physiology and behavior and in forest genetics and tree seed research—those are the areas where more effort now should pay off.

Mr. WYATT. High priority programs?

Mr. ARNOLD. These are areas where we can move very rapidly and where curtailment of pesticide use does place high priority.

Mr. WYATT. Will you furnish for the record a figure as to what the capability, what additional capability there would be for the use of research funds in the items that you have mentioned at Corvallis during fiscal year 1971?

Mr. ARNOLD. I will be glad to do that.

(The information follows:)

The most urgent needs for funding research activities at Corvallis in keeping with our plans for program development are:

Forest disease and insect research.—Researchers in forest disease and insect control work at Corvallis are working to control the tremendous timber losses these pathogens and pests cause. At present, in the Northwest, losses caused by diseases and insects amount to about one-third the volume of timber harvested. The projects at Corvallis have highly promising leads in developing safe biological controls of forest diseases and insects that are effective in reducing tree losses and in protecting the environment from contamination. Increasingly rigid restrictions on use of chemical pesticides emphasize the urgency to strengthen this work. In accordance with long-range plans, the Forest Service disease research could use effectively an increase of $50,000 and forest insect research an increase of $50,000 also.

Watershed management research.—The upsurge in pressure for more timber, and more intensive timber management, has stimulated serious anxieties over the impacts of these programs on forested watersheds and on water quality in the Northwest. Harmful effects of roadbulding, logging, brush control, and forest fertilization on water must be prevented. New technology must be developed to meet the demand for increasing timber harvests. But, at the same time, streams must run clear, soil must be kept in place, and the forest environment must be attractive as well as productive. Under long-range plans, the research in intensive management could use effectively an increase of $100,000.

Forest genetics and tree seed research.—Corvallis is headquarters for the forest tree improvement and tree seed projects of the Northwest. The tree improvement project is working to increase growth and quality through the science of genetics. Findings to date indicate that timber yields may be increased by 20 to 30 percent through genetic improvement forest trees. Better methods must be found to collect, store, and use high quality, genetically improved tree seed. It is urgent to speed the development of this technology which has the capacity to improve timber yields and the forest environment simultaneously. As soon as the budget permits, this research should be increased as follows: $100,000 for forest genetics research, and $50,000 for forest tree seed research.

FUNDING FOR POLLUTION CONTROL

Mrs. HANSEN. I received a letter from Congressman Johnson of California relative to the Tahoe National Forest. He says:

> We have a rather small problem as compared to the total picture, but a major problem as it relates to Lake Tahoe. It had been the intent of the region, I am told, to include $1,008,000 to finance required sewer hookups at the lake. This would have allowed $245,000 for Tahoe National Forest and $763,000 for El Dorado National Forest. Some place the money was inadvertently omitted.

Was the budget for pollution control items prepared before the President's Executive Order 11507 on correcting pollution at all Federal installations?

Mr. CLIFF. Yes, ma'am.

Mrs. HANSEN. Would the present rate of funding correct pollution problems at Forest Service installations by the President's deadline of December 31, 1972?

Mr. CLIFF. No; not at all. As Mr. Nelson discussed this yesterday, we have identified the $34 million of needs in correcting and abating water pollution at our recreation facilities.

Mrs. HANSEN. So without adequate funds the order is just a sheet of paper.

Mr. CLIFF. And there is another $8.5 million of needs at our ranger stations and headquarters installations around the country. At the rate that we are financing this work, it would take at least 6 years to correct these known problems at recreation facilities and 12 years at our administrative stations. The President's deadline was December 1972. The Executive order also covered air pollution. We have costly problems there, too.

Mrs. HANSEN. What happens if the funds are inadequate?

Mr. CLIFF. With inadequate money to meet the deadline. The estimates as we indicated earlier were made before the President's Executive order on this subject.

Mr. NELSON. We have $6 million total in our budget for water pollution control at recreation areas, plus our ranger stations such as Mr. Cliff mentioned, whereas the total need is presently estimated at more than $43.6 million.

LAKE TAHOE SEWER SYSTEM

Mrs. HANSEN. Have you finished your work at the south end of Lake Tahoe in connecting all your installations to the new sewer system?

Mr. CLIFF. No, we haven't, and Mr. Nelson has the details on just where we stand on that.

Mr. NELSON. That project was planned to be completed in five stages. We have finished stages 1 and 2. Stage 3 is under construction this fiscal year, and will be completed to a point where we can move ahead to stage 4. Stages 1, 2, and 3 put in the trunk sewer lines and pumping stations. Stage 4 is for sewer conversions, the comfort stations, collection systems, holding tanks and so forth. It really makes the other two stages usable, to put them into effective use on the south end of Lake Tahoe. There is a fifth stage that would follow the fourth stage that would hook up the Baldwin Beach area to the entire system. We will have spent some $2 million by the end of this year.

Mrs. HANSEN. Do you have anything in this budget to correct Forest Service sewage problems in the Tahoe Basin?

Mr. NELSON. No, ma'am; there is nothing in this budget that would take care of either the south end or—I think you read in the letter something about Tahoe National Forest which we consider the northwest part of the lake, where we have two campground and picnic areas in need of water pollution abatement work. They should be connected into a municipal export system that is in existence. The cost of those two projects would amount to about $245,000.

Mrs. HANSEN. What would be the impact of a sudden ruling that forced you to connect your sewage system or it couldn't be used.

Mr. NELSON. That is a very serious situation at Lake Tahoe. One of the reasons we were into this problem early is that the south end of Lake Tahoe is now really a city. It was only a few years ago that it wasn't even kept open in the wintertime. We moved our ranger out in the wintertime, for example. Now, there are at least 30,000 people that live there yearlong. It has some very large hotels.

Mrs. HANSEN. Do you think it is proper that your sewage drains into the lake?

Mr. NELSON. I don't want to leave the impression that our sewage at the present time goes directly into the lake, because it doesn't. We have septic-type tank systems. They are not satisfactory. There may be some leaching into the lake from this type of system. That is why the whole community went together and built a multimillion dollar project, to take care of this whole south end water pollution problem. Actually, it is a very highly developed treating system. It pumps treated water over the hill and into a lake on the Nevada side of the mountain. We should be tied into that major treatment system. The first three stages will have been completed which represents the first part needed to tie into that whole system. By all means, we should move ahead with stage 4. We have to move ahead because of the situation that exists at Lake Tahoe.

POLLUTION ABATEMENT AT JUNE LAKE

Mrs. HANSEN. Will you explain the recreation situation at June Lake in Inyo National Forest. Your budget includes an item for pollution abatement. Will this take care of this problem?

Mr. NELSON. June Lake is really a community. There is an item in the budget for some pollution abatement at June Lake. June Lake is a relatively small lake on the Inyo National Forest. The problem is

related to the community, not strictly to our recreational development on the lake. This budget includes——

Mrs. HANSEN. How many recreation users per year do you have in this area?

Mr. NELSON. I don't have the figures on how many there are. It is however, an intensively used area.

Mrs. HANSEN. Insert the information in the record.

Mr. NELSON. We will be glad to try to find that and put it in the record.

(The information follows:)

The estimated recreation use at Forest Service facilities at June Lake for 1969 was 612,200 visitor-days. There is also extensive use of private lands at this lake.

LAND EXCHANGE AT JUNE LAKE

Mr. NELSON. The amount in this budget for water pollution abatement of June Lake is our share of the costs of a survey and design of a major sewage system for this entire June Lake area. It is not to take care of a specific pollution problem at a campground or other Forest Service facility. Another problem at June Lake is that one of our campgrounds on the lake is surrounded by private land. This particular land is needed for expansion of the community. We have another area that could be developed at June Lake, or near June Lake to take care of the public recreation use now existing at our campground. In order to make this land, which we own, available for the expansion of the community, it would require a land exchange. We have a party that is interested in exchanging some other land for the land that is now occupied by the campground. We feel very strongly that we should not make such an exchange until we have another area developed that would take care of the people that are presently using the June Lake campground. That is our situation as far as June Lake is concerned.

Funds for this campground development are not in the budget this year. It would require, as I recall, about a quarter million dollars.

Mrs. HANSEN. Why aren't the funds included in this budget?

Mr. NELSON. It is one of those needed recreation facilities which wasn't high enough in priority to be included in the limited amount of funds that we have in the budget for development of new campgrounds in fiscal year 1971.

Mrs. HANSEN. Were you given a limitation that you had to stay within?

Mr. NELSON. The Forest Service requested $47.9 million in the recreation item. The budget finally came out at $42.2 million. We in the Forest Serivce recognized some of these needs, but because of the overall budgetary situation, we didn't come out with what we felt were some of the needs to take care of new improvements. The new campground for the June Lake area would cost $228,000 of recreation money, and that would include a water and sewage system. It would also require about $75,000 of road and trail funds for recreation-type roads to serve the development.

WATERSHED MANAGEMENT RESEARCH IN ALASKA

Mrs. HANSEN. I have a letter from Congressman Pollock requesting $40,000 to accelerate the Forest Service research in the coastal forests environment of southeastern Alaska. This item is included in the budget. What will this research accomplish?

Mr. ARNOLD. That research relates to timber harvest and fisheries biology for improving the fisheries habitat for salmon spawning grounds in Alaska. An increase of $40,000 is in the budget. It is one of the two areas of research in watershed management in the budget dealing with the relation between timber and improving the watersheds.

FOREST PRODUCTS UTILIZATION RESEARCH

Mrs. HANSEN. An increase of $170,000 is requested for forest products utilization research. Will you please give us the justification for this increase?

Mr. ARNOLD. The forest products utilization increase of $170,000 is related very heavily this year to reducing environmental pollution. It also will contribute to——

AIR POLLUTION AT FOREST PRODUCTS LABORATORY

Mrs. HANSEN. I am quoting from a letter I received from Congressman Kastenmeier:

> I understand there is extensive public pressure being brought on the Forest Products Laboratory at Madison, due to the air pollution caused by the Lab's large coal-burning heating plant.

What can be done about this and what plans are being made to rectify the situation?

Mr. ARNOLD. We discussed yesterday that the Forest Products Laboratory is now 38 years old, and in 1967, planning money was provided for modernizing and reconstructing the service facilities, including the heating, electrical, and other outmoded systems. It was recognized it would take $1.6 million for the complete renovation of that 38-year-old facility in terms of the utilities.

Mrs. HANSEN. Have the funds been included in this budget?

Mr. ARNOLD. No, ma'am.

Mrs. HANSEN. Why not?

Mr. ARNOLD. There were no moneys in the research budget for construction.

Mrs. HANSEN. Why did the President issue an order demanding that pollution cease on Federal installations, if you are not going to request adequate funds in this budget? You cannot have cessation of pollution without adequate funds. This is a matter apparently of some urgency in Madison.

Mr. CLIFF. Do you want me to try to answer that?

Mrs. HANSEN. I would like you to try and answer when you expect to start this program? Don't tell me the budget is going to be any better next year.

Mr. CLIFF. We didn't have the President's order at the time this budget was prepared.

Mrs. HANSEN. Pollution abatement has been discussed for the last 2 years.

Mr. CLIFF. With the emphasis that the administration is putting on the question of reducing environmental pollution from Federal installations, I am sure that next year we will make recommendations for full funding of these needs.

Mrs. HANSEN. Mr. Cliff, the Bureau of the Budget has to approve the funds and every time funds are requested for these activities they are always curtailed.

Mr. CLIFF. The Bureau of the Budget, I am sure, will take cognizance of the President's directive to cure these pollution problems.

Mrs. HANSEN. Do you think the Bureau of the Budget will approve the $43 million that is needed?

Mr. CLIFF. I am hopeful that they will recognize——

Mrs. HANSEN. It has to be in the 1972 budget. Pollution will not be abated by December 31, 1972, if the funds aren't included in the 1972 budget, because construction couldn't possibly be completed.

Mr. CLIFF. That is very true.

Mrs. HANSEN. I think there should have been more funds in this year's budget. The 1969 budget was curtailed, the 1970 budget was curtailed, and now the 1971 budget is being curtailed. Time is running out on us.

FOREST ENGINEERING RESEARCH

An increase of $171,000 is requested for forest engineering research. What is the justification for this increase?

Mr. ARNOLD. This increase, Madam Chairman, is going to be used to strengthen the bark-chip separation research. This research has great potential for making it possible, all over the country, to utilize more of the tree.

The second part of this increase is for——

Mrs. HANSEN. To date how much increased utilization of the tree has been made possible through your research?

Mr. ARNOLD. I could not estimate that directly. However, the better chipboard that has come from the research in the Forest Products Lab has made it possible to utilize lower grade materials in chips. We have much better pulping processes which increase the proportions of the fiber in the tree that actually reaches the paper stage. Part of the increase proposed for utilization research is aimed at increasing the proportion of fiber in the mechanical pulping process.

Mrs. HANSEN. Isn't private industry continually using and applying the developments of this laboratory?

Mr. ARNOLD. Yes, ma'am.

PULP MADE FROM DENSE HARDWOODS

Mr. CLIFF. This is certainly true. One of the spectacular breakthroughs in utilization research I think has been the process that was developed at the laboratory to make pulp out of the dense hardwoods. This one piece of research I think has more than paid for all the cost of the lab throughout its history through the impact it has had on the economy. It has resulted in opening up a brand new source of material that wasn't used before. It enables us to improve the forests by remov-

ing the low-grade hardwoods, for which there was no market, and for which a rather large market is now developed. This is an example of the kind of utilization research that stretches out our present wood supplies, contributes to better forest land management, and reduces the environmental pollution. These low-grade hardwood species are occupying productive forest land sites which previously made no contribution to the resource base of our country.

UTILIZATION OF SAWDUST

Mr. WYATT. Chief, on that same line, may I inquire? I understand now that there is substantial utilization of just plain ordinary sawdust, upon the basis of past research. Industry is now able to mix a greater proportion of sawdust in with chips in pulp production, on certain kinds of paper products. Has this been a result of research that you people have carried on in past years?

Mr. CLIFF. This utilization of sawdust in connection with other fiber is growing, and the laboratory has participated in this research. I think some of it has come about as a result of research conducted by the industry itself, and trials by the industry.

Mr. WYATT. Again this takes care of an environmental problem, the burning of or other disposal of a solid waste that is very difficult to dispose of other than burning.

Mr. CLIFF. That is correct, sir.

Mr. ARNOLD. That is the advantage of chipboard, Madam Chairman and Chief Cliff, I think we might mention another development. I don't know whether you have seen this paper that has been produced in part from wastes in the Madison City Dump.

Mrs. HANSEN. I used it in a speech the other night.

Mr. ARNOLD. I might say that fuller development of this process, which is, of course, in the very exploratory stages, will utilize $90,000 of the proposed increase of the Forest Products Laboratory. The development and perfection of this particular process will not only reduce a pollution problem by using municipal wastes but will also extend the supply of timber.

BENEFITS FROM FOREST ENGINEERING RESEARCH

Mrs. HANSEN. On page 116 of your justifications you say one of the benefits of forest engineering research is: "Capture of a billion board feet of annual allowable cut now lost on timberlands of the Douglas-fir region and Alaska, and from steep sensitive slopes of the interior west." Insert in the record the total amount you have spent in this research. This type of research has the ability to increase future harvesting of logs in an almost impossible terrain.

Mr. ARNOLD. I think this is true and we will be happy to place that in the record. Really the research in new skyline logging systems is just in exploratory stages.

(The information follows:)

The following funds were budgeted for transportation engineering research in the West:

LOGGING TRANSPORTATION RESEARCH FUNDING

	Seattle, Wash.			Bozeman, Mont.	
	Helicopter	Balloon	Skyline	Pipelines	Roads
Fiscal year:					
1962				$26,000	
1963	$30,000	$10,000	$11,500	47,000	
1964	13,000	34,000	20,200	18,450	$3,300
1965		85,000	30,050	72,000	21,600
1966		37,000	30,600	50,500	38,200
1967		39,500	48,000	60,500	26,200
1968		82,400	123,600	56,600	37,500
1969		61,800	144,200	59,500	42,500
1970		62,000	156,000	58,000	42,000

FOREST SURVEY

Mrs. HANSEN. An increase of $435,000 is requested for forest survey. I have received many letters supporting this request. Justify this request and indicate what you intend to accomplish?

Mr. ARNOLD. Yes, ma'am. The forest survey is completely unique. It is the only source of regional, State, and local appraisal of timber resources and timber use nationally and internationally.

Mrs. HANSEN. Are we the only Nation that has this type of survey?

Mr. ARNOLD. Some other countries have the timber surveys, but it isn't the kind of activity that can be taken on a local or even a regional basis. If it isn't coordinated for national statistical purposes then, just like the census, it can't be used.

The forest survey is interesting in that it is used for policy and legislative purposes. It is used to evaluate progress on major timber programs.

Mrs. HANSEN. Can it be a usable guideline for budget preparation?

Mr. ARNOLD. It has been a usable guideline for budget preparation. The basics of the timber survey were the background for the special task force report which you asked to be placed in the record. It is used in the development and the justification of most of the public and private investments in timber programs in the country. This particular increase of $435,000 will be used to obtain up-to-date information on timber inventories, timber growth, and timber removals in the south, the Pacific coast, the Rocky Mountains, and the Central and Northern States. It will allow us to inventory more acreage each year. At the present time we are only able to resurvey and reinventory about every 11 years. This just isn't frequent enough for the uses of survey information. With this increase, we will be able to reduce the schedule to less than 10 years.

At the present time we are ready for the next major analysis of the timber resource situation in this country.

Mrs. HANSEN. What would be the ideal time for the review?

Mr. ARNOLD. It varies. For the high-timber producing areas in the South and in the West, the surveys should probably be as frequently as about every 5 years. We can get by in many other parts of the country with 8 or 9 years, where the timber growth is slower. The requested increases will be used to bring to completion as rapidly as possible a new, complete timber analysis. At the last analysis in 1962, it took us 2 years to summarize the basic data. We feel now we can bring the basic data together and make them available in 1 year rather than two.

Mrs. HANSEN. You have a lot of supporters.

Mr. ARNOLD. We receive more requests for survey and timber analysis information, which relates both to forest economics research and the forest surveys, than for any other of our research programs.

CONDOMINIUM DEVELOPMENTS ON NATIONAL FOREST LANDS

Mrs. HANSEN. I have received letters from the Governor of Kentucky, the International Paper Co., the Commissioner of Public Lands of the State of Washington, the Northwest Forestry Group, and the Department of Natural Resources of Washington. I also have a letter from you, Mr. Cliff. The State of Washington sent resolutions, as you remember, unequivocally favoring condominium development on national forest lands, in order for existing and future recreation complexes to become more economically viable by providing all facilities necessary to serve the broad public interest.

You say in your letter to me of March 5 that you would be glad to give suitable comments during the forthcoming hearings. Please proceed.

Mr. CLIFF. I am pleased to have this opportunity. We have within the national forests only three condominium developments.

Mrs. HANSEN. Where are they?

Mr. CLIFF. All of these are under special use permits on the Snoqualmie National Forest in the State of Washington. They are located at the White Pass ski area and at Crystal Mountain. These were permitted about 5 years ago with the idea of providing overnight facilities for the general public as well as the owners of the condominiums. This was a new development. Condominiums in recreation areas are relatively new. We decided at that time to try this out to see how it worked, and see how well it served the general public. We announced that we would not issue any more for a 5-year period during this trial period. The moratorium was to expire in 1970, which is this year.

There has been considerable interest, as you know, in the State of Washington and elsewhere for more condominum developments at winter sports areas in the national forests.

Mr. WYATT. In Oregon too, chief, as our correspondence has indicated.

FINDINGS OF STUDY TEAM

Mr. CLIFF. Yes, there is interest at the new Mount Hood Meadows ski area in Oregon, for example, and this interest extends to other States as well. We contracted for an outside study team to study the results of our experience with condominiums and make recommendations or give us their findings. This study has been completed. The

report has been submitted to us. A summary of the report has been distributed rather widely to the ski area operators and others who were interested in condominiums.

In general, the study team felt that condominiums, on national forest lands have not served the general public in the manner originally contemplated.

Mrs. HANSEN. Why?

Mr. CLIFF. Because the original plan was that a substantial part of the capacity of these condominiums would be available to serve the general public. We put high priority on the use of these Federal lands for public use over strictly private use. Where there is need for overnight facilities for the general public, we feel that should have priority over the use of the same land for strictly private purposes. The condominium is very much like a summer home or a vacation residence. It is owned by a private person, and it is owned primarily for his personal use. In the permits we required that a certain part of the capacity of these condominiums be available for rental to the public when the facilities were not being used by the owner.

Mr. WYATT. What was that requirement percentagewise, Chief?

Mr. CLIFF. I think it was in the nature of 25 percent of the capacity that should be available. The study team reported their conclusions that the condominiums that we have are not serving the public purposes as was originally contemplated.

PROPONENTS OF CONDOMINIUMS

Mrs. HANSEN. I am quoting from the resolution I received from Senator Pritchard:

> The State of Washington feels that the questions to which the study was directed were lacking in scope, and so preconditioned the study results that any subsequent acceptance or further action by the Forest Service, resulting in a policy statement, would strongly indicate a totally negative response to the condominiums development question; and
>
> Whereas, the probability of such a negative policy interpretation, supported by a mere perfunctory contract report on performance without due consideration of additional germane elements would preempt for all time the potential for condominiums development on Forest Service lands in the State of Washington and elsewhere, thus creating a situation contrary to the desires of the State and establishing an inexpedient precedent for future similar issues.

Mr. CLIFF. Madam Chairman, I am aware of this resolution and of the reaction of some of the people who have studied the consultants report. As a result of their dissatisfaction with the consultant's report, the advocates of condominiums have employed a consultant of their own. They have asked this consult, who is a former operator of the Crystal Mountain ski area——

My WYATT. Where is that, Chief, for the record?

Mr. CLIFF. Crystal Mountain is a winter sports area on the Snoqualmie National Forest on the summit of the Cascades right near Mount Ranier National Park.

The proponents of condominiums have asked us to postpone a decision until their consultants report can be completed and forwarded to us, and the regional forester has agreed to postpone.

LEASE PERMITS FOR CONDOMINIUMS

Mrs. HANSEN. Would private funds be used to construct these facilities?

Mr. CLIFF. Yes.

Mrs. HANSEN. How long would the leases be?

Mr. CLIFF. Normally the leases are issued for a sufficient length of time to amortize the investment. The maximum amount of time that could be allowed under the law is 30 years. The permits are renewable at the end of the term. I don't recall just what the length of the lease on the condominiums that we have is but probably 20 years.

ENTERPRISES SIMILAR TO CONDOMINIUMS

Mrs. HANSEN. What private enterprises with a similar character are within the boundaries of national forests?

Mr. CLIFF. What other enterprises? The thing that comes closest to it is the summer home. Summer home use is a private use of public land. A condominium is nothing more than a group of summer homes under one roof.

Mrs. HANSEN. Doesn't condominium development require a large investment?

Mr. CLIFF. Certainly a condominium requires considerable investment.

Mrs. HANSEN. That is right. It is not going to be without profit is it?

Mr. CLIFF. No, there would be profit to the contractor. Another kind of use that is similar is the club-house type of use. We have a number of these.

Mrs. HANSEN. Insert in the record other similar situations.

Mr. CLIFF. Yes, ma'am.

(The information follows:)

There are several types of use that are somewhat similar in that they accommodate a private privilege activity. For example, there are summer homes and private clubs. As to the clubs, alumni associations, sportsmen groups, skier organizations, conservation groups, and industrial concerns are allowed to use national forest land for their own purposes. Private summer camps operated for a profit are also under permit. Each of these, however, departs in similarity from condominiums in that they do not occupy land that is needed to support public recreation opportunities. Condominiums at ski areas would occupy the same base area acres needed for public use or fully public accommodations.

FOREST SERVICE ACTION ON CONDOMINIUMS

Mrs. HANSEN. I am quoting from a letter I received from Governor Daniel J. Evans, of Washington:

You can readily see the impact and importance of this problem in the State of Washington as well as in other areas of the country, and I personally wish to enlist your immediate and continuing support in order to preclude any hasty action contemplated by the U.S. Forest Service and the Department of Agriculture.

Mr. CLIFF. The proponents of condominiums have asked that their review be received and studied, and they said that it would be completed by mid-May. We have agreed to receive and consider their consultant's report. Consideration of the question will be delayed until we have the response from this review.

APPLICATIONS FOR CONDOMINIUMS

Mrs. HANSEN. How many applications do you anticipate receiving from condominium developers?

Mr. CLIFF. I don't have a very good estimate of how many applications we would have for condominiums. I presume we have quite a number, because we have about 200 ski areas on the national forests. Many of these would probably apply for condominiums where there is not private land available for development of such facilities. We have a number of these ski areas where there is private land near the lower terminals of the ski lifts, where condominiums, chalets, and other facilities are constructed. Good examples of this are the Vail and Aspen areas in Colorado where the more elaborate public and private facilities are built on private land and the ski slopes are on the national forests. There are other examples. Of course the success of some of these resort areas lead other resorts to think if they could build condominiums and have leeway for construction of similar facilities on the national forests, that they would have better success in running their ski areas.

A basic matter of public policy is involved here, and it is a very difficult one. I can see——

MINERAL KING PROPOSAL

Mrs. HANSEN. Is this similar to the Disneyland proposal in California.

Mr. CLIFF. No; it is not.

Mrs. HANSEN. In considerations?

Mr. CLIFF. The Mineral King proposal provides for complete public facilities to be developed in Mineral King, and there would be no private facilities. Condominiums are controlled solely by private individual citizens. This is the difference.

We do need public facilities. It has been very difficult to get ski resort owner-operators to build and operate lodges, dormitories, and the motel type accommodations that are open for any citizen that wants to make a reservation and rent a room. We have a lack of these kinds of facilities at some of these ski resorts.

The condominium owner naturally is not very anxious to open his home to rental by people who are unknown to him.

NEED FOR CONDOMINIUMS

Mr. WYATT. Chief, may I interrupt at that point? I would like to take issue with you on that particular point. My home is a condominium in Oregon. I also own another condominium, and I am very anxious to rent it and most of the people in our area are most anxious to rent it. There may be wealthy people who would want to build a condominium or to buy one and participate in it, in some of these areas, who would want to keep it for themselves, but I think the great majority of condominium owners would want to rent. One of the real purposes in owning it is to have it pay for itself.

Mrs. HANSEN. Won't this type of development be limited to the rich, who can afford to build a condominium and who will in turn receive the profits?

Mr. WYATT. Of course if there is a sufficient requirement for public availability of the condominium—and I certainly think it should be above 25 percent—this would be of considerable protection to the public. What really concerns me about this issue, and I think it is a fundamental public issue that we have, is that I don't see any real prospects for any kind of facilities of any kind being built on any kind of a scale based upon our budgetary difficulties, looking ahead, for the next 10 years. This is kind of dangerous to predict, but for the kind of money and arrangements that have to be worked out to make purely public facilities available it looks to me as if your choice may be this kind of a development or none.

I would think that the requirement that they be available for a certain percentage of the time, 50 percent or maybe 75 percent, would protect against the very wealthy coming in and having an exclusive mountain retreat.

Mr. CLIFF. This is the issue really as to the priority of the use of this land by the general public as opposed to affluent people who can afford to build condominiums.

Mr. WYATT. But if we don't do anything there isn't going to be any use of it or very little use of it.

Mr. CLIFF. I certainly can see both sides of this question. I want to assure the committee that I haven't made any conclusions on this. I am still trying to factor out all the different things involved.

Mrs. HANSEN. This is a matter that would involve a lot of public understanding before it is embarked upon.

(Discussion off the record.)

REPORT ON CONDOMINIUMS

Mr. WYATT. Chief, I wonder if your report on this is too long to be made part of these hearings?

Mr. NELSON. The report is too long, I am sure. The summary report covers it very well, and even that is quite long—some 30 or 40 pages. At least we could give them to the committee and the committee could determine whether they want to make it a part of the record.

Mr. WYATT. And I wonder if you could also include with the report a charter of what they were asked to do, so that this could be clearly understood by everyone as to the scope?

Mr. CLIFF. That is outlined in the summary report, but we will do that.

(The information follows:)

The study was designed to answer the following questions:

1. Have the three condominiums provided adequate lodging to the skiing public?
2. Have the three condominiums served as catalysts to the development of the overall ski complex where they are located?
3. What impact have the three condominiums had on the "nonski complex" local economy?
4. Is private venture capital unavailable for development of completely public accommodations on national forest ski areas?
5. What are the advantages and disadvantages, to all parties involved, of condominiums relative to other alternatives for public accommodations on national forest ski areas?

RENTAL OF CONDOMINIUMS

Mr. CLIFF. I would say that the public issue involved here is important. I am sure that we all agree that the interest of the general public must be protected, whatever kind of development is allowed on these public land areas.

One of the problems with the condominium use, and I am not arguing with the statement Mr. Wyatt made about the willingness of people to rent them, but from the condominium owner's standpoint, as I understand it, he can't select a tenant that would be there for a month or more, as you would with your apartment. He has to make it available part of the time for just overnight occupancy. He may have several dozen different people occupying his home during the winter season. He doesn't know who they are going to be, and has little control over this. I can understand why they might be reluctant to make their condominiums available for that kind of occupancy.

Mr. WYATT. Chief, on this point, of course, as I have mentioned off the record. I think there is a potential for protecting the public and yet providing for them by not only a requirement as to a minimum amount that the condominiums would be available for public occupancy, but some sort of a regulatory power in the Forest Service having to do with the daily or weekly rentals.

Also, there can be—this may or may not suit these circumstances—there can be minimum periods of rental. I know one condominium unit, for example, it is not in a ski area, it is in a resort area, but the rules only permit rentals of a minimum of 3 months. I think probably you would have to have a daily or a 2- or 3-day rental in order to really service the general public, but there are all sorts of arrangements that are possible.

Mr. CLIFF. We are certainly deeply concerned with this, and we do want to serve the public in the best way possible. The question is still wide open. We haven't made any conclusions as yet, and we are studying this from all angles. We will give it our most careful attention.

Mr. WYATT. I think Mrs. Hansen and I probably would both like a copy of the other study, when it is available, provided it is a matter of public information, so that we have both of them to look at. I would be interested in it.

Mr. CLIFF. We will make that available if it can be done.

USE OF PRIVATE CAPITAL FOR DEVELOPMENTS

Mr. NELSON. On the matter of whether or not there is private capital available to develop ski areas without this real estate type of development involved, we have some very successful ones without that. Mammoth Mountain in Inyo National Forest is an example that is in operation now. There, private investors have spent over $4.5 million. The proposed development at Mineral King is one in which private capital would spend some $35 million without this type of real estate development. In fact we are buying most of what little private land is in the Mineral King Valley in order to assure that the full development will be in harmony with the environment without having a real estate development involved.

We recently opened a prospectus for a development on the Inyo Forest called Trail Peak, in which bidders propose to spend some $15 million in development of that winter resort and ski area without a private real estate development being involved.

Mr. WYATT. My real interest would be if some sort of a satisfactory condominium development is not permitted in the numerous areas that we have been talking about, the some 200 areas, that there be some reasonable prospects that in the entire scope of these areas that there will be some other type of availability of public facilities. It doesn't make sense that you just have these areas there and they are not used. It is just a total waste of resource.

Mr. CLIFF. This is an important aspect of this whole problem. In many places there are opportunities to develop these private facilities on private land within a reasonable driving distance of the area itself. Where private land opportunities are available, we feel that these private investments could better be put on the private land.

There are places where it is a considerable distance to the private land, and the public controls all or most of the usable land, where a different approach might be considered. It is from these areas that I think we may be getting most of the requests for condominiums. No matter how you look at it, when you permit a private investment in a private home on public land, it sews up that land for that use for a considerable length of time. With the growing demands for public use, we are a little bit cautious about committing important public recreation land to private use.

If we can assure adequate public use, which is what we want to do, we may have a different view on this.

FOREST ECONOMICS RESEARCH

Mrs. HANSEN. Thank you. You are requesting an increase of $172,000 for forest economics research. Justify this request.

Mr. ARNOLD. The forest economics research, Madam Chairman, develops the analytical methods and provides the analysis to guide much of the major investments in expenditures. I believe you mentioned yesterday a major private investment over the next few years, and roughly about $800 million a year is invested in forestry enterprise. These economic analyses are supplements to the forest survey. Of this increase, $30,000 will be used in the Pacific Northwest to appraise the economics of thinning and fertilizing second growth Douglas-fir. Some $50,000 is planned to be used in the South to appraise the economic feasibility of converting low yield upland hardwood timber to pine plantings and other studies looking at the economics of fast growing hardwood stands.

In the Interior West, we need to look at the entire actions of watershed management practices and timber developments and the impacts of trying to grow timber and provide other uses on the unstable soil, and recreation as well.

CONSTRUCTION OF RESEARCH LABORATORIES

Mrs. HANSEN. You aren't requesting funds for research laboratory construction. What were your construction projects in 1970?

Mr. ARNOLD. In 1970 we had three construction items in the appropriation. There was the $71,000 for planning of the forest marketing and utilization laboratory at Duluth, and that planning is underway.

Mrs. HANSEN. When will the plant be completed?

Mr. ARNOLD. The plant will be completed in the next 3 or 4 months. It is well underway. The funds for the two laboratories authorized at Nacogdoches, Tex., and Corvallis, Oreg., have been frozen.

Mrs. HANSEN. Did you use the Nacogdoches laboratory funds for pay costs?

Mr. ARNOLD. Yes, ma'am.

Mrs. HANSEN. Part of the funds for the laboratory in New Hampshire are in reserve. How many acres of forest lands do you have in New Hampshire?

RESEARCH LABORATORIES IN NEW ENGLAND

Mr. ARNOLD. I believe that we mentioned that in New England there were about 1 million acres of national forest lands.

Mrs. HANSEN. Is this the only laboratory in New England?

Mr. CLIFF. No, but this laboratory serves more than the national forests. It serves much of the forest land in New England.

Mrs. HANSEN. What are the other laboratories in New England?

Mr. ARNOLD. We have a laboratory in Connecticut working on the specialized biological controls of forest insects and disease.

Mrs. HANSEN. Do you have any other laboratories?

Mr. CLIFF. We have a small, field hydrological lab stationed at Hubbard Brook in New Hampshire, but that is a branch of the Durham laboratory.

Mr. ARNOLD. We can supply the names of the New England laboratories for the record.

(The information follows:)

LOCATION AND NAME OF FOREST SERVICE LABORATORIES IN NEW ENGLAND

Burlington, Vt., Sugar Maple Laboratory.
Durham, N.H., Forestry Sciences Laboratory.
Hamden, Conn., Forest Insect and Disease Laboratory.
Orono, Maine, Timber Research Laboratory.

LABORATORY AT MADISON

Mrs. HANSEN. What is the basic funding level required to operate your laboratory in Madison, Wis.?

Mr. ARNOLD. The basic amount needed is the amount that I mentioned before, $1.6 million. That is the current estimate for the utility and heating renovation in the 38-year old building at Madison.

Mrs. HANSEN. The abatement of that pollution has to be done.

I have received many letters on behalf of the Berea, Ky., laboratory requesting an additional $260,000. Have you requested an increase for strip mine reclamation research at the Berea laboratory?

STRIP MINE RECLAMATION RESEARCH AT BEREA LABORATORY

Mr. CLIFF. There is no increase for that.

Mr. ARNOLD. At Berea, Ky., we have a research budget of $408,000, timber management $184,000 and watershed management $224,000.

Mr. CLIFF. The watershed mangement is largely directed at reclamation of the strip mine lands.

Mrs. HANSEN. Why have these people requested an increase of $260,000?

Mr. ARNOLD. That is the addition required; $224,000 is the level of funding now available. Under our long-range research plans an increase of $250,000 is needed for strip mine research.

COMPLETION OF RESEARCH LABORATORIES

Mrs. HANSEN. When do you expect to complete these laboratories?

Mr. ARNOLD. We would certainly hope that they could be completed as rapidly as possible, when the funds permit, because we have established the needs for these 15 laboratories. We now have the planning completed.

CORVALLIS LABORATORY

Mr. WYATT. Madam Chairman, may I inquire as to the Corvallis laboratory?

Mrs. HANSEN. Absolutely.

Mr. WYATT. In connection with the phase 2 construction of the Corvallis, Oreg. laboratory, there was $500,000 added by this committee, and it was passed in the bill that Congress finally approved and the President signed last year for the first or starting construction on phase 2. As I understand it, this was to be used in the laboratory service building in connection with the phase 2 construction, Doctor; is that correct?

Mr. ARNOLD. Yes, sir.

Mr. WYATT. I can't make any promise, but I can tell you that I am working very hard trying to put the blowtorch to this money. In the event that we could allocate more money to phase 2, would you give me a breakdown as to the estimated cost of the other component parts of phase 2 in building?

Mr. ARNOLD. Phase 2 of the forestry sciences laboratory at Corvallis has five different building components in it to accommodate the various laboratory needs of this multidisciplinary problem. One of them is the laboratory service building that you mentioned, which appeared as the $500,000 item in the fiscal year 1970 appropriation act.

A second one is an east laboratory wing, which is estimated to cost $1,300,000. There is a west laboratory wing of $1,650,000, a north wing of $500,000, and an insectary greenhouse of $500,000 which provides the adjunctive facilities needed, particularly for insect physiology and in the insect disease work. The sum total of phase 2, as envisioned in a stage construction, is $4,450,000.

Mr. WYATT. Thank you, Dr. Arnold. Now in the event we are successful in getting the money obligated for the laboratory service building, which of these other items would you say had the highest priority?

Mr. ARNOLD. There are two items which share high priority. First, would be the insectary greenhouse to move the physiology and insect disease work along very rapidly. Then, the next priority is the east laboratory wing, which has most of the utilities for the other wings, so it would have to come before the other wings.

Mr. WYATT. Is the work that would be done in the insectary greenhouse development high priority work in connection with both environmental protection and also a rapid growth of wood fiber?

Mr. ARNOLD. Yes, sir. As we approach the completely new techniques and methods to control forest insects, we have to have the biological assessment, which means we have to have the insect population in the laboratory for testing purposes. This is a very critical facility for that particular research which is so timely now.

Mr. WYATT. Thank you, Doctor. Thank you, Madam Chairman.

Mrs. HANSEN. Since you have requested no research construction funds in 1971, doesn't it mean that none of these laboratories can be constructed before 1973?

Mr. ARNOLD. Yes, ma'am.

Mrs. HANSEN. This means you must delay the programs that need to be done in the research field to better the programs of forestry. I think this is unconscionable. This is a time when you are going to need more forests for everybody's use. You need to attack the things that are threatening the productivity of our forests. I wonder sometimes if the people of the United States are ever going to be able to forgive the kind of management that has been going on for the last few years.

You know how they woke up on environment, and they are going to do the same thing for every natural resource we have. The oil spills resulted because the Government didn't have the proper leasing agreements. I think there is going to be a public uproar about construction in foreign countries when at the same time we can't construct the necessary facilities needed in this country.

STATE AND PRIVATE FORESTRY COOPERATION

Mrs. HANSEN, Please insert pages 126 through 136 of the justifications in the record.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS

State and Private Forestry Cooperation
(includes Projects (29) through (32) on following pages)

	FY 1970 estimate	FY 1971 estimate	Change
Alabama	$657,370	$595,370	-$62,000
Alaska	298,780	277,780	-21,000
Arizona	66,920	46,920	-20,000
Arkansas	572,330	510,330	-62,000
California	1,324,220	1,176,220	-148,000
Colorado	214,620	200,620	-14,000
Connecticut	176,620	160,620	-16,000
Delaware	62,460	57,460	-5,000
District of Columbia	835,330	777,330	-58,000
Florida	840,930	757,930	-83,000
Georgia	918,150	830,150	-88,000
Hawaii	113,120	105,120	-8,000
Idaho	424,510	393,510	-31,000
Illinois	203,230	188,230	-15,000
Indiana	172,330	160,330	-12,000
Iowa	124,370	116,370	-8,000
Kansas	258,540	235,540	-23,000
Kentucky	587,380	544,380	-43,000
Louisiana	716,990	647,990	-69,000
Maine	587,220	529,220	-58,000
Maryland	335,290	310,290	-25,000
Massachusetts	286,840	257,840	-29,000
Michigan	781,400	707,400	-74,000
Minnesota	533,210	486,210	-47,000
Mississippi	795,400	730,400	-65,000
Missouri	646,360	593,360	-53,000
Montana	241,260	219,260	-22,000
Nebraska	207,790	193,790	-14,000
Nevada	233,610	217,610	-16,000
New Hampshire	188,430	172,430	-16,000
New Jersey	284,480	257,480	-27,000
New Mexico	176,940	170,940	-6,000
New York	706,340	650,340	-56,000
North Carolina	866,450	792,450	-74,000
North Dakota	75,570	65,570	-10,000
Ohio	378,740	356,740	-22,000
Oklahoma	280,920	255,920	-25,000
Oregon	778,050	703,050	-75,000
Pennsylvania	686,870	637,870	-49,000
Puerto Rico	115,720	115,720	
Rhode Island	109,280	101,280	-8,000
South Carolina	635,820	573,820	-62,000
South Dakota	128,590	120,590	-8,000
Tennessee	618,280	553,280	-65,000
Texas	473,320	425,320	-48,000
Utah	185,800	174,800	-11,000
Vermont	192,560	183,560	-9,000
Virginia	760,800	700,800	-60,000
Washington	692,750	614,750	-78,000
West Virginia	369,200	341,200	-28,000
Wisconsin	824,680	760,680	-64,000
Wyoming	142,230	132,230	-10,000
Virgin Islands	50,600	50,600	
Undistributed 1/		1,000,000	+1,000,000
Total	22,939,000	21,939,000	-1,000,000

1/ To be allocated to those States with best opportunities for increasing softwood sawtimber.

Project (29)

COOPERATION IN FOREST FIRE CONTROL

1969	$14,396,000
1970	16,469,000
1971	14,469,000
Decrease	-2,000,000

A program decrease of $2 million is proposed due to the urgent need to reduce Government spending to the lowest possible level.

By working together in the Cooperative Forest Fire Control program, individual States and the Forest Service bring fire protection to the Nation's State and privately owned woodlands and important watersheds. The State forestry departments provide the manpower and organization to do the job in each State. The Forest Service cooperates through providing financial assistance, coordination, inspection, training, dissemination of research knowledge, and development and procurement of fire equipment.

Past efforts to increase State fire protection efficiency have resulted in steady progress. From 1949 through 1968 State and private land placed under protection has increased from 357 million acres to 486 million acres. In the 10-year period 1959-1968, States reported an average of 107,804 fires which burned 3,773,037 acres of valuable forest and watershed lands each year. This compares to the previous 10-year period, 1949-1958, when an average of 146,320 fires burned 9,256,992 acres each year. The Clarke-McNary Act authorizes Federal participation up to one-half of the costs. Expenditures in the program increased from $28 million in 1949 to over $98 million in fiscal year 1969. The Federal share during this same period increased from about $9 million to over $14 million. Federal authorization is now at the $20 million level. The pattern of cost sharing is shown below.

Fiscal Year	Federal appropriations	Total expenditures	Percent (Federal)
	(in thousands)		
1926	$710	$2,460	28.9
1936	1,635	5,221	31.3
1946	7,340	16,899	43.4
1956	10,023	42,393	23.6
1966	12,803	85,858	14.9
1969	14,396	98,000	14.7

The proportion of Federal contributions has been decreasing since 1946. Fire protection and analysis studies show that the estimated cost of the fire control job on State and private lands increased from $40 million in 1949 to $123 million in 1965. The increased costs are primarily attributed to rising operating costs and to an increase of nearly 25 percent in the area protected.

There are many forest resource values-at-risk. These values are rapidly increasing due to expanding population and increasing human needs. The population of our Nation has increased from 117 million to 200 million between 1926 and 1968. During this time there has been a vast increase in recreation use of forest land. A recent survey showed that development of permanent summer homes and campsites on private forest lands has increased nearly five-fold in the past 10 years.

Resources values are increasing and as they do, damage from uncontrolled fires become less tolerable. Such resources as life, timber, water, forage, recreation, natural beauty, soil, wildlife, air quality, and other environmental factors are at stake. The Forest Service, in cooperation with the National Association of State Foresters, Bureau of Land Management, and others, is making an intensive

study of values-at-risk. By 1970 it is planned to apply interim dollar values, nationally, to all of the forest resource values-at-risk in order to evaluate fire control expenditures for State and private lands.

Man-caused fires continue to be the major problem confronting the State forestry departments. Although prevention efforts have increased over the years with the Smokey Bear and other prevention programs, man-caused fires have increased from 76,000 in 1949 to over 104,000 in 1968. Incendiary fires, especially in the South, along with debris burning nationwide, accounted for 61 percent of all man-caused fires in 1968 on State and privately owned lands.

To find solutions to the incendiary fire problem, special studies are being undertaken. For example, preliminary results show that the contactor program in Louisiana is effective in reducing the number of fires. The Louisiana Forestry Commission performs special tasks for the residents in the study area such as plowing firelines, control burning, hazard reduction, and land clearing. A significant reduction in the number of fires resulted from these personal contacts and the people are being made aware of the benefits of keeping wildfire out of the woods. Mississippi also has implemented a contactor program to aid in reduction of man-caused fires.

Coupled with the cooperative research study, the Louisiana Forestry Association has been conducting an intensive information program in the press and on radio and television to change attitudes of people toward arson. Another study is being established in Georgia which should aid in finding those prevention techniques which are most effective in reducing man-caused fires.

The incidence of disaster (over 300 acres) fires presents a serious national problem and a threat to many sections of rural America. In 1968 these large fires accounted for only one-half of one percent of all fires, yet they burned 35 percent of the non-Federal protected area.

The Nation also faces the threat of nuclear fire from enemy attack. Recent studies indicate that as much as 10 percent of our total area could be set on fire from nuclear attack. Disaster fires of these proportions would threaten the survival of our Nation, if not controlled.

The table at the end of this section shows proposed financing in fiscal year 1971 compared with fiscal years 1969 and 1970.

Examples of Recent Accomplishments

Aircraft use. Many States have intensified the use of both fixed-wing and helicopter aircraft. Among the States reporting use of airplanes in fire detection were Connecticut, Georgia, Idaho, Maine, Michigan, New Hampshire, New Jersey, North Carolina, Oregon, Rhode Island, Texas, Vermont, and Washington. These States and others are beginning to use aircraft to supplement lookout towers and in some instances to replace lookouts. States also reported a large increase in the use of aircraft to drop retardants and to support actual fire suppression during the 1968 fire season.

Training. More emphasis is being given to training in all aspects of fire control work. The Forest Service has sponsored courses in fire generalship and fire behavior. Fire simulators continue to be used to impart realism to training sessions. Most States now either own a simulator or cooperate in conducting fire simulation courses. Training in law enforcement procedures is carried on by several States with additional ones planning this specialized training in the future.

Project (29)

Prevention. Oregon requires each railroad which operates within the State to prepare a special fire plan to help reduce the railroad caused fires. Washington requires a standard type spark arrestor on all locomotives operated in the State. In addition, many States hold special meetings with operating railroad officials to find ways to reduce fire starts. States, especially in the South and West conduct prescribed burning and hazard reduction for landowners at cost. Also fire lines and fuel breaks are constructed to reduce the chance of fires spreading. North Carolina, Florida, South Carolina, Montana, Idaho, Oregon, and Washington are among those States having active programs.

COOPERATIVE FOREST FIRE CONTROL

	State and Private Funds Expended FY 1969	Federal Allotments FY 1969	Federal Allotments FY 1970 Estimate	Federal Allotments FY 1971 Estimate 1/
Alabama	$1,436,074*	$424,493	$486,893	$424,493
Alaska	156,569	143,771	164,831	143,771
Arizona	34,837	34,734	54,740	34,734
Arkansas	1,235,958	420,358	482,173	420,358
California	23,700,498	1,006,050	1,153,860	1,006,050
Colorado	438,652	118,187	132,152	118,187
Connecticut	345,212	109,683	125,868	109,683
Delaware	20,021	15,440	20,670	15,440
Florida	5,604,393	562,578	645,258	562,578
Georgia	5,224,229	595,307	682,862	595,307
Hawaii	62,633*	50,888	58,493	50,888
Idaho	862,941	229,030	260,375	229,030
Illinois	263,295*	96,465	110,700	96,465
Indiana	207,116	77,370	88,680	77,370
Iowa	96,804	55,784	63,974	55,784
Kansas	540,006	155,874	178,689	155,874
Kentucky	1,035,168*	293,656	336,751	293,656
Louisiana	2,915,274	471,161	540,386	471,161
Maine	1,524,909	396,919	455,224	396,919
Maryland	788,424	168,854	193,619	168,854
Massachusetts	497,388	196,269	225,129	196,269
Michigan	2,306,634	500,188	573,703	500,188
Minnesota	767,001	320,982	368,172	320,982
Mississippi	2,140,022	480,499	545,309	480,499
Missouri	1,681,596	361,243	414,283	361,243
Montana	582,715	156,261	178,076	156,261
Nebraska	329,844	122,656	136,706	122,656
Nevada	488,109	127,785	144,310	127,785
New Hampshire	310,321	105,924	121,524	105,924
New Jersey	828,878	182,781	209,691	182,781
New Mexico	91,792	74,880	80,415	74,880
New York	1,988,064	382,496	438,656	382,496
North Carolina	2,862,765	502,216	576,121	502,216
North Dakota	13,388	14,008	24,128	14,008
Ohio	728,124	150,593	172,823	150,593
Oklahoma	326,553	174,928	200,668	174,928
Oregon	4,117,170	512,685	587,955	512,685
Pennsylvania	1,948,529	372,833	421,848	372,833
Rhode Island	237,526	52,198	59,803	52,198
South Carolina	2,208,691	420,847	482,662	420,847
South Dakota	166,273	51,043	58,648	51,043
Tennessee	2,510,498	445,793	511,313	445,793

Project (29)

COOPERATIVE FOREST FIRE CONTROL -- continued

	State and Private Funds Expended FY 1969	Federal Allotments FY 1969	Federal Allotments FY 1970 Estimate	Federal Allotments FY 1971 Estimate 1/
Texas	$1,176,107	$346,968	$395,168	$346,968
Utah	352,933	94,579	106,229	94,579
Vermont	108,515	61,688	70,853	61,688
Virginia	1,935,549	414,613	475,453	414,613
Washington	3,868,629	526,290	603,705	526,290
West Virginia	590,051	189,011	216,701	189,011
Wisconsin	2,314,518	437,796	502,146	437,796
Wyoming	123,499	68,159	78,104	68,159
Administration, inspection, prevention and special services	- -	1,121,186	1,252,500	1,194,186
Totals	84,094,695	14,396,000	16,469,000	14,469,000

* Fiscal year 1968 expenditures the latest available.

1/ While the amount available to a State may, if the allotment is small, exceed previously computed expenditures by that State, the actual payment to a State never exceeds State and private funds expended by or under the control of the State.

Project (30)

COOPERATION IN FOREST TREE PLANTING

1969	$306,000
1970	313,000
1971	313,000

No program increase is proposed.

This forestation program encompasses cooperative efforts by 46 States, Puerto Rico, and the Virgin Islands. The Forest Service, through financial and technical assistance and other services, aids in the production, acquisition, and distribution of tree planting stock for forest and windbarrier plantings on non-Federal land. The amount expended by the Federal Government in cooperation with any State shall not exceed the amount expended by the State. This program (authorized under Section 4 of the Clarke-McNary Act of 1924) helps provide tree planting stock for the Nation's needs for a wide variety of uses. Included are:

Timber production
Wildlife habitat
Watershed protection
Recreation
Rural beautification
Special forest products

This program also assists the States in meeting increased costs for new equipment for extracting seeds, seedling-lifting, nursery maintenance, and other nursery operations.

The 1969 Federal-State cooperation in the production and distribution of forest and shelterbelt planting stock, for use on non-Federal land, continued at about the 1968 level. The 46 cooperating States operate 89 nurseries that produced over 510 million trees for forestation and shelterbelt planting this year.

The number of trees shipped to landowners during each of the past five fiscal years in comparison with all forest and shelterbelt trees produced by public and private nurseries is as follows:

Year	Federal-State Cooperative Program	Other State Distribution	Total Output All Nurseries*
1965	508,651,000	37,805,000	841,529,000
1966	521,440,000	50,530,000	819,640,000
1967	572,087,000	30,307,000	922,247,000
1968	544,420,000	29,646,000	888,985,000
1969			

* Does not include production from commercial nurseries.

Examples of Recent Accomplishments

Many State nurseries are now shipping seedling stock in polyethylene-lined paper bags. Contract growing of seedlings with seed furnished from seed orchards and seed production areas is increasing. Alabama grew about 23 million seedlings under contract, while North Carolina and Mississippi each grew about 21 million seedlings under contract.

The production of genetically improved tree seedlings increases each year. Over 27 million were grown in cooperatively operated State nurseries in 1968-69. Many forest industry seed orchards have commenced seed production; consequently, the volume of improved genetic quality stock grown under contract is also expected to increase rapidly during the next five years.

Project (31)

COOPERATION IN FOREST MANAGEMENT AND PROCESSING

1969	$3,575,000
1970	4,130,000
1971	4,950,000
Increase	+820,000

An increase of $820,000 is needed for the following purposes:

(1) $192,000 is needed to increase availability of technical assistance to loggers, mill operators, and other processors of timber products. This amount, when matched with State appropriated funds up to 60 percent of the total cost, would permit the States to employ an additional 24 forest products utilization specialists whose primary objective would be to provide assistance for improving the supply of softwood lumber and plywood.

(2) $428,000 is needed to strengthen the States' capabilities for providing technical forest management assistance to private non-industry forest owners. This amount, when matched with State appropriated funds up to 60 percent of the total cost, would permit the States to employ an additional 55 service foresters whose primary objective would be to increase softwood sawtimber supplies through improved management, harvesting and marketing. The number of State employed service foresters would be increased to 883.

(3) $200,000 is needed to provide four Federal forest products utilization specialists and other Federal technical support where needed and to provide training of State and Federal personnel.

Public-owned and industry-owned commercial forests cannot be expected to supply the Nation's total softwood sawtimber needs. Improving the supply situation for both the short- and long-term depends to a large extent on improving the management of 300 million acres of commercial forest in private non-industry ownerships. It is essential that the owners of these lands be given technical help to make their timber available for supplying the Nation's needs for softwood sawtimber for housing and other purposes, and to insure that their forest resources are so managed that they will adequately provide for future supplies. It is also essential that loggers and wood-using industries receive increased assistance in logging methods and equipment use, recruiting and training of workers, improving processing methods, increasing plant capacity, procuring raw materials and arranging for financing.

The increase in level of assistance would be in areas having the best potential for increasing the production of softwood sawtimber, i.e., States in the East, the West Coast, and parts of the Lake States.

The program provides technical forestry assistance to private landowners, loggers, sawmill, and other plant operators in 49 States, Puerto Rico and the Virgin Islands. The work is carried out in cooperation with the State forestry agencies.

At the local level, State service foresters serve as USDA forestry representatives on county and multicounty rural development panels. This participation, as a catalytic activity, provides intermediate outputs to social, economic and environmental planning and development in terms of technical assistance.

Attention to the needs and ambitions of youth; provision for adequate health, educational, recreational and cultural institutions; vocational training opportunities; enhancement of the environment are all a part of rural development. Community planning and development involves the efforts of local people, local government, private enterprise and public agencies. These funds are used to staff State forestry agencies to meet needs for forestry inputs to regional development

commissions, State comprehensive plans, liaison and coordination with other agencies with programs for rural development and general administration of State forestry cooperative rural development activities.

The following table shows major accomplishments that have been, or will be, obtained from Federal appropriations when matched with State appropriations:

Major benefits	Unit	Fiscal year 1969	Fiscal year 1970	Fiscal year 1971
Woodland owners given woodland management assistance	number	113,000	126,000	145,000
Forest products operators given assistance	number	13,300	14,300	17,000
Area of woodland involved	acres	7,300,000	7,450,000	8,860,000
Volume of timber products sold or harvested	MBF	872,000	945,000	1,125,000
Value of timber products sold or harvested	dollar	31,883,000	25,500,000	30,000,000
Owners referred to consulting and industrial foresters for additional assistance	number	3,300	3,500	4,200

The following table shows proposed financing in fiscal year 1971 compared with fiscal years 1969 and 1970. The proposed increase of $820,000 is not included in the distribution by States for 1971. A separate apportionment formula will be determined after consultation with the States. The increase would be allocated to those States with the best opportunities for increasing softwood sawtimber.

Cooperation in Forest Management and Processing

State	FY 1969	FY 1970 estimate	FY 1971 estimate
Alabama	$49,200	$63,400	$63,400
Alaska	30,100	30,200	30,200
Arkansas	53,100	64,200	64,200
California	51,400	58,000	58,000
Colorado	34,900	40,900	40,900
Connecticut	31,800	34,600	34,600
Delaware	6,958	30,500	30,500
Florida	132,000	161,300	161,300
Georgia	123,100	149,000	149,000
Hawaii	15,275	30,800	30,800
Idaho	30,500	31,800	31,800
Illinois	68,300	65,900	65,900
Indiana	53,800	61,900	61,900
Iowa	39,900	44,600	44,600
Kansas	32,342	35,700	35,700
Kentucky	124,900	151,500	151,500
Louisiana	50,600	62,000	62,000
Maine	76,000	87,300	87,300
Maryland	59,100	72,900	72,900
Massachusetts	34,700	39,800	39,800
Michigan	98,500	123,900	123,900
Minnesota	68,000	86,500	86,500
Mississippi	75,000	86,100	86,100
Missouri	114,700	144,400	144,400
Montana	30,700	32,600	32,600
Nebraska	31,700	35,300	35,300
Nevada	23,273	30,100	30,100

Project (31)

Cooperation in Forest Management and Processing -- continued

State	FY 1969	FY 1970 estimate	FY 1971 estimate
New Hampshire	41,800	47,500	47,500
New Jersey	36,700	40,200	40,200
New Mexico	30,400	32,100	32,100
New York	157,700	151,500	151,500
North Carolina	162,800	200,300	200,300
North Dakota	30,200	30,500	30,500
Ohio	88,500	105,500	105,500
Oklahoma	25,117	35,400	35,400
Oregon	32,700	38,800	38,800
Pennsylvania	115,500	139,900	139,900
Puerto Rico	30,300	31,000	31,000
Rhode Island	16,752	30,600	30,600
South Carolina	87,900	104,000	104,000
South Dakota	30,400	31,600	31,600
Tennessee	69,900	81,300	81,300
Texas	47,700	54,600	54,600
Utah	30,100	30,200	30,200
Vermont	69,800	83,300	83,300
Virginia	171,900	165,900	165,900
Virgin Islands	9,683	30,000	30,000
Washington	42,500	47,500	47,500
West Virginia	68,500	77,700	77,700
Wisconsin	197,800	190,900	190,900
Wyoming	24,000	30,300	30,300
Total to States	3,158,500	3,665,800	3,665,800
Reserve	- -	- -	820,000 1/
Forest Service Administration	416,500	464,200	464,200
Total appropriation	3,575,000	4,130,000	4,950,000

1/ Pending development of new formula.

Project (32)

GENERAL FORESTRY ASSISTANCE

1969	$1,652,000
1970	2,027,000
1971	2,207,000
Increase	+180,000

An increase of $180,000 is needed for increasing softwood timber supplies. The funds will be used under contractual arrangements and agreements with States and consultants to carry out needed measures to achieve short-range production goals. Projects will include assistance in implementation of research findings, harvesting, processing, marketing, and forest resources planning and development. Special consideration will be given to projects that also provide additional job and income opportunities in rural areas.

Funds provided for this program are used to:

(1) Accomplish highly specialized forestry assistance not available through other Forest Service cooperative programs. Technical assistance is provided to the State foresters, other State and Federal agencies, and private individuals, groups, and organizations, to more fully develop and utilize forest resources to meet the social and economic needs of communities and the Nation's need for forest products and services.

(2) Provide leadership in Forest Service responsibilities in rural development.

(3) Increase the production of higher quality softwood and hardwood timber.

(4) Extend the supplies of wood through improved forest products utilization.

(5) Increase the production of other goods and services from forest land.

(6) Insure orderly development and use of forest resources in planning and development districts and regions.

(7) Increase professional and technical competencies by specialized training of Forest Service and State forestry personnel, and others.

The Forest Service and cooperating State foresters work with communities and rural areas in many ways. Over the years, they have assisted in considerable rural development, not associated directly with their more traditional responsibilities.

The objective of the Department's Rural Development Program is to build new and greater opportunities for creative and satisfying living, work, and play in rural America. To get the job done, technical forestry assistance is needed in comprehensive and functional planning, rural industrialization, manpower training and education, and environmental improvement.

These funds are used to meet the assigned responsibilities of the Forest Service and to assist cooperating State foresters in rural development efforts. Local groups have consistently shown that they have the vision and ability to spur community action toward economic and social growth. A few examples may demonstrate how this has been done.

Recently, the Forest Service contracted with the Ojo Caliente Cooperative to produce signs for National Forests in New Mexico, Arizona, and Texas. The craftsmen in this cooperative were all unemployed citizens of this small non-industrial village in northern New Mexico. With assistance and encouragement from the Forest Service and others, the cooperative now constitutes the major industry producing Spanish-style furniture and wooden toys in addition to signs for the Forest Service.

The first mill to manufacture plywood in Colorado was established a few years ago through community and industry action, technical assistance from the Forest Service, and a Government loan. This mill, drawing on timber from the nearby San Juan National Forest, had the capacity to provide jobs for hundreds of persons at the mill and in the woods. The first 6 months of operation showed a new payroll in the community of over half a million dollars, a sharp increase in electric power and natural gas consumption, about 2,000 truckloads of logs delivered, and over 22 million square feet of plywood produced for the market.

In Webster Springs, West Virginia, a town of about 2,000 population, a new woodworking plant utilizing hardwoods initially brought new jobs to 70 people and a weekly payroll of $2,000 to the community.

Examples of Recent Accomplishments

A pine sawmill owner in southern Louisiana requested an analysis of the entire operation which he had recently purchased. Manufacturing costs and production rates were determined, and poor practices pointed out. Miscut logs and careless scaling practices were costing the mill over $10,000 annually. Inadequate control of slab thickness and product width, thickness, and length were resulting in a recovery of 2.7 tons of chips per thousand board feet. Normal chip yield is about 1.6 tons. Corrections that will allow this excess volume to be recovered as lumber rather than chips will increase revenues for lumber by approximately $35,500 per year. Currently, the production rate at this mill is about 100,000 board feet per week. Previous to this study, it was 80,000 per week.

A furniture plant in Oregon was experiencing considerable difficulty with its wood bending operation, losing about 50 percent of its stem bends. The yield was so low the plant was forced to supplement its bent-wood production with sawed-out curves from solid wood, a much costlier procedure. Forest products utilization personnel successfully demonstrated a method that increased bent-wood production yield to 95 percent, much to the amazement and satisfaction of the owner and manager.

Mrs. HANSEN. The committee will adjourn until 1 p.m.

AFTERNOON SESSION

ROBERT KERR MEMORIAL ARBORETUM

Mrs. HANSEN. The committee will come to order.

I received a letter from the very distinguished majority leader, Congressman Albert, relative to funding of $75,000 for the Kerr Arboretum. Have you requested funds for the Kerr Arboretum in this budget?

Mr. CLIFF. No, ma'am.

Mrs. HANSEN. Did you spend last year's funds?

Mr. CLIFF. The funding for this current fiscal year has been diverted to other purposes.

Mrs. HANSEN. Diverted to what?

Mr. NELSON. As I recall there weren't any specific funds put in the 1970 budget but there were instructions in the report. They were to the effect that if we had funds otherwise not obligated we should consider Kerr Memorial first priority.

Mrs. HANSEN. So you conveniently found no funds.

Mr. CLIFF. We didn't find any funds to do the full job needed. However, the southern region, with assistance from the National Audubon Society and some minor savings from other projects, is developing plans for the Robert Kerr Memorial Arboretum and Nature Center. We estimate these plans will be about 40 percent completed by June 30.

Mrs. HANSEN. This committee appropriated the funds you requested last year because we realized that your receipts were dependent upon your funding level. What was the percentage of funds held in reserve by the Bureau of the Budget aside from construction?

Mr. CLIFF. Only part of the construction funds, Madam Chairman, and that amounted to $5.9 million.

(Discussion off the record.)

CONSTRUCTION DEFERRALS IN FISCAL YEAR 1970

Mr. CLIFF. Under the instructions for construction deferment, we were authorized to go ahead with certain projects that had already been started.

Mrs. HANSEN. Insert in the record a list of those items.

Mr. CLIFF. Yes, we will be glad to do that.

(The information follows:)

PLANNING AND DEVELOPMENT WORK NOT AFFECTED BY CONSTRUCTION DEFERRAL

[Dollars in thousands]

	Fiscal year 1970	
	Funds [1] appropriated	Planning or development work underway
Forest protection and utilization:		
Recreation-public use	$7,668	$6,492
Construction and maintenance of improvements for fire and general purposes (including communications)	2,695	2,346
Water resource development related activities	4,443	3,127
Forest research	931	71
Subtotal, F.P. & U	15,737	12,036
Forest roads and trails (program level)	127,434	125,231
Total	143,171	137,267

[1] Includes proposed supplemental for increased pay costs.

EXEMPTIONS FROM CONSTRUCTION DEFERRALS

Mr. CLIFF. Also the roads that contributed to timber harvesting were exempt from the construction holdback. A considerable part of our construction program was exempt from the deferment. However, those projects that were not started, and particularly the ones that didn't contribute to timber harvesting and timber production were deferred.

Mr. NELSON. In addition, the exemptions included those projects that were necessary to repair flood or other disaster work.

Mr. CLIFF. That is correct. Those kinds of projects were also exempt.

FOREST FIRE RESEARCH IN ALASKA

Mrs. HANSEN. I received a letter from the Alaska Conservation Society. I will read the opening paragraph:

> I have been following the progress of recent deliberations on appropriations with interest and concern. A statement attributed to Senator Stevens of Alaska—and very likely garbled in the common fashion of the press—indicated that hearings were being held on appropriations for forest fire control and forest fire research. Included in this statement, as it reached our local paper, was the notion that the Forest Service should step up its efforts on fire control in Alaska. Fire control on Forest Service land in Alaska is the responsibility of that agency as you undoubtedly know. It so happens that most of the national forest land in Alaska is relatively fire resistant; it is part of the wet coastal forest. Perhaps increased fire control effort could be used on the Chugach National Forest on the Kenai Peninsula, but that is somewhat beside the point. Fire control on most of the land in Alaska that is subject to bad or frequent fires is the responsibility of the BLM.

This letter was signed by Frederick C. Dean, president. What are you doing in Alaska on forest fire research?

Mr. ARNOLD. In Alaska we have a small forest fire research project of two scientists.

Mrs. HANSEN. What is the amount of funding?

Mr. ARNOLD. The amount of money there is $110,000. However, we support the needs of national forests and BLM with the research done

in our fire laboratories. Missoula, Mont., has backed up their work with lightning and provided some help on weather modification. We did fire mapping work in a pilot model basis for them last year.

Mrs. HANSEN. A total of $110,000.

Mr. ARNOLD. Yes, ma'am.

PINYON-JUNIPER AND SHRUB GENETICS RESEARCH

Mrs. HANSEN. Congressman Baring from Nevada would like to have funding included in the budget for development of superior strains of both native and exotic shrubs, for revegetation of wildlife habitat, screening and esthetics on recreational areas, watershed management, and soil stabilization. Mr. Arnold, you had some correspondence with him on February 27. What is included in this budget for Mr. Baring's program?

Mr. ARNOLD. I think the two problems that he refers to include the Pinyon-juniper research affecting about 30 million acres in Utah and Nevada and the shrub genetics and improvement work for wildlife habitat and watershed protection. The Pinyon-juniper research will be headquartered at Reno, Nev., when we are able to fund the work. The shrub genetics research is now at Provo, Utah.

Mrs. HANSEN. Have these programs been started?

Mr. ARNOLD. We have a small start on the Provo work but we haven't been able to place the funds in the budget for Reno.

PROPOSED LABORATORY AT SEATTLE, WASH.

Mrs. HANSEN. I have a letter from Mr. Bert Cole, Commissioner of Public Lands, Washington. He is discussing the problem of two scientists quartered at the University of Washington in the College of Forest Resources, and a Seattle forest science laboratory that is needed to expedite research accomplishments.

Two years ago the General Services Administration assigned an outstanding site on Sand Point Way to the Forest Service for this much needed facility. It's all ready to use. I am familiar with the Administration's current restrictions on Federal construction. I urge, however, prompt allocation of $120,000 to permit preparation of detailed plans and specifications for such a structure.

What are the details on this facility?

Mr. ARNOLD. We obtained a 5-acre site, as Mr. Cole mentioned in 1968. We have a program of research in Seattle in forest fire, utilization, recreation, and engineering. All of the research does need laboratory facilities. The tentative estimates are that the building would cost about $1,350,000, and it would require about $120,000 to plan. This is a high priority item in our future laboratory planning.

Mrs. HANSEN. If you continue at this rate you will never complete these laboratories.

Mr. ARNOLD. We hope that we do catch up.

Mrs. HANSEN. Nonsense. How can you complete this work if you only request $6 million for pollution control in this year's budget when you need $43 million? That is a difference of $37 million. How much will the construction costs be for the 15 laboratories you anticipate building?

Mr. ARNOLD. The construction of those 15 labs comes to just under $22 million.

Mrs. HANSEN. Your total need is $59 million in excess of your request. I think these funds should have been included because your revenues are dependent upon your total investment.

Mr. ARNOLD. Yes, ma'am.

Mrs. HANSEN. When funds are curtailed for forest operations you literally curtail the income of the United States. This is something the Bureau of the Budget does not consider.

They don't understand that you cannot continue to curtail funds without it having an adverse effect.

SEED RESEARCH PROGRAM

Mr. Cole also mentioned in his letter a need of $50,000 for seed research program at the Pacific Northwest Forest and Range Experiment Station. Would you please comment on this?

Mr. ARNOLD. That again is the work at Corvallis, Madam Chairman, and deals with getting better seed as a result of tree improvement research. This research is associated with the tree breeding work of Douglas Fir.

Mrs. HANSEN. Where is that on your priority list?

Mr. ARNOLD. Regeneration and tree improvement are always high on our priority list.

Mrs. HANSEN. Do they have the necessary space available for this project?

Mr. ARNOLD. The space available in this would not be required in new laboratory space, because the breeding research——

Mrs. HANSEN. If these funds are included in this year's appropriation can you assure me that they will be spent?

Mr. ARNOLD. Yes, ma'am.

POLLUTION AT MADISON

Mrs. HANSEN. Mr. Obey, we discussed the problems of the Madison Laboratory at some length yesterday. The total amount needed for the pollution abatement for initial projects is $1.6 million, which is not provided for in this budget.

Mr. OBEY. Thank you very much. I do know that there is considerable concern on the part of the citizens of the Madison area about that problem.

Mrs. HANSEN. The President has directed that as of December 31, 1972, all pollution from Federal installations must be abated. This year $43 million is needed to comply with this directive, yet only $6 million is included in this budget.

I have another letter concerning forest research on balsam aphid beetle, and the biological control of root disease. Are there items in this budget for this research work?

Mr. ARNOLD. Yes. There are no increases for that.

Mrs. HANSEN. I understand that.

(Discussion off the record.)

Mrs. HANSEN. Why were the Clarke-McNary funds cut after this committee increased them last year to meet the States demands?

Mr. CLIFF. Madam Chairman, we discussed that some yesterday morning as you recall. This had to do with the timing of the preparation of the budget with respect to the passage of the appropriations act. We started forming our budget request prior to the passage of the act. The starting point on budget estimates, which were given to us as the President's initial requests for the previous year didn't recognize the increase of $2 million which the Congress subsequently added.

Mrs. HANSEN. If we had enacted the appropriation in June, the Bureau of the Budget would have taken the same attitude toward congressional added-ons. That is very clear.

Mr. CLIFF. Nevertheless, we did indicate in our initial budget request the need for continuation of this program, but it was finally decided that this would be a lower priority than some of the other activities which were recommended for increase. These decisions, of course, as you know, are made in a process of negotiations with the Department of Agriculture and the Budget Bureau. The fact that this was cut back does not diminish our feeling that the program is a good one, and that there is justification for expanding it.

Mrs. HANSEN. Let's look at one significant fact. In 1926 the Federal share appropriated for fire control was 28.9. In 1936, and bear in mind this was right in the middle of the depression years, it was 31.3 percent. In 1946, 43.4 percent, in 1956, 23.6 per cent, in 1966, 14.9 percent, and in 1969 it was 14.7 percent. Hasn't the impact been that the States have had to increase their expenditures for their firefighting program?

Mr. CLIFF. Actually, this is what has happened. The States have gradually increased their expenditures.

Mrs. HANSEN. Hasn't it been necessary?

Mr. CLIFF. It has been necessary.

Mrs. HANSEN. You can't let the land burn.

Mr. CLIFF. The Federal Government has increased its expenditures over the years, but not in proportion to the increase at the State level.

Mrs. HANSEN. Supposing the States said, "We are going to curtail our expenditures." You state in your justifications: "Damages from uncontrolled fires become less tolerable." I think this is true.

Mr. CLIFF. As resource values increase, fire losses do become more intolerable.

NEED FOR INCREASED FUNDS

Mrs. HANSEN. Mr. Cliff, you say on page 128 of your justifications: "Man-caused fires continue to be the major problem confronting the State forestry departments."

The character of the population today is very mobile.

An Oregon user comes into a Washington forest, a Washington user goes into an Oregon forest. The Federal participation in fire prevention control should increasingly reflect this mobility.

Mr. CLIFF. Of course the theory, Madam Chairman, behind the cooperative forest fire protection work is that the people of the Nation have a very definite interest in seeing that the State and privately

owned lands are protected from fire. They have use of these lands for recreation. They do travel from State to State. The protection is essential for protection of watersheds, and many of these watersheds are interstate. That was the basic theory.

Mrs. HANSEN. Is it less of a valid theory in 1970 than it was in 1962?

Mr. CLIFF. No; it is not. Of course the law allows——

Mrs. HANSEN. Don't tell me this country is in worse condition today than it was in 1931 or 1936?

Mr. CLIFF. No; I am sure that is not intended at all.

Mrs. HANSEN. Don't you think you could make the same proportional input into our national forests that was made in 1936?

Mr. CLIFF. That would be impossible, Madam Chairman, unless the $20 million authorization in the law is increased.

Mrs. HANSEN. Last year the funding level was raised to $16,396,000.

Mr. CLIFF. $20 million would only be 20 percent of the nearly $100 million being spent by the States and the Federal Government combined.

Mrs. HANSEN. Is there any reason why this shouldn't be increased to $20 million?

Mr. CLIFF. My personal opinion is that it should be up to the full authorization, but this has not been allowed in the budget presentations.

Mrs. HANSEN. You have the ability to increase your participation with the States, but because of financial restrictions imposed you are unable to do this.

Mr. BACON. Madam Chairman, I would like to supplement the Chief's statement on the need. In cooperation with the State foresters we periodically make an analysis of what would be needed in terms of total funds to adequately do this fire protection job on State and private forest lands.

Five years ago our estimate showed that to do the job, at the cost levels 5 years ago, would require $123 million total input, State, and Federal. You will note that the current level of input is $98 million of all funds. As to conditions 5 years ago with respect to cost the total is not yet meeting the need that was estimated at that time.

Mrs. HANSEN. Yet the value of our forest lands is increasing year by year and will continue to increase.

Mr. CLIFF. That is correct.

DOLLAR VALUATIONS ON PROTECTED VALUES

Mr. BACON. I might point out, Madam Chairman, that one of our difficulties has been to put dollar valuations on the total protected values, rather than just the timber values.

Mrs. HANSEN. From now on this committee is going to require that you place the total dollar valuation on your lands, because this is something that must be measured.

If dollars are the only thing that people are going to consider of any value, then you have to attach a dollar value to your lands. You have to begin to assign dollar values to all of your resources.

Mr. BACON. This is certainly true, Madam Chairman. We have a joint study underway now with the State foresters to evaluate and

determine what these total values are as best as we can with the research available. For next year's presentation we hope to strengthen our data on the total values that we do really have at risk.

Mrs. HANSEN. In many States they have a problem of financing. They assess all landowners, as you are well aware, that have trees for forest fire protection, and that assessment continues to increase each year. After a while you realize that the assessments are not enough to pay the fire hazard costs. For example, along the Columbia River 40 years ago there was no road. Therefore, no one could get into this forest land. Travel was entirely by river. A road was opened in 1930.

Travel at first was minimal. Then it became one of the most traveled roadways, so that all summer and fall and spring you had a continual stream of tourists. Anyone of those travelers could have set a fire. The average urban oriented person of today does not have the familiarity with programs of individual fire protection that he had in the years preceding this type of travel. Years ago people spent more hours in the outdoors, and they were closer to the outdoors. People lived amidst a forest environment. They were taught the use of it. People that had campfires knew how to put them out. They knew how to build them in the first place and how to protect the forest. But today you don't have that kind of use.

Mr. BACON. That is certainly true.

Mrs. HANSEN. Therefore, your forest fire incidence has increased and will continue to increase because of the increase in tourists' travel. This is true not only for the U.S. forest lands but for every piece of forest land in this country. There is an increasing number of residential areas close to forest lands, so that you have the potential of not only a forest fire, but of a fire that can destroy a community overnight. Look how the winds swept a fire through the canyons in southern California. You pick up the paper almost any August, September, or October morning and find so many residences in the Los Angeles area have been destroyed.

Mr. CLIFF. What you say about the urban development extending out into forested lands is certainly true. This is happening all over the Eastern United States and in parts of the West. Land that was formerly relatively wild and undeveloped is now being invaded by subdivisions, and there remains forest cover that is a fire hazard. The protection problems are changing in these areas of urban development.

Mrs. HANSEN. You can imagine the headlines if a fire is neglected or if it sweeps beyond control, and three or four children are burned to death in a home adjacent to a forest. I think the time has arrived in the United States that we don't govern by crisis. We must plan and prepare and protect.

COOPERATION IN FOREST MANAGEMENT AND PROCESSING

An increase of $820,000 is requested for cooperation in forest management and processing. What is the justification for this increase?

Mr. BACON. Madam Chairman, this increase will be used for three different kinds of activities. First we propose to use $192,000 to strengthen the forest products utilization assistance program, which is a cooperative effort with the States. At the present time this item supports the employment of 44 State employees engaged in this im-

portant assistance to loggers and forest products processors. This would permit the States to add an additional 24 people to this activity, and thereby make a real return in reducing loss from mis-manufacture, from poor seasoning practices, etc.

$428,000 is proposed to be used to strengthen the States capabilities to provide technical service assistance to individual forest landowners. There are 828 State-employed service foresters This would increase the number to 883. This item is a cost-sharing arrangement in which the present level is about 60 percent State funds and 40 percent Federal funds.

An additional amount of $200,000 is to employ four more Forest Service specialists in this field to backstop State people. It will also permit us to establish new, and expand existing training that is needed to keep the State people fully abreast of the latest research information coming from the Forest Products Laboratory and other sources and, to increase their skills in this work.

SMALL OWNERSHIPS OF WOODLAND

Mrs. HANSEN. On page 133, of your justifications you mention woodland owners. Are these small operations?

Mr. BACON. That is correct.

Mrs. HANSEN. One of your greatest potentials in the future against soil erosion and for protection of watersheds is to get small individual owners to plant in an orderly fashion.

Mr. BACON. This is certainly true, particularly when you recognize the fact that 59 percent of the forest lands in this country are in the hands of that size owner. There is a really significant contribution. We estimate that these lands are only producing at about half their capacity to supply timber to meet the future forest products needs of the country.

Mrs. HANSEN. You say in your justifications that in fiscal year 1970, $25,500,000 worth of timber products were sold or harvested. Does that relate to the area of woodland involved?

Mr. CLIFF. That just relates to the owners that got assistance through this program.

Mr. BACON. And only to that part of the assistance that resulted in an actual yield of products. The program provides assistance in stand improvement and tree planting, for example, but these activities do not produce an immediate product yield.

GENERAL FORESTRY ASSISTANCE

Mrs. HANSEN. An increase of $180,000 is requested for general forestry assistance. What is the justification for this increase?

Mr. BACON. Madam Chairman, under this item we hope to give increased emphasis to supplying the Nation's needs now and in the future for softwood sawtimber. We will continue special emphasis in the forest products utilization assistance activity as I mentioned in connection with our cooperative management program.

Mrs. HANSEN. You also have hardwood timber. What are you proposing to do in this respect?

Mr. BACON. Our direction for emphasis in this budget presentation was to focus on softwood sawtimber. We are giving emphasis to the fine hardwoods and are working on a special program for walnut, for example

WALNUT PROGRAM

Mrs. HANSEN. How much have you spent on walnut research, and how much do you propose to spend on walnut research in this budget?

Mr. BACON. We have special efforts which have a direct expenditure of $70,000 devoted solely to this activity. I will have to search the record for the total contribution.

Mrs. HANSEN. Insert the information in the record.

Mr. BACON. Yes, Ma'am.

(The information follows:)

SPECIAL PROGRAM FOR WALNUT

Current level	$100,000
Proposed level in fiscal year 1971	125,000

CHERRY PROGRAM

Mrs. HANSEN. Pennsylvania is very interested in cherry wood research. What are you doing in that field?

Mr. BACON. This is one of the fine hardwoods, of course, and there is need for emphasis on that particular shortage category.

Mrs. HANSEN. What have you done so far aside from saying that there is a need?

Mr. BACON. As far as the cooperative programs are concerned, we have emphasized fine hardwoods assistance. For example, in Pennsylvania we have emphasized that service forestry assistance should focus on these fine hardwoods especially the cherry. Dr. Arnold might be able to speak to the specific research underway for cherry.

Mr. ARNOLD. At Warren, Pa., we have the timber management research effort of $90,000, and about two-thirds of that is related directly to the problems of growing high quality cherry.

Mrs. HANSEN. What is the Nation's inventory of cherrywood at the present time?

Mr. ARNOLD. I don't know what the national inventory of cherry is. It is so scattered on many of the small private wood lots, and I don't have a ready answer, but I believe we could supply one for the record.

Mrs. HANSEN. Insert in the record the inventory of fine hardwoods that are major commercial products.

Mr. ARNOLD. You mean those of high quality?

Mrs. HANSEN. The high quality hardwoods, particularly those used in furniture or in the better quality flooring.

Mr. ARNOLD. The forest survey has made a recent analysis of hardwood availablility. I believe that information is available. I will put it in the record.

(The information follows:)

Net inventory of fine hardwoods—1968

Species:	*International ¼-inch rule (million board feet)*
Black walnut	2,037
Black cherry	5,527
Ash	16,091
Yellow poplar	25,343
Sweetgum	25,647
Hard maple	28,435
Yellow birch	9,717
Selected red and white oaks	81,812

In addition, flooring, which generally utilizes lower quality oak lumber, has an inventory estimated at 94 billion board feet, international ¼-inch rule.

Cooperative Range Improvements

Mrs. Hansen. Please insert in the record page 137 of the justifications.

(The page follows:)

Cooperative Range Improvements

Appropriation, 1970	$700,000
Budget estimate, 1971	700,000

Part of the grazing fees from the national forests, when appropriated, are used for revegetation of depleted rangelands, construction, and maintenance of range improvements, rodent control, and eradication of poisonous plants and noxious weeds. These funds are advanced to and merged with the appropriation, forest protection and utilization, subappropriation, forest land management.

FORMULA FOR APPROPRIATION

Section 12 of the act of April 25, 1950 (Granger-Thye Act), provides that of the money received from grazing fees by the Treasury from each national forest during each fiscal year there shall be available at the end thereof when appropriated by Congress an amount equivalent to 2 cents per animal-month for sheep and goats and 10 cents per animal-month for other kinds of livestock under permit on such national forest during the calendar year in which the fiscal year begins.

Since figures for animal months permitted are not available until after more than one-half of the fiscal year for which funds are appropriated has elapsed, the 1971 appropriation request of $700,000 necessarily represents the best current approximation of the amount which will become available in the calendar year 1970 under the animal-months-permitted formula.

For calendar year 1968, the latest available figures, animal months permitted were 6,718,277 for cattle and horses, and 5,268,304 for sheep and goats. This calculates to $777,193 available under the formula.

Mrs. Hansen. Mr. Obey?

Mr. Obey. No questions.

Mrs. Hansen. Mr. Reifel?

Mr. Reifel. No questions.

(Discussion off the record.)

Forest Roads and Trails

Mrs. Hansen. Insert pages 138 through 142 of the justifications in the record.

(The pages follow:)

FOREST ROADS AND TRAILS

Appropriation Act, 1970	$100,570,000
Budget estimate, 1971	115,000,000
Increase	+14,430,000

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.

Project	1969	1970 estimate	1971 estimate	Increase or decrease
1. Construction of roads and trails	$86,564,458	$127,434,000	$139,898,000	+$12,464,000
2. Maintenance of roads and trails	28,373,459	28,034,000	26,550,000	-1,484,000
Total obligations	114,937,917	155,468,000	166,448,000	+10,980,000
Transfer from Roads and trails for States	-20,931,005	-31,206,198	-34,292,200	-3,086,002
Program under Forest roads and trails contract authorization	94,006,912	124,261,802	132,155,800	+7,893,998
Change in unfunded obligations	-3,006,912	-23,691,802	-17,155,800	+6,536,002
Total appropriation or estimate	91,000,000	100,570,000	115,000,000	+14,430,000

An increase of $14,430,000 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 $115,000,000 for 1971 is required to:

(1) Pay for obligations of the prior year which will be due for payment in fiscal year 1971.
(2) Pay the portion of the 1971 obligations of $132.2 million contract authorization which will require cash payment in that year. The contract authorization being utilized is from the unused portion of the 1969 and 1970 authorizations remaining available.

Following is a summary of the road and trail construction and maintenance to be undertaken in 1971 as compared with fiscal year 1970:

	FY 1970		FY 1971		Change	
	Miles	Amount (in thousands)	Miles	Amount (in thousands)	Miles	Amount (in thousands)
Recurrent road maintenance	120,210	$21,400	122,400	$21,864	+2,190	+$464
Recurrent trail maintenance	101,000	6,634 1/	100,900	4,686	-100	-1,948
Bridge construction (units)	196	7,200	162	6,100	-34	-1,100
Road construction	1,324	87,250	1,529	98,944	+205	+11,694
Trail construction	950	4,000	950	4,000		

1/ Includes $2 million California flood repairs.

	FY 1970		FY 1971		Change	
	Miles	Amount (in thousands)	Miles	Amount (in thousands)	Miles	Amount (in thousands)
Surveys, plans, and supervision (timber purchaser roads)	6,700	$22,200	7,000	$23,000	+300	+$800
Supplementing timber purchaser construction .	1,100	6,584	1,200	7,654	+100	+1,070
Road purchase		200		200		
Total program level ...		155,468		166,448		+10,980

The $10,980,000 program increase is needed to continue in 1971 the increased road construction program in support of National Forest management plans to get more forest land under intensive management. This program change will make it possible to increase the timber supply over time, and make additional timber available through such efforts which also include salvage harvest and thinning. Previous demands on the budget required many short-term decisions to delay planned road construction projects required to adequately support the timber harvesting program. Road construction activities were postponed and realigned with the expectations of a future increased construction program to recapture delay in projects. This time lag in construction of roads and additional time necessary to carry out silviculture practices and to get timber cut and hauled to the mill makes it imperative to continue the accelerated program started in fiscal year 1970. Presently inaccessible areas must be made available in the years ahead for more intensive management. Through timber sale contract allowances, timber purchasers will continue to build many roads tributary to major access, needed to harvest individual sale areas. These roads are also a part of the total development system. Planning, surveying, supervision of construction, and, in some cases, supplemental financing, of roads constructed by the purchaser are from appropriated funds.

At the proposed fiscal year 1971 program level, construction of roads to support activities other than timber will be a minimum amount that is required in support of facilities underway or existing and needing roads to become fully functional and operational. Studies provided for by the 1968 Act are underway and will continue in fiscal year 1971. A Five-Year Development Needs Program is being prepared in fiscal year 1970.

The objectives of the road and trail program are to provide, maintain, and operate with optimum efficiency all of the transportation improvements needed to accomplish the land and resource management, protection, and utilization goals of the Forest Service at the lowest cost of transportation consistent with protecting the watershed, preventing erosion and permanent damage to the natural environment, scenic resource, and fish and wildlife habitat.

All management objectives of the National Forests involve the transportation system either directly or indirectly. Management objectives become so enmeshed with a required transportation system that it is impossible to associate a single road project with only one resource unless it is for very short periods. Even then, other resources are affected and are the factors which determine adequacy.

Construction of roads takes time. Projects contracted for in any given year will usually not be completed until one or two years later. Translated to resource management needs, this means that scheduling the same or a reduced program level for roads in any given year will result in the inability to adequately expand many other National Forest programs until two years later.

An adequate system of Forest development roads and trails is essential to insure the continued contributions and values of the National Forest System. The presence or lack of access by road or trail has a direct or controlling influence on the proper management and beneficial use of National Forest lands and resources. This factor largely determines the value of timber that can be marketed, the size, duration, and distribution of timber sales, and the level of salvage cuttings. It strongly influences the effectiveness of measures for protecting these lands from fire, insects, disease, and other destructive forces. It influences the level of use made of recreation, wildlife, and other resources of the National Forest.

Roads and trails are also needed in the National Forests to help provide the life-lines required by trade and commerce. Extending the Forest road system is essential to rural communities which depend upon National Forest resources for a livelihood. Improvement of rural life is one of the major objectives of the Department and the Forest Service. The goal is to increase the economic and cultural opportunities of rural people to insure that they can enjoy a pattern of living comparable to that of the rest of our citizens. Good roads expand opportunities for rural development. Rural businesses and industries depend on the access they provide to National Forests to move the forest goods and raw materials they need. Roads open up the bountiful recreation sites and opportunities with which our National Forests are endowed. They serve the urban dweller seeking relaxation and open space. An adequate National Forest transportation system is essential for the economic and social well-being of both urban and rural America.

The following tabulation shows the current status of the forest roads and trails system and projected needs:

Item	Existing Mileage	Mileage Needing Reconstruction	Additional Mileage Needed
Roads	199,042	147,200	185,000
Trails	100,257	49,100	23,000

Summary of Work Progress and Accomplishment

	By the Government			By Timber Purchaser		
	FY 1969	FY 1970	FY 1971	FY 1969	FY 1970	FY 1971
Roads (miles)	1,028	1,324	1,529	7,577	7,380	6,200
Trails (miles)	447	950	950	- -	- -	- -
Bridges (No.)	166	196	162	56	63	56

Authorizations for Appropriations a/

Fiscal Year	Construction	Maintenance	Total	Funded	Unfunded
1969	$146,558,000	$23,442,000	$170,000,000	$170,000,000	- -
1970	141,966,000	28,034,000	170,000,000	39,944,000	$130,056,000
1971	143,450,000	26,550,000	170,000,000	- -	170,000,000
	431,974,000	78,026,000	510,000,000	209,944,000	300,056,000

a/ The annual appropriation language and the Department presentation combine the appropriation for Forest roads and trails made pursuant to 23 USC 205 and the appropriation of 10 percent of forest receipts for construction and maintenance of roads and trails pursuant to 16 USC 501. This merger of funds is made in order to simplify the programing, allotment, and accounting of funds at the field level. Since the accounts for these two funds are merged, it is not practicable to distribute obligations and expenditures between the two 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 1970	$345,626,000
Federal-Aid Highway Act of 1968 (1971 authorization available in 1970)	170,000,000
Appropriation, 1970	-100,570,000
Total unfunded beginning of 1971	415,056,000
Federal-Aid Highway Act of 1970 (1972 authorization available in 1971) (proposed legislation)	100,000,000
1971 Budget estimate (cash requirements)	-115,000,000
Balance to remain unfunded as of June 30, 1971	400,056,000

Analysis of Cash Requirements

1.	Unliquidated obligations, June 30, 1969		$44,802,997
2.	Estimated cash requirements to finance 1970 program		57,656,002 a/
3.	Total cash requirements by June 30, 1970		102,458,999
4.	Less cash on hand 1970: Balance from 1969	$9,212,158	
	Appropriation, 1970	100,570,000	109,782,158
5.	Cash available for expenditure		7,323,159
6.	Obligations in 1970 for which cash was not provided in item 2		66,605,800
7.	Estimated cash required to finance 1971 program		55,717,359 b/
8.	Total cash required to cover all 1971 obligations		122,323,159
9.	Cash carryover from 1970 (item 5)		7,323,159
10.	Total cash required in 1971		115,000,000

a/ An estimated 46 percent of the $124,261,802 new obligations will require cash payments during the fiscal year.

b/ An estimated 42 percent of the $132,155,800 new obligations will require cash payments during the fiscal year.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS
Forest Roads and Trails

	FY 1970	FY 1971	Change
Alabama	$677,300	$677,300	
Alaska	1,703,500	4,703,500	+$3,000,000
Arizona	3,766,200	4,266,200	+500,000
Arkansas	2,403,300	2,403,300	
California	31,878,620	32,825,750	+947,130
Colorado	7,451,269	8,451,300	+1,000,031
District of Columbia	3,013,161	3,046,000	+32,839
Florida	848,700	848,700	
Georgia	1,100,750	1,100,750	
Idaho	16,474,800	17,974,800	+1,500,000
Illinois	272,750	272,750	
Indiana	210,900	210,900	
Kansas	15,300	15,300	
Kentucky	924,600	924,600	
Louisiana	667,000	667,000	
Maine	55,400	55,400	
Michigan	2,071,000	2,071,000	
Minnesota	1,762,000	1,762,000	
Mississippi	717,500	717,500	
Missouri	506,500	506,500	
Montana	9,521,600	10,521,600	+1,000,000
Nebraska	30,000	30,000	
Nevada	661,900	661,900	
New Hampshire	397,100	397,100	
New Mexico	4,178,700	4,678,700	+500,000
New York	6,100	6,100	

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS -- continued
Forest Roads and Trails

	FY 1970	FY 1971	Change
North Carolina	$1,158,600	$1,158,600	
North Dakota	136,500	136,500	
Ohio	266,800	266,800	
Oklahoma	164,200	164,200	
Oregon	32,625,300	33,625,300	+$1,000,000
Pennsylvania	1,432,250	1,432,250	
Puerto Rico	113,000	113,000	
South Carolina	671,100	671,100	
South Dakota	805,600	805,600	
Tennessee	812,600	812,600	
Texas	567,500	567,500	
Utah	2,872,400	3,372,400	+500,000
Vermont	390,000	390,000	
Virginia	1,254,300	1,254,300	
Washington	15,019,600	16,019,600	+1,000,000
West Virginia	1,956,000	1,956,000	
Wisconsin	1,191,300	1,191,300	
Wyoming	2,715,000	2,715,000	
Total	155,468,000	166,448,000	+10,980,000

Note: Above planned obligation levels would be subject to adjustments required by emergency conditions and situations.

PROGRAM LEVEL INCREASE

Mrs. HANSEN. An increase of $14,430,000 is requested for forest roads and trails. Justify this request.

Mr. NELSON. That cash increase, Madam Chairman, is the dollars that are necessary to carry on a certain level of program. This is no-year money, as you know.

Mrs. HANSEN. I am glad some items are funded by no-year appropriations.

Mr. NELSON. Really the basic program is our program level. So, if you would permit me, I will talk to the program level. There is a $10,980,000 increase in program level in fiscal year 1971 over the previous year.

Mrs. HANSEN. What will this accomplish?

ROAD MAINTENANCE

Mr. NELSON. That contemplates the carrying on of our road maintenance program in our regular transportation system of 122,400 miles of roads to be maintained. The cost of that is $21,864,000, a slight increase over the previous year.

Carrying on our trail maintenance program where we have to maintain——

TRAIL MAINTENANCE

Mrs. HANSEN. Mr. Nelson these trails are fire protection trails and recreation trails. What other types of trails do you have?

Mr. NELSON. Some of them are used in connection with the grazing on the national forest. Basically, our trail system originally was put in almost entirely from a fire protection standpoint, but many of those trails are now highly used by recreationists. Consequently they have become more important for other users, the hikers and so forth, than they were originally.

BRIDGES

We propose also to construction 162 bridges, which is 34 less than last year. This will cost $6.1 million.

Mrs. HANSEN. How many miles of bridges are in your system?

Mr. NELSON. If I may, I will supply statistics on bridges for the record.

(The information follows:)

We have 9,315 existing bridges in the national forest transportation system. Of these, 5,990 bridges are classified as adequate and 3,325 bridges are classified as inadequate and will have to be replaced.

ROAD, TRAIL, AND BRIDGE STATISTICS

Mrs. HANSEN. Isn't it correct that you have 100,900 miles of trails?

Mr. NELSON. Yes; that we maintain.

Mrs. HANSEN. Why is this figure 100 miles less than last year's amount?

Mr. NELSON. This is 100 fewer miles than we planned to maintain last year. I don't know just what accounts for that. Last year we had a lot of extra trail maintenance because of the flood damages. Some trails are not maintained every year. It depends on what the use is, and so forth.

Mrs. HANSEN. What is your total trail mileage?

Mr. NELSON. It is a little over 100,000 miles.

Mrs. HANSEN. What is your total road mileage?

Mr. CLIFF. 199,042 miles.

Mrs. HANSEN. How many miles of trails do you have?

Mr. CLIFF. The trails according to these notes show 100,257 miles.

Mrs. HANSEN. Why then are you going to maintain 100,900 miles of trails?

Mr. NELSON. We have areas where we maintain some mileage of trails for fire protection that are located on lands owned by others for which we do not have an easement. Therefore, we do not show this mileage in our statistics of trails owned by the Forest Service.

MULTIPLE-PURPOSE ROADS

Mrs. HANSEN. Of your basic inventory of roads, how many miles of that 199,042 are purely for timber harvest and recreation, and how many are for multiple-purpose use?

Mr. NELSON. Madam Chairman, we like to think of practically all of our roads as being multiple purpose. However, we do classify roads for the primary or first priority use such as timber, recreation, and other. In those classified as timber, we have 105,593 miles, but these are also heavily used for recreation. We have 36,886 miles classified as primarily for recreation, but some of this may be used for timber or other purposes.

Then we lump in, in one classification, the rest of the roads that have uses to support any of our activities other than timber and recreation. We have 56,563 miles of those other types of roads.

Again, as I have said many times, most of these roads have more than one use, other than perhaps a road within a campground that is all recreation. They practically all have some other use. Many of our timber roads are very important from a recreational standpoint also, but they are built and classified as primarily for timber.

Mrs. HANSEN. Were they built primarily for timber use?

Mr. NELSON. Yes, and many of them were built to standards only for timber hauling. Presently, in our planning and determination of our standards, we try to take into account all of the multiple uses that the road will be used for. Consequently, we might feel it necessary to build a road to a higher standard than is necessary only for timber, because it will serve recreation purposes, and we think the public should use it. That is why we plan to use $7,654,000 to supplement roads being constructed under requirement of timber sale agreements.

Mrs. HANSEN. I think this point has not been made very clear to the timber industry as well as it might have been. They many times will make the statement that a road could be narrower, or that it could have a heavy ballast.

They don't realize that the recreation user is going to use that road. Isn't this true, Mr. Cliff?

Mr. CLIFF. I think this is true. They are thinking primarily, of course, about their own particular activity.

TIMBER INDUSTRY CRITICISMS OF ROADBUILDING STANDARDS

Mrs. HANSEN. The timber companies compare your roads with what they are constructing even though they are only constructing single purpose roads. Then they are very critical of the Forest Service for asking them to construct a better quality road.

Mr. CLIFF. We are very much aware of this. This has been a continuing point of discussion with the timber industry. We feel that the general public is going to demand the use of these roads, and that if they are allowed to use them, they must be made to a standard which is safe for the public use as well as for the timber use. Really, part of the opposition to timber harvest on the national forests may come from this attitude on the part of the timber people that the recreation should come second.

Mrs. HANSEN. I think a great deal more has to be done between the Forest Service and the timber industry to analyze the total use of these roads, so that the timber industry will understand why they must contruct a better quality road.

ROAD ADVISORY COMMITTEES

Mr. CLIFF. We agree with you very thoroughly on this, Madam Chairman, and we have set up road advisory committees in most of our regions to discuss these very problems that we are talking about now. This includes people other than timber operators. We are trying to reach a better meeting of minds and better communications between the various users. But the predominant representations on the committee are the timber operators, because they actually build many of these roads as a part of their timber sale operations.

Mrs. HANSEN. I understand, but your road standards are different from the timber industries' standards. For example, a private timberland road is constructed primarily for the purpose of hauling logs, therefore, they are not as concerned with the surface.

As you are well aware, Mr. Cliff, the general public is not used to this type of road.

Mr. CLIFF. There is another part to this problem, too. It has to do with the requirements that we make for cleanup and for erosion and these roads. We must take proper measures to protect the land against erosion and against fire. Now the public is being more critical of what they call visual pollution. They are critical of the debris and the appearance of the average logging operation. We are having to put more attention on the cleanup, erosion control, and fire protection, in order to get public acceptance of timber harvesting operations. I think this is only realistic. We do have continuing discussion and arguments with the timber industry over our standards for cleanup and erosion control. This is part of the overall problem of road standards.

Mrs. HANSEN. I can't help but think that many more conversations are needed so that you develop some understanding. There is a road in my district that traverses a national forest and private timberland. There are three different road standards in use, and the public, unfortunately, doesn't understand exactly who is maintaining which. They don't understand why one section is being maintained and another isn't.

Mr. CLIFF. We appreciate the need for continuing communication and even increasing this effort as you suggest. We are working at this very hard.

Mr. NELSON. We also have the program where private land is intermingled with national forest lands, where we enter into cooperative road agreements with the private landowners. We take into account the public needs in this program.

Mrs. HANSEN. That doesn't make them happy either.

Mr. NELSON. The sharing of the costs of the road are divided between what volume they might haul from the private land and what might be hauled from the public land. Then we also pick up the share of the cost resulting from use of the road by the public, such as recreation use.

ROAD CONSTRUCTION IN 1971

Mrs. HANSEN. How many miles of roads do you plan to construct this year?

Mr. NELSON. We plan this year to construct 1,529 miles of roads by contract paid from this appropriation. I will break down our total road construction item. I think it would be more meaningful than what is in the printed record. We expect to spend for construction of roads which are for timber as the primary value, $37,666,000 in our normal program and $46 million in the accelerated timber access road program. Also in the timber road field we will spend $7,654,000 to supplement purchaser constructed roads. That is getting back to what we just talked about, where a road to remove the timber from the sale would take one standard of road, and we are requiring a little higher standard because of the other use. We supplement what the timber op-

erator put in through his requirement in the timber sale contract, which, of course, is also Government money, because it reduces the amount we get for the timber.

We also expect to spend $23 million in surveys, design, and supervision of the roads that will be constructed by timber operators under timber sale agreements. We expect timber sale operators to construct about 6,200 miles of road this year, and this will cost the Government, through reduction of timber sale receipts, $74.6 million. We will be spending for roads primarily for the timber business a total of $114,320,000 of appropriated funds plus that required by timber sale operators. For roads that are primarily to support the recreation business, we propose to spend $15,536,000, and construct 132 miles of road. For those type of roads that support all other Forest Service activities, other than timber and recreation, we propose to spend $5,842,000, and construct 143 miles of road.

The types of roads for support of recreation and support of other activities are down from what they have been in the past.

In trails we propose to spend $4 million in the construction of 950 miles of trails. I have already covered the maintenance. Then we expect to spend $200,000, which is the same as last year, for purchase of roads. That deals with rights-of-way and the agreements that we may enter into, such as cost-sharing agreements, where a road has already been constructed and we buy our share of that road.

VALUE OF TIMBER HAULED

Mrs. HANSEN. What is the dollar value of your timber?

Mr. NELSON. The dollar stumpage value of our timber would be better than $350 million of national forest timber. On the average there is a labor or other investment in logs by the time they are loaded on trucks which is about equal to the stumpage value. So, the value of logs hauled would be about $700 million. Of course, there is private timber hauled over some of these roads, too.

Mrs. HANSEN. The Government of the United States is like business when it appropriates funds in the form of an investment.

Mr. CLIFF. These are capital investments which improve the value of public property.

EXAMPLES OF ROADS BUILT

Mr. NELSON. I have here one or two examples of types of roads which may be interesting, Madam Chairman, that we propose to build in this 1971 program. One is on the Gifford Pinchot forest, the Pin Creek Twin Falls section, which is a part of the Lewis River road system. It is 5 miles in length. Another is the Boulder section, which is 2.7 miles in length, or a total of 7.7 miles, at an estimated cost of $1,200,000. This will be constructed to a double lane standard, and will provide access to about 30,000 acres of commercial forest land plus numerous potential recreation sites and 13 miles of fishing stream.

The Lewis River project, which has been broken into sections for financing over several years, will be completed with construction of these two sections. Construction has accelerated on this project

through the $35 million that was placed in the budget last year. It will be completed 9 years earlier than it could have been done. Upon completion, plans call for harvesting 265.5 million board feet of timber over this road in the next 20 years, an estimated increase of 3 million board feet, due to the early intensive management made possible by opening up this area to access. This project is an example of the advantage of accelerated advanced roading. I have another example on the Mount Hood National Forest with a similar type of payoff.

Mrs. HANSEN. Insert this example in the record.

Mr. NELSON. I will be glad to do that.

(The information follows:)

WHITE RIVER ROAD IN THE MOUNT HOOD NATIONAL FOREST IN OREGON

This road also has been broken into sections for programing purposes. The 1971 programed section is called Hayburner and is 9.8 miles of double-lane road which includes a bridge across White River and extends to Highway No. 35. The estimated cost, including paving, is $1.3 million. A secondary feeder road called Bonny, 3.8 miles of single-lane road costing $145,000, plus additional purchaser constructed roads will provide the access to 5,000 acres of old growth timber (estimated volume of 289 million board feet) and 2,700 acres of second growth timber (estimated volume of 47 million board feet).

The 5-year plan for this area calls for harvest of 20 million board feet of old growth, 2.5 million of prelogged timber which would otherwise be lost, and 5 million board feet of thinning resulting from placing the second growth stands under intensive management.

EAGLE CREEK

Mrs. HANSEN. Do you have any comment on the Forest Service Eagle Creek plan to, "Keep back country roadless"?

Mr. CLIFF. I suppose that could be discussed at the same time as the French Pete.

Mrs. HANSEN. Yes.

Mr. NELSON. Eagle Creek is a rather extensive drainage in the Mount Hood National Forest running down into the Columbia River. Much of the Eagle Creek is not accessible by road at the present time. I haven't seen the articles that Mr. Cliff is looking at now, but I am sure that it deals with keeping an area of that type roadless, as does the French Pete controversy on the Willamette National Forest in Oregon.

Mr. CLIFF. This is a similar problem that we have at French Pete. This is a 45,000-acre area close to the Portland metropolitan area. We in the Forest Service have been making a study to determine the best land use plan for Eagle Creek. It is a popular recreation area. It has been accessible by trail. There are people who are just as interested in keeping it wild, as some people are interested in keeping French Pete Creek wild.

(Discussion off the record.)

Mr. CLIFF. The area has been under study. As I get the picture, the final conclusions as to the land use plan that we will attempt to apply there have not been reached.

FRENCH PETE

Mrs. HANSEN. How are you progressing on your solution to the French Pete problem?

Mr. CLIFF. French Pete is well on the way toward solution. The French Pete Creek area is on the Willamette National Forest, south and east of Eugene, Oreg., on a tributary of the McKenzie. This is in a tract of national forest land that used to be in a part of the Three Sisters primitive area. When the primitive area was reclassified about 12 years ago, the major part of it was classified as a wilderness, but a determination was made at that time that 52,000 acres had values for multiple use purposes which exceeded the values for wilderness. It is in a heavy timbered area and is in area that has high potential for mass recreation use.

This decision was made during the Eisenhower administration. It was a controversial decision. The people who wanted a larger wilderness have never been satisfied and have contested our land use plans for the 52,000 acres. We have proceeded with multiple use programs on part of this 52,000 acres. We have set aside some special areas for special protection, geological areas, special botanical areas, et cetera. It has been our plan to manage the bulk of the 52,000 acres for multiple purposes.

The last remaining large section of this land that has yet to be developed is the French Pete Creek drainage. The people who want to preserve more of this country have objected to our plan to develop a road system in there and to provide for the harvest of timber and the development of intensive recreation use. We had an intensive planning effort on this. We had a citizens committee advise us. The plans were contested by certain groups in Oregon, and the decisions that were made were appealed. They were appealed eventually last fall to the Assistant Secretary, who for the second time made a decision to support the Forest Service plan for this area.

The matter did not end there because the people who were appealing felt that there was a misunderstanding over the appeal procedure. We granted additional time for the objectors and others to comment on our plans for this area. This period of review has been completed. We received over 10,000 communications from various people in Oregon and elsewhere expressing their viewpoints. The predominant expression by far came from people who supported the Forest Service multiple use plan, but there was a rather substantial group that was still objecting.

I appointed a committee to review all of these responses, and to give me their analysis and recommendations on the plan, or changes that might be made in it, in response to the public response. This review has been completed. The report has been presented to me, and I have approved it.

At present it is being reviewed from the legal standpoint by the Office of the General Counsel. It is in the process of final determination, we hope. Just when the General Counsel will complete his legal review I cannot say. I hope it will be very soon, and then we will present it to the Secretary, who will make his final decision.

I cannot say what final decision will be made.

Mrs. HANSEN. Thank you very much.

Mr. WYATT. I would like to just say, Chief, that I appreciate the attention the Forest Service has given this problem, which has been a very hot subject of controversy in Oregon, and I think it is very commendable that you have spent the time objectively reviewing it, particularly in view of the history of the matter having been studied, restudied, studied, and restudied to the best of my knowledge about three times previously, and I think it shows great patience and also responsiveness to making certain that your decision is one which is justifiable.

I, as you know, have supported the multiple-use concept which the Forest Service has recommended in connection with this plan. I think it is solidly based, and I would again just commend you for your thoughtful attention to the matter.

Mr. CLIFF. Madam Chairman, could I go off the record a minute.

(Discussion off the record.)

UNOBLIGATED AND UNEXPENDED BALANCES

Mrs. HANSEN. Please insert in the record your unobligated and unexpended balances as of June 30, 1969, and as of January 31, 1970.

(The information follows:)

The forest roads and trails unobligated and unexpended balances were as follows:

	June 30, 1969	Jan. 31, 1970
Unobligated balance	$584,083	$81,692,448
Unexpended balance	9,212,158	53,325,893

FOREST ROADS AND TRAILS OUTLAYS

Mrs. HANSEN. You had an actual outlay of $95 million for this activity in 1969; you estimate an outlay of $102.4 million in 1970; and an outlay of $122.3 million in 1971. On this basis your outlays in 1971 will exceed actual outlays in 1969 by $27 million. What are the factors that would cause this comparatively large increase in outlays in 2 years in your roadbuilding program?

Mr. NELSON. Of course, when we came up a year ago, we came up with a budget that had been recommended by the previous administration. Then, you recall, we came back with the budget revised as recommended by the new administration. That revision, because of the timber situation that we discussed earlier in these hearings, recommended that we increase our program level for timber roads by $35 million. It also reduced our program level by $11 million for the roads other than timber.

The increased cash needs that you referred to are needed to pay the obligations incurred because of the increased program in 1970 over 1969. Of course, the dollars that it takes to finance the program level do not all come in the same year the obligation is made. The 1971 budget, for example, will be used partly to pay for the obligations that were made in 1970 or prior years, and partly for obligations that will be made during 1971.

INFLATION INCREMENT ON RESEARCH FACILITIES

Mrs. HANSEN. What is inflation going to do to your estimated research laboratory construction costs?

Insert the information in the record.

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

(The information follows:)

COST OF RESEARCH CONSTRUCTION

The cost of construction for research laboratories shown on pages 124–125 of the explanatory notes are current. These costs have increased an average of 15 percent over those shown 1 year ago.

1970 ROADS AND TRAILS FOR STATES FUND

Mrs. HANSEN. You estimate transfer from "Roads and trails for States" of $31.2 million in 1970. How valid is this estimate as of today?

Mr. NELSON. We believe that is reasonably valid. In fact, this year, as compared with past years, I think it is probably more valid this year. In the past years our income has been on the rise, and consequently several times we have been up here and estimated that the income was going to be higher than we estimated at the time the budget was prepared. I think it is going to be closer this year to our original estimate. It might be down some, depending upon what the market, what the timber industry does in the last 6 months of the current fiscal year.

1971 ROADS AND TRAILS FOR STATES FUND

Mrs. HANSEN. You estimate transfer from "Roads and trails for States" of $34.2 million in fiscal year 1971. Have there been any changes since the preparation of this budget estimate that would affect the validity of that estimate?

Mr. NELSON. The amount for transfer and use in fiscal year 1971 is, of course, based upon receipts of fiscal year 1970. I think the 1971 estimate is quite accurate. I doubt that it will be greater than estimated. It might be a little smaller than estimated.

For the first half of the fiscal year our income was higher by over $17 million. Our total estimates for the full year took into account collections already made. Our timber cut stayed about the same as in the first half of the previous year.

INTEREST RATES

Interest rates, as you may have noticed in the Wall Street Journal of March 23, took a downward turn for some types of interest rates. It could go further and really result in the break needed to get housing started. I see more in this morning's paper where some other interest rates have come down.

Mrs. HANSEN. The prime interest rate has decreased from 8½ to 8 percent.

Mr. NELSON. It varied. If you are talking about commercial paper it went down to 7¾ from 8½. Euro dollars went down to 9 percent

from 10 percent. Interest on Federal funds dropped to 7¾ percent whereas for most of the year it averaged around 9 percent and has been as high as 12 percent. As long as there is a trend toward the downward side the primary interest rate one day will be lowered by the big banks. It has already been lowered by some of the small banks. All of these changes should be a shred of light toward better interest rates for homebuilders, and could be the spark that will light up a better situation.

Mrs. HANSEN. I hope the interest rates will continue to decrease before the construction season is completed.

Mr. NELSON. Some of the people that put in supplies, getting ready for an increased construction program, will take those indications to start building inventories I am sure. As you know, the price of plywood is low. If they are going to buy plywood to use in the next year they probably don't have a better investment to make than to buy it in today's market. Before the end of the fiscal year we might have a better investment to make than to buy it in today's market. Before the end of the fiscal year we might have another shift that is going to cause the timber industry to go either up or down. I believe it will be up.

DIAMOND CROSSING (BARKER PASS ROAD) CALIFORNIA

Mrs. HANSEN. I am quoting from a letter I received from Congressman Johnson of California: "I would like to call to your attention a problem we are having with an access road into the High Sierra country that would continue the road from Lake Tahoe up Blackwood Creek to a point where we would like to see a continuation of a road referred to as Diamond Crossing, which is a distance of 5.5 miles, with an estimated cost of $1,360,000. This would require no additional new money. It would come from Forest Roads and Trails money at the suggestion of the Appropriations Committee to the Forest Service."

He goes on to state: "This would be a multipurpose road from the standpoint of timber management, recreation, tourism, and so forth. The Diamond Crossing area is one of the finest potential campground developments in the Sierra. This has been under consideration for many years. All of the preliminary engineering has been done, I do believe, and the Forest Service would be ready to move forward if the Appropriation Committee gave them some encouragement."

He would personally appreciate anything that can be done in this connection.

Mr. NELSON. This road would let some people get out of Tahoe basin, you might say. It is located in the Tahoe National Forest. We generally refer to it as the Barker Pass Road. One termini is at Lake Tahoe. The road is planned to go over the mountain to the Soda Springs-Riverton Road. On that end of it, the opposite end from Lake Tahoe, there are a number of reservoir developments that have been put in by people developing power. That is a very desirable recreation area.

The road would require at least a couple of projects to get it connected up. The first one, and the high priority one, is for 5.5 miles. The cost would be $1.5 million. We don't have our estimates for the remaining portion, but if they were on the same proportion as the 5.5

mile section it might cost as much as $6.3 million, or a total for the whole 28.3 miles of $7.8 million. There is a portion of that road up toward the pass from Lake Tahoe that has already been constructed. That section of 2.9 miles opened up timber harvesting for about 60 million board feet of timber. The 5.5 additional miles would open up another 213 million feet of timber. After the whole road is completed, or the 22.8 miles, there would be another 156 million board feet of timber. This road would serve a total of 429 million board feet of timber.

As the Congressman has suggested, this is an attractive area. It would be used heavily by recreationists. Our regional recreation people have estimated that if this road were completed, it would carry about 140,000 cars per year by 1975. Because of the attractiveness of this road and the area, from a recreation standpoint, they estimate by 1990 it might carry traffic up to 255,000 cars per year. It is an important multiple use type of area.

Mrs. HANSEN. Why can't you start this program?

Mr. NELSON. I am not sure. I know there is some additional survey and design work that must be done.

ROAD PRIORITIES

Mr. CLIFF. This raises the question of priorities within the region and between regions. I guess what Mr. Nelson is saying is that we haven't firmed up our program for 1971 on a project-by-project basis. We have other important roads in Congressman Johnson's district too.

Mrs. HANSEN. Why don't you discuss your priorities with Congressman Johnson?

Mr. CLIFF. I am sure we have done this on kind of a continuous basis with Congressman Johnson. He is very much interested in everything that happens in the national forests in his district. He is one of the best informed Congressman concerning these matters. We have very frequent conversations with him about these things.

Mr. NELSON. This road has a little tinge of the French Pete type of problem. There are some people in California who would not like to see a road built through there because it would open up a rather substantial roadless area. That is another factor.

Mrs. HANSEN. Insert in the record a list of your priorities.

(The information follows:)

The following road construction projects are planned for construction in fiscal year 1971 in the Second Congressional District in California.

Forest and project name	Length	Estimated cost
Klamath:		
Morefords Rd	1.5 miles	$151,800
Middle House	6.8 miles	213,900
Taylor-Salmon Bridge	150 feet	93,000
Lassen:		
Summit Camp	2.3 miles	91,500
Pine Creek	4.8 miles	125,000
Mendocino: Hoxie Crossing Bridge	250 feet	265,000
Modoc: Johnson Creek Bridge	40 feet	252,000
Shasta-Trinity:		
Big French Creek	4 miles	318,000
Powder Hill	18.9 miles	218,200
Sims Bridge	220 feet	210,000
Sierra: Chowchilla Mountain	0.7 mile	92,200
Stanislaus:		
Hells-Half Acre	4.3 miles	300,000
Big Creek-El Portal	3 miles	143,000
New Fish Hatchery Bridge	30 feet	98,000
Tahoe:		
Mosquito Ridge	8.6 miles	325,000
Poorman Valley Bridge	74 feet	75,000
Total cost		2,971,600

The list above are highroad projects in the Second Congressional District. The Barker Pass Road (Diamond Crossing Road) is needed for full multiple-use development of this section of California. The preliminary planning has been done for a section of the road, but it requires additional engineering and design. The Forest Service plans to do this in fiscal year 1971 for the first section to be constructed.

Mr. NELSON. I was going to say this would be a recreation road, but this does have considerable timber. Consequently, it would be eligible for the type of road funds that our budget has listed for this year.

JEFFERSON LAKE AREA, COLORADO

Mrs. HANSEN. I received a letter concerning the road leading into the Jefferson Lake area in the Pike National Forest. This is from Congressman Aspinall, the distinguished chairman of the Interior and Insular Affairs Committee, and Congressman Byron Rogers, a distinguished Member from Colorado. They say:

> While we realize the many demands made upon the few funds available for outdoor recreation development, we would appreciate it if you would consider this development when you review the forest roads and trails program for fiscal 1971. It sounds as if the Forest Service is in position to move forward with the construction of a more suitable roadway, but that funds for this purpose have been unavailable. Any assistance which you could give on this matter would be greatly appreciated.

Will you please comment on this.

Mr. NELSON. I haven't heard of that particular road before, Madam Chairman, but I am positive that is the type that would fall in our recreation and other types of roads, and that is the portion of our road budget that has really hampered us. It is that type of road where our deferments were made last year and the deferred amount, as has been reported here earlier, was $2,203,000.

On these types of roads, other than timber——

Mrs. HANSEN. Do you know what is going to happen if you continue to curtail funds for these recreation roads? You are going to have a group of individuals with picks and shovels who are going to lay a road wherever they please.

Mr. NELSON. That could happen, because in 1969 we had for this type of nontimber road a budget of $27.2 million.

Mrs. HANSEN. How much do you have in this year's budget for these roads?

Mr. NELSON. This year, $21.4 million.

Mrs. HANSEN. In spite of your increased visitation?

Mr. NELSON. Yes. You see last year, as I mentioned earlier, we came up here to testify for a $31 million level for nontimber roads. Then when we came back on the amendment, it was down to $20.1 million. There was the deferment of $2.2 million, so in 1970 it was down to $17.9 million for all nontimber road construction.

This particular budget for construction of all nontimber roads has $21.4 million, plus the $1.3 million that is a carryover from the deferred item provided we are authorized to use it.

Mr. CLIFF. I am familiar in a general way with this Jefferson Lake road problem. There is a road there now, a very low standard road that will permit people to get up there. There is a considerable interest on the part of people who enjoy using that area to get a better road which isn't so hard on automobiles and tires. We do appreciate the interest of the Congressmen from Colorado. We will give special attention to see whether or not we can include this in our programing

Mrs. HANSEN. Thank you. The committee would very much appreciate whatever you can do with this program.

Mr. CLIFF. This is among other projects. We have just so much money in our budget. Plans for recreation-type roads and the demand for these kinds of roads exceeds what we can do. We can't cover them all. I don't know just where this one would fall in our list of priorities in that region.

Mrs. HANSEN. Insert in the record your road construction priorities.

Mr. CLIFF. We will do that. We are very much aware of the interest in this particular road.

(The information follows:)

The Jefferson Lake Road on the Pike National Forest is typical of many low-standard roads now in existence, providing access to recreation areas in Colorado and throughout the Nation. We have recognized the need for improving this and many other roads and have prepared surveys and designs in anticipation of funding levels which will allow programing of the needed work.

Jefferson Lake Road has 2.5 miles of completed survey and design with a construction cost estimate of $100,000. It is not included in the 1971 program of work. Construction deferrals and reduced budgets for roads for recreation have created a backlog of high-priority projects.

We have had to defer 13 recreation road projects in Colorado which we felt were of higher priority than the Jefferson Lake Road. We do plan to reconstruct this road in the future when funds become available.

TWIN BUTTES HUCKLEBERRY AREA, WASHINGTON

Mrs. HANSEN. I have a letter from Senator Henry Jackson of the State of Washington concerning the huckleberry fields at Mount Adams. The district ranger at Mount Adams has prepared a huckleberry management plan for the area.

Mr. NELSON. I think that is what the ranger refers to as the Twin Buttes huckleberry area. He has prepared a plan, which I have not seen.

Mrs. HANSEN. Would this plan require Federal funding?

Mr. NELSON. It would require some funding to develop the plan completely, as I understand the situation. It is about 2,500 acres. The plan would call for $2,000 for some administrative studies in relation to culture of huckleberries.

Mrs. HANSEN. Couldn't you have included $2,000 in this budget for the administrative studies?

Mr. NELSON. I would hope the region might be able to find $2,000 to do that. The major problem appears to evolve around the road to better serve the area. This type of a road that would fall in the same category that we just referred to--the type deferred in fiscal year 1970.

Mrs. HANSEN. Huckleberry picking isn't recreation to the Indians. They consider it food.

Mr. NELSON. But this particular area is not one of the areas that is set aside for the Indians.

Mrs. HANSEN. I know, but the Indians go to Mount Adams to pick the huckleberries.

Mr. NELSON. Yes, they also go up the Little Natches River where I used to be assistant ranger. There is need for consideration as we move along for some sanitation and taking care of a lot of visitors that come to these huckleberry fields, primarily, I believe, as a recreation feature in picking huckleberries.

Mrs. HANSEN. Why don't you earmark funds to determine the overall plan?

Mr. NELSON. I don't think that will be too difficult and we can do that. The overall plan would also require removal of some of the trees that are encroaching on some of the huckleberry fields. The community of Glenwood is real anxious to get a road constructed because people would stay in Glenwood and drive to the mountain to pick huckleberries.

Mrs. HANSEN. It is in my district.

Mr. NELSON. Well, maybe you are more interested in this road than I realized. But it is another one of those types of roads that fall in the area where our construction funds have been sharply curtailed. The county is building or is ready to build the road up to the forest boundary some 5 or 6 miles, and the community, as I say, is quite interested in getting that road on up into the huckleberry field. Lots of the people don't camp up there, but they stay in towns or down at Trout Lake, I believe it is.

Mrs. HANSEN. That is right. I think you should earmark funds for the administrative studies to determine the best cultural treatment.

Mr. NELSON. I think the region ought to be able to help themselves. Within the budget they have, they shouldn't have too much trouble with that.

(Short recess.)

Mrs. HANSEN. Insert in the record a statement on how you can implement this program.

Mr. NELSON. On this particular huckleberry situation?

Yes, I will.

(The information follows:)

GIFFORD PINCHOT NATIONAL FOREST HUCKLEBERRY MANAGEMENT

The regional forester will consider the fund needs to implement a plan for the Twin Buttes huckleberry area along with other priority needs. He will plan to provide, as a minimum, funds to get started on an administrative study on cultural techniques during fiscal year 1971. He will also consider needs for opening up, or minimum improvement, of some of the primitive roads used by the pickers.

LINCOLN BACK COUNTRY, MONTANA

Mrs. HANSEN. Do you intend to construct any roads in the Lincoln back country of Montana?

Mr. NELSON. We do not plan to build any roads in the Lincoln back country of Montana this year.

CONSTRUCTION CUTBACKS IN NORTHWEST

Mrs. HANSEN. I am quoting from the Daily Olympian of February 6, 1970. "President Nixon's cutbacks in contracts for Government construction will defer nearly $1.5 million in forest development projects for this fiscal year, including three national forest projects in Washington. Regional Forester Charles A. Connoughton, U.S. Forest Service, made the assessment. He said reduction in funds other than for timber roads and timber harvest will make it 'increasingly difficult' to give full attention to other national forest resources. There was a $10,000 cutback for work on the Cascade Crest Trail in the Snoqualmie National Forest, and $17,800 for an information center near Crystal Mountain."

Have these two items been deferred by the construction cutback?

Mr. NELSON. Those were two of the projects deferred by the 1970 construction cutback. There were also other projects deferred in the State of Washington: two roads in Mount Baker National Forest and one on the Okanogan National Forest; plus a large campground at Baker Lake on the Mount Baker, and two campgrounds on the Okanogan National Forest. These latter recreation developments were planned in relation to the new North Cascades National Park.

Mrs. HANSEN. Don't you have a sizable number of recreation visits in those areas?

Mr. NELSON. Yes, we do. Two of these road projects are at campgrounds and the other one is at Bordman Lake in the Mount Baker National Forest.

Mrs. HANSEN. How many visitors per year do you have in the Mount Baker National Forest?

Mr. NELSON. We will have to put it in the record.

(The information follows:)

The reported recreation use for 1969 on the Mount Baker National Forest is 939,300 visitor days.

ACQUISTION OF LANDS FOR NATIONAL FORESTS, SPECIAL ACTS

Mrs. HANSEN. Insert in the record justification pages 143 and 144.

(The pages follow:)

ACQUISITION OF LANDS FOR NATIONAL FORESTS, SPECIAL ACTS

Appropriation Act, 1970 ..... $80,000
Budget estimate, 1971 80,000

PROJECT STATEMENT

Project and Authority	1969	1970	1971 estimate	Increase or decrease
1. Cache National Forest, Utah, Act of 5/11/38, as amended	$7,553	$20,000	$20,000	- -
2. Uinta-Wasatch National Forests, Utah, Act of 8/26/35, as amended	1,470	20,000	20,000	- -
3. Toiyabe National Forest, Nevada, Act of 6/25/38, as amended	8,000	8,000	8,000	- -
4. Angeles National Forest, California, Act of 6/11/40	27,250	- -	32,000	+32,000
5. Cleveland National Forest, California, Act of 6/11/40	- -	32,000	- -	-32,000
Unobligated balance reverted to National Forests Fund	35,727	- -	- -	- -
Total available or estimate	80,000	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. Amounts appropriated and laws under which authorized are shown above.

These are critical watershed lands needing soil stabilization and vegetative cover restoration to prevent serious erosion and damaging floods within these National Forests. Land treatment measures must be applied and subsequently maintained on all lands in these areas to make corrective action fully effective. To assure full program effectiveness, the intermingled private lands must be acquired by the Federal Government. The results will be reflected in improved watershed conditions, social benefits, and development of economic strength in local communities.

During fiscal year 1969, 401 acres of land were purchased under the special purchase authorities applying to the Cache National Forest in Utah.

Cache National Forest. In fiscal year 1969, funds were available from two sources for the purchase of lands within the Cache National Forest in Utah.

1. The Receipts Act of May 11, 1938, as amended -- $20,000. This is an annual appropriation.

2. The Act of July 24, 1956 -- $200,000 was appropriated under this authority in fiscal years 1957 through 1960. These funds remain available until expended. Through fiscal year 1969, $189,063 has been obligated from this appropriation.

These funds are used to acquire key tracts of land in the steep, rough, and highly important watershed areas lying north of the Ogden River along the Wasatch front and on Wellesville Mountain of the Cache National Forest. These are rugged mountain lands above the river valley which have been damaged and their watershed functions impaired through forest fires or overgrazing. This contributes to excessive rainfall runoff causing severe erosion. The damaged watershed lands are potential sources of floods and mudrock flows. Many tracts of land are located in the north fork of Ogden River and on the drainage of Pineview Reservoir, a Federal reclamation project. Others are within the watersheds of the city of Ogden and the other

small towns along the Wasatch front. Public ownership of these lands and subsequent restoration and protection of their vegetative cover is a highly important part of a vigorous cooperative program with the local community and agencies.

The appropriation of $20,000 under the Act of May 11, 1938, is from receipts of the Cache National Forest. In the absence of this appropriation, the State of Utah would receive 25 percent of these receipts for roads and school purposes in the local counties involved. Therefore, the local counties, in effect, are contributing one-fourth of the amount of this appropriation. These appropriations are extremely important to the continuation of a vital and worthwhile program extending almost thirty years and shared in by both the local agencies and the Federal Government through the National Forests.

The 1956 Act requires that expenditures of Federal funds be matched by contributions by local agencies or people. This requirement has been met through donations of money and lands valued at $189,000. The remainder of the contributions in the amount of $11,000 are expected in fiscal year 1970.

Through fiscal year 1969, 28,257 acres have been approved for purchase pursuant to the Receipts Act of 1938, and 15,957 acres under the Special Act of 1956. The 1970 objective is to acquire 840 additional acres of these critical watershed lands. A similar acreage is expected to be acquired in 1971.

Uinta-Wasatch. In fiscal years 1963 through 1969, an appropriation of $140,000 was made under the Uinta-Wasatch Receipts Act of August 26, 1935, for acquiring critical watershed lands in the American Fork Canyon watershed. A total of 2,786 acres has been approved for purchase through fiscal year 1969 and an estimated 400 acres will be acquired each year during 1970 and 1971. It is estimated that it will take two years to complete the necessary American Fork acquisitions.

Toiyabe National Forest. $8,000 was appropriated under this Act in each of fiscal years 1969 and 1970. The 1970 and 1971 objective is to acquire 40 acres each year.

Cleveland National Forest. $32,000 was appropriated in fiscal year 1970 to acquire important watershed lands totaling 240 acres. No additional properties are available at this time on the Cleveland National Forest; therefore it is proposed that this program be transferred to the Angeles National Forest for 1971.

Angeles National Forest. $32,000 is proposed to be appropriated in fiscal year 1971 to purchase important watershed lands totaling 80 acres, Acquisition is needed to minimize erosion and flood damage.

UNOBLIGATED BALANCE

Mrs. HANSEN. You indicate an unobligated balance in 1969 of $35,727 which reverted to the National Forest Fund. What is the significance of this?

Mr. NELSON. These are special accounts and apply to certain national forests. They are not carryover funds. In 1969, we didn't find desirable land purchases, where authorized in the particular national forest to use all of the money. Consequently, $35,727 was unobligated and will revert to the national forests fund.

ASSISTANCE TO STATES FOR TREE PLANTING

Mrs. HANSEN. Insert pages 145 through 147 of the justifications in the record.

(The pages follow:)

ASSISTANCE TO STATES FOR TREE PLANTING

Appropriation, 1970 ..... $1,000,000
Budget estimate, 1971 1,000,000

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate	Increase or decrease
Assistance to States for tree planting	$997,214	$1,072,946	$1,000,000	-$72,946
Unobligated balance brought forward ..	-70,160	-72,946	- -	+72,946
Unobligated balance carried forward ..	72,946	- -	- -	- -
Total available or estimate	1,000,000	1,000,000	1,000,000	- -

This program authorized under Section 401 of the Agricultural Act of 1956 (16 USC 568e) effectively assists 37 States in their forestation and tree improvement programs. It has been responsible for directly speeding up the needed rehabilitation work on State and county forest lands.

The program has fostered tree improvement programs in 28 States. Through assistance in establishing forest tree seed orchards, improved genetic quality tree seed is being produced for use in the forestation work on an increasing scale each year. The amount expended by the Federal Government on this program does not exceed the amount expended by the State.

To date the program has helped reforest over 780,000 acres. These are included in approved State plans which total nearly 1.6 million acres. This forestation work:

(1) Helps restore low yielding forest lands to fuller production.

(2) Helps stabilize eroding soils on hills and mountain slopes.

(3) Helps improve the natural beauty of the environment.

(4) Helps improve rural areas.

The program provides employment for 7,000 to 10,000 rural laborers on a part-time or full-time basis, for the tree planting, orchard establishment and maintenance, and other jobs required to carry out the necessary cultural practices.

Future economic values of the timber and other wood products will be increased by the improved volumes and quality of the forest crop at harvest time. The commercial wood thus produced will have significant economic benefits and will help provide for the anticipated increased national wood needs.

To date, over 3,000 acres of State-owned and operated forest tree seed orchards have been established under this assistance program. The improved genetic quality seed derived from some of these orchards has already produced tree planting stock that will yield increased volumes of commercial wood within a decade.

The following table shows proposed financing in fiscal year 1971 compared with fiscal years 1969 and 1970.

Proposed Financing

State	FY 1969	FY 1970	FY 1971
Alabama	$11,000	$11,000	$11,000
Arkansas	10,000	10,000	10,000
Colorado	5,000	5,000	5,000
Connecticut	4,000	4,000	4,000
Florida	35,000	33,500	29,500
Georgia	20,000	19,000	19,000

State	FY 1969	FY 1970	FY 1971
Hawaii	$30,000	$30,000	$35,000
Idaho	10,000	10,000	10,000
Illinois		8,000	8,000
Indiana	12,400	12,400	12,400
Iowa	7,000	7,000	7,000
Kansas	10,000	10,000	10,000
Kentucky	12,000	12,000	12,000
Louisiana	12,000	11,500	11,500
Maine	15,000	15,000	15,000
Maryland	5,000	5,000	5,000
Michigan	30,000	30,000	30,000
Minnesota	100,000	90,000	80,000
Mississippi	12,000	11,500	11,500
Missouri	26,500	26,500	26,000
Montana	14,500	14,500	14,500
New Hampshire	10,000	10,000	10,000
New Jersey	12,000	12,000	12,000
New York	25,000	35,000	30,000
North Carolina	12,000	12,000	12,000
Ohio	14,000	14,000	14,000
Oklahoma	10,000	10,000	10,000
Oregon	95,000	95,000	85,000
Pennsylvania	25,000	25,000	24,000
South Carolina	26,000	24,500	22,000
Tennessee	11,100	11,100	11,100
Texas	14,900	14,900	14,900
Vermont	5,500	5,500	5,500
Virginia	13,000	13,000	13,000
Washington	97,000	96,000	86,000
West Virginia	9,600	9,600	9,600
Wisconsin	20,000	20,000	20,000
Wyoming	10,000	10,000	10,000
Special Projects:			
Black Walnut Program	41,835	27,700	27,700
Cottonwood Increase Program			37,500
Total to States	833,335	821,200	820,700
Forest Service administration	166,665	178,800	179,300
Total	1,000,000	1,000,000	1,000,000

Following are the major accomplishments that have been or will be obtained from Federal appropriations when matched with State appropriations:

	FY 1969	FY 1970	FY 1971
		(estimated acres)	
Area planted or seeded	160,000	165,000	165,000
Area of improved watershed conservation	8,500	10,000	10,000
Area of improved wildlife habitat	5,000	7,000	7,000

Examples of Recent Accomplishments

During the 1968-69 planting season, forestation work under this program was carried out on thousands of acres of forest land. For example, Florida planted and seeded 2,485 acres, Hawaii planted 1,909 acres, Idaho planted 1,312 acres, Louisiana planted and seeded 45,948 acres, Mississippi seeded and planted 2,288, Texas planted 8,534 acres, and Virginia seeded and planted 68,089 acres.

These activities not only added potential commercial wood to our forest resource but also improved watersheds, wildlife habitats, and the rural environment.

Tree improvement activities resulted in the production of seed in tree seed orchards in sufficient quantities to produce nearly 27 million improved genetic quality seedlings for planting on State and private lands. Forest tree seed orchards are coming into seed production in numerous States so the quantity of improved genetic quality seed is expected to increase rapidly during the next decade.

Mrs. HANSEN. On page 145 of your justifications you say: "To date the program has helped reforest over 780,000 acres." How many acres do you plan to seed in fiscal 1971?

Mr. CLIFF. That program was authorized by the Agricultural Act of 1956. It was funded in 1958 for the first time.

Mr. BACON. This has been the funding level for several years now.

Mrs. HANSEN. I know, but I am interested in knowing how many acres you propose to seed in fiscal 1971. It is interesting to note that 7,000 to 10,000 rural laborers on a part- or a full-time basis for the tree planting are employed. Isn't it true that much of this planting goes on in a relatively low economic area?

Mr. CLIFF. That is true. 165,000 acres are proposed for planting or seeding in fiscal year 1971.

Mr. BACON. I might add, Madam Chairman, that this is a significant program from the standpoint of longtime benefit. We would hope soon that we can emphasize the long-term as well as the short-term timber aspects. We will then be able to move ahead with a more broadly based forestry program.

OTHER GENERAL FUNDS

Mrs. HANSEN. Insert pages 148 through 151 of the justifications in the record.

(The pages follow:)

ACQUISITION OF LANDS FOR UINTA NATIONAL FOREST

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate
Acquisition of lands for Uinta National Forest	- -	$96,894	- -
Unobligated balance brought forward	-$96,894	-96,894	- -
Unobligated balance carried forward	96,894	- -	- -
Total available or estimate	- -	- -	- -

Public Law 89-226 authorized the purchase of approximately 10,000 acres of non-Federally owned land within a described part of the Uinta National Forest in Utah for the purpose of promoting the control of floods and the reduction of soil erosion through restoration of adequate vegetative cover. $300,000 were appropriated in fiscal year 1967. 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.

As of June 30, 1969, 8,847 acres have been acquired at a cost of $203,106. Lands have become difficult to acquire. It is anticipated that the remaining lands will be acquired by the end of fiscal year 1970.

ACQUISITION OF LANDS FOR WASATCH NATIONAL FOREST

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate
Acquisition of lands for Wasatch National Forest	- -	$65,405	- -
Unobligated balance brought forward	-$65,405	-65,405	- -
Unobligated balance carried forward	65,405	- -	- -
Total available or estimate	- -	- -	- -

The Act of September 14, 1962 (PL 87-661) provided authorization for the appropriation of $400,000 for purchase of privately owned lands within the Wasatch National Forest in Utah to aid in control of floods and to reduce soil erosion. The full amount of this authorization has been appropriated with the funds remaining available until expended.

As of June 30, 1969, approximately 12,345 acres had been acquired under this authority. It is expected that the remaining lands will be acquired by the end of fiscal year 1970.

ACQUISITION OF LANDS FOR SUPERIOR NATIONAL FOREST

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate
Acquisition of lands for Superior National Forest	- -	$32,774	- -
Unobligated balance brought forward	-$31,983	-32,774	- -
Recovery of prior year obligation	-791	- -	- -
Unobligated balance carried forward	32,774	- -	- -
Total available or estimate	- -	- -	- -

The Act of June 22, 1948 (PL 80-733) as amended, provided authorization for the appropriation of $4.5 million for the purchase of lands and improvements thereon in the Boundary Waters Canoe Area, Superior National Forest, Minnesota. The full amount of this authorization has been appropriated 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.

This purchase program is in its final stages. The remaining balance of $32,774 is held in reserve principally for possible excess awards for purchase cases currently in condemnation proceedings.

ACQUISITION OF LANDS FOR CACHE NATIONAL FOREST

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate
Acquisition of lands for Cache National Forest	- -	$10,937	- -
Unobligated balance brought forward	-$10,937	-10,937	- -
Unobligated balance carried forward	10,937	- -	- -
Total available or estimate	- -	- -	- -

The 1956 Appropriation Act provided $200,000 for the acquisition of lands in the Cache National Forest pursuant to the Act of July 24, 1956 (70 Stat. 632). Obligations under this fund are in addition to the appropriation from National Forest receipts authorized by the Act of May 11, 1938, and provided in the appropriation, Acquisition of Lands for National Forests, Special Acts. Under the 1956 Act, funds appropriated must be matched by contribution of funds or land by local agencies or persons. Explanation of this program and the accomplishments thereunder are included under the appropriation, Acquisition of lands for national forests, special acts.

Mrs. HANSEN. Insert pages 152 through 155 of the justifications in the record.

(The pages follow:)

ADMINISTRATIVE PROVISIONS, FOREST SERVICE

Changes in Language

Changes in language are proposed as follows. New language is underscored and deleted matter is enclosed in brackets.

Appropriations to the Forest Service for the current fiscal year shall be available for: (a) purchase of not to exceed [two] one hundred and [twelve] ninety passenger motor vehicles of which one hundred and [eighty] seventy shall be for replacement only, and hire of such vehicles; operation and maintenance of aircraft and the purchase of not to exceed [two] four for replacement only; . . . . . ; and (f) acquisition of land and interests therein for sites for administrative and not to exceed $75,000 for research purposes, pursuant to the Act of August 3, 1956 (7 U. S. C. 428a) . . . .

Changes 1 and 2 would provide authority to purchase 190 passenger motor vehicles of which 170 will be replacements.

Change 3 would provide authority to purchase four aircraft which will be replacements.

Change 4 would provide authority to purchase sites needed for forestry research purposes.

PASSENGER CARRYING VEHICLES

Replacements

During fiscal year 1971, it is proposed that the Forest Service replace 170 passenger carrying vehicles. Of these, 165 will meet replacement standards and five will require replacement because of accidents or excessive maintenance costs.

Dependability of passenger carrying vehicles is an important factor in keeping work programs on schedule and in meeting emergencies. Vehicle breakdowns while on field travel cause disruptions and delays in field work as well as loss of effective work time of employees. The continued use of over-aged equipment is undesirable from a safety standpoint since most of it is operated over rough, narrow, winding roads in mountainous country under adverse conditions. This use generally results in excessive operating and repair expenses when vehicles reach or exceed replacement standards.

In order to maintain passenger carrying vehicles in a safe and satisfactory operating condition, it is the policy of the Forest Service to schedule periodic preventive maintenance inspections, services, and tune-ups to reduce the necessity for costly repairs and major overhauls, and to minimize lost time resulting from field breakdowns.

It is desirable to maintain a reasonable balance in the age class of the passenger vehicle inventory. The age class distribution is based upon conforming with replacement standards which recognize that some units will be retired under the age standards and others under the use standard. Prescribed replacement standards, although applicable, are not always appropriate for all Forest Service vehicles because of the wide range of operating conditions and the comparatively short field season in many of the National Forests at higher elevations. Decision on replacement of passenger vehicles which reach replacement age is based on an appraisal of each unit. This involves a review of the history record combined with a mechanical inspection of the vehicle's condition and repair liability. When such appraisal indicates that the vehicle is satisfactory for further service without unreasonable repair expenditures, it is retained and assigned to lighter work, even though such action tends to upset the age standards for the fleet inventory.

The vehicles selected for replacement are those which cannot be operated another season without excessive repair expense. They are unsatisfactory for further use both as to safety and mechanical condition. The replacement authorization requested is within the normal annual replacement standards prescribed by the General Services Administration.

Essentially all passenger carrying vehicles are pooled for use by all activities with replacement of pooled units financed from a Working Capital Fund. All appropriations reimburse this fund in ratio to use of vehicles on activities financed by the respective appropriations.

None of the replacements requested will be assigned to areas served or scheduled to be served by Inter-Agency Pools.

Additions

It is proposed that the Forest Service purchase 20 additional passenger carrying vehicles for the following purpose:

Twenty to be used as replacements for one-half ton pickups and carryalls which are more expensive to operate.

Sedans or station wagons cost less to operate and maintain than a truck. During fiscal year 1970, the Forest Service is replacing 26 light trucks, such as carryalls, pickups, panels, and sedan delivery trucks, with sedans and station wagons. The total estimated cost savings is $9,750 per year. The replacement of 20 passenger cars for light trucks in fiscal year 1971 would result in an additional saving of about $7,500 each year.

The Forest Service analyzes current work plans and program in determining its overall passenger carrying vehicle requirements. This analysis includes a careful study of the number of vehicles needed at each field station, using as a guiding principle the ownership of only the minimum number of dependable units required to serve programs for which funds are budgeted. Also, it is Forest Service policy to utilize Inter-Agency Motor Pools or commercial car rental services to the fullest practicable extent. Passenger car use is restricted and is integrated with various activities so as to attain good utilization of all vehicles.

Additions are financed from program funds in direct relationship to the anticipated use of the equipment. Distribution of costs to appropriations is based on analysis of use of the equipment fleet for the past three years and the estimated use for the budget year.

Number of Vehicles

The Forest Service had a net active fleet of 862 passenger carrying vehicles at the start of fiscal year 1970. It will add 32 units during the year, making a total of 894 units available at the start of fiscal year 1971, excluding possible transfers to other agencies. It is proposed that the total number of passenger carrying vehicles be increased to 914 by the end of fiscal year 1971.

As of June 30, 1969, the age and mileage classes of the passenger carrying vehicles on hand, exclusive of five buses, were:

Age Data

Year	No. of Vehicles
1964 and older	163
1965	122
1966	107
1967	124
1968	249
1969	197
Total	962*

Mileage Data

Miles	No. of Vehicles
60,000 and over	186
50,000 to 59,999	83
40,000 to 49,999	79
30,000 to 39,999	79
20,000 to 29,999	103
10,000 to 19,999	206
0 to 9,999	226
Total	962*

*Includes 120 vehicles on hand awaiting disposal, and excludes 15 vehicles on order, but not received at this time.

Use of Vehicles

Passenger carrying vehicles are used by:

(1) Forest officers in the protection, utilization, management, and development of the National Forests and land utilization projects and in the program for control of forest pests.

(2) Research technicians on experimental forests, and ranges, on field research projects and forest surveys.

(3) Foresters engaged in carrying out the laws providing for State and private forestry cooperation.

(4) Regional office field-going administrative personnel in performing, directing, and inspecting field work.

The Forest Service is essentially a field organization and its passenger carrying vehicles are located mainly at regional, National Forest, and ranger district headquarters, and experimental forests and ranges. There are over 226 million acres within the exterior boundaries of the National Forests.

About 472 million acres of State and private forest land are included within the areas which benefit from Federal participation in the cooperative forest program. Much of this area is without common carrier service, and most forest areas and research centers are remote from commercial travel routes, requiring extensive use of motor vehicles as a means of transportation. The major portion of transportation needs, particularly at regional and forest supervisor levels and at other larger headquarters, involves multiple passenger use and can be more expeditiously and economically met by use of sedans and station wagons than by other types of vehicles.

AIRCRAFT

Replacement of Aircraft

The 1971 estimates propose replacement of four aircraft by purchase and four by transfer from other agencies as available. The Forest Service currently has 57 aircraft:

14 T-34b lead planes (2-place scout)
12 Single-engine reconnaissance and transport airplanes
14 Light twin-engine reconnaissance and transport airplanes
16 Medium and heavy cargo and transport airplanes (7 medium, 9 heavy)
1 Helicopter

The helicopter is used for experimental development of techniques and equipment for direct tactical suppression of forest fires and in training Forest Service personnel in tactical use of helicopters. Current assignment includes project for operations of helicopters on fires using a suspended bucket for dropping retardants.

The T34-B lead airplanes are primarily single-purpose military model aircraft used by air tanker bosses to direct and control the dropping of retardants on forest fires by contract air tankers.

The multipurpose reconnaissance and transport airplanes are used primarily to transport smokejumpers, firefighters, administrative personnel, equipment and supplies to remote and inaccessible areas where commercial services are inadequate or not available for protection and suppression of forest fires. Other use is to locate and survey timber stand and vegetation conditions such as insect infestations, blowdown, diseased areas, undesirable species, and to appraise resources and damage and evaluate effectiveness of control.

One light twin-engine airplane is modified, equipped, and used primarily for fire mapping with infrared equipment in low visibility of smoke and at night.

The replacements requested will be primarily medium twin-engine airplanes. They will be utility airplanes that may be used for several purposes but primarily for providing essential service in dropping smokejumpers and paracargo and lead planes directing contract air tankers. The airplanes will be new, standard manufacture airplanes to upgrade with greater efficiency and utility some of the old military surplus aircraft currently providing essential services. These replacements will provide more effective operations with greater safety margin. The Forest Service aircraft are operated to a large extent over rough, mountainous terrain in turbulent air conditions, and from unimproved landing fields.

Medium and heavy cargo and transport airplanes are needed to meet requirements as a result of rapidly diminishing number available from supplemental air carriers and other commercial sources. The transport type may be obtained and other aircraft currently in use be replaced as newer or more suitable models and types become available from military services as excess property. Procurement would be on transfer without reimbursement and would not increase the total beyond 57 aircraft. When aircraft are partially or completely destroyed in a crash accident, they may be replaced out of any available funds.

SITES FOR RESEARCH USE

The present language authorizes the acquisition of only those sites needed for administrative purposes. The wording "administrative purposes" is generally interpreted to mean sites for headquarters buildings, ranger stations, laboratories, and dwellings. Therefore, sites needed for forestry research purposes have been acquired under authority of the Act of March 3, 1925, as amended (16 USC 555). This Act limits the amount which may be expended for land purchases in any one fiscal year to $50,000. In the last three years this limitation has severely hampered efforts to acquire small sites for research purposes. It has impeded orderly program progress, resulted in loss of desirable and advantageous sites because prompt acquisition could not be consummated, and resulted in increased site costs later when adequate authorization was available.

Over the next few years it is anticipated that there will be a continuing but intermittent need to acquire small tracts of land for experimental tree nurseries, development of superior tree seed sources, outplanting of genetic materials, and for other forestry research purposes.

REPLACEMENT PASSENGER MOTOR VEHICLES

Mrs. HANSEN. Give us the details on your requirement for the purchase of 170 replacement passenger motor vehicles.

Mr. CLIFF. Mr. Schultz will answer that.

Mr. SCHULTZ. Of the 170 passenger carrying vehicles, 165 will be to meet regular replacement standards, and five will be for replacement because of accidents or excessive maintenance costs.

Mrs. HANSEN. Accidents?

Mr. SCHULTZ. Automotive accidents.

Mrs. HANSEN. Insert in the record the locations at which the automobiles will be stationed.

(The information follows:)

MOTOR VEHICLE STATISTICS—FISCAL YEAR 1971

Forest or station	City and State	Replacement
Region 1:		
Gallatin	Bozeman, Mont	2
Nezperce	Grangeville, Idaho	2
Flathead	Kalispell, Mont	3
Beaverhead	Dillon, Mont	1
Regional office	Missoula, Mont	1
Colville	Colville, Wash	1
Deerlodge	Butte, Mont	2
Kootenai	Libby, Mont	1
Lolo	Missoula, Mont	2
Custer	Billings, Mont	1
Region 2:		
Grand Mesa Uncompahgre	Delta, Colo	1
Nebraska	Halsey, Nebr	1
Medicine Bow	Laramie, Wyo	2
Pike	Colorado Springs, Colo	2
Black Hills	Custer, S. Dak	2
White River	Glenwood Springs, Colo	2
Rocky Mountain Sta	Fort Collins, Colo	4
Do	Flagstaff, Ariz	1
Do	Bottineau, N. Dak	2
Region 3:		
Carson	Taos, N. Mex	1
Continental Divide Training Center	Continental Divide, N. Mex	1
Gila	Silver City, N. Mex	1
Lincoln	Alamogordo, N. Mex	1
Coconino	Flagstaff, Ariz	1
Region 4:		
Sawtooth	Twin Falls, Idaho	1
Manti-La Sal	Price, Utah	2
Dixie	Cedar City, Utah	2
Targhee	St. Anthony, Idaho	3
Uinta	Provo, Utah	1
Boise	Boise, Idaho	2
Challis	Challis, Idaho	1
Salmon	Salmon, Idaho	2
Region 5:		
Angeles	Pasadena, Calif	3
Eldorado	Placerville, Calif	2
Inyo	Bishop, Calif	1
Klamath	Yreka, Calif	1
Lassen	Susanville, Calif	2
Los Padres	Santa Barbara, Calif	1
Mendocino	Willows, Calif	1
Modoc	Alturas, Calif	1
San Bernardino	San Bernardino, Calif	2
Sequoia	Porterville, Calif	1
Shasta-Trinity	Redding, Calif	3
Stanislaus	Sonora, Calif	1
Tahoe	Nevada City, Calif	3
PSW Station	Berkeley, Calif	1
Regional Office	San Francisco, Calif	5
Northern California Service Center	Redding, Calif	1
Stockton Equipment Depot	Stockton, Calif	1

Forest or station	City and State	Replacement
Region 6:		
Willamette	Eugene, Oreg	1
Okanogan	Okanogan, Wash	2
Siuslaw	Corvallis, Oreg	2
Wallowa—Whitman	Baker, Oreg	2
Wenatchee	Wenatchee, Wash	2
Malheur	John Day, Oreg	1
Rogue River	Medford, Oreg	2
Winema	Klamath Falls, Oreg	1
Mt. Baker	Bellingham, Wash	2
PNW Station	Portland, Oreg	1
Region 8:		
Georgia	Gainesville, Ga	2
Cherokee	Cleveland, Tenn	1
Florida	Tallahassee, Fla	4
Kisatchie	Pineville, La	3
George Washington	Harrisonburg, Va	2
Ouachita	Hot Springs, Ark	2
North Carolina	Asheville, N.C	4
Texas	Lufkin, Tex	2
Jefferson	Roanoke, Va	2
Mississippi	Jackson, Miss	1
S & PF	Asheville, N.C	2
Region 9:		
Allegheny	Warren, Pa	2
Chippewa	Cass Lake, Minn	1
Hiawatha	Escanaba, Mich	3
Huron-Manistee	Cadillac, Mich	1
Monongahela	Elkins, W.Va	2
Ottawa	Ironwood, Mich	2
Shawnee	Harrisburg, Ill	3
Wayne-Hoosier	Bedford, Ind	4
White Mountain	Laconia, N.H	2
Superior	Duluth, Minn	2
Clark	Rolla, Mo	1
Green Mountain	Rutland, Vt	2
Nicolet	Rhinelander, Wis	2
North Central Station	St. Paul, Minn	2
Northeastern Station	Upper Darby, Pa	6
Forest Products Lab	Madison, Wis	1
Southeastern Station	Asheville, N.C	5
Southern Station	New Orleans, La	6

ADDITIONAL PASSENGER MOTOR VEHICLES

Mrs. HANSEN. Describe your requirements for 20 additional passenger motor vehicles.

Mr. SCHULTZ. The 20 additional passenger carrying vehicles are to replace one-half ton pickups and carryalls. Passenger carrying vehicles cost less to operate and maintain than the pickups or carryalls, so we plan to replace 20 of these vehicles with sedans and station wagons. We estimate the cost saving in this kind of replacement to be $7,500 per year.

Mrs. HANSEN. Please insert in the record the locations at which they will be stationed.

(The information follows:)

MOTOR VEHICLE STATISTICS—FISCAL YEAR 1971

Forest or station	City and State	Addition
Region 1:		
Regional office	Missoula, Mont	2
Deerlodge	Butte, Mont	1
Kootenai	Libby, Mont	2
Custer	Billings, Mont	1
Region 2:		
Grand Mesa Uncompahgre	Delta, Colo	1
Nebraska	Halsey, Nebr	1
Region 4: Uinta	Provo, Utah	2
Region 5: Cleveland	San Diego, Calif	2
Region 6: Willamette	Eugene, Oreg	3
Region 9:		
Chippewa	Cass Lake, Minn	1
Huron-Manistee	Cadillac, Mich	2
White Mountain	Laconia, N.H	2

AIRCRAFT

Mrs. HANSEN. Describe your requirements for the purchase of four replacement aircraft.

Mr. SCHULTZ. Four aircraft will be by purchase and four by transfer. The replacements we are requesting will be primarily the medium twin-engine airplanes. They will be utility planes that are used for several purposes, but primarily for dropping smokejumpers and paracargo, and as lead planes in directing the aerial fire retardant drops.

SITES FOR RESEARCH USE

Mrs. HANSEN. Give us the justification for the authority you are requesting to purchase sites needed for forestry research purposes.

Mr. SCHULTZ. Presently the appropriation language provides authority for acquiring only those sites needed for administrative purposes. The authority we have been using for purchasing sites for forestry research purposes is limited to $50,000 a year. This has limited us in acquiring small areas for research purposes, and has resulted in a loss of desirable and advantageous sites, because prompt acquisition could not be consummated. This has resulted in increased site costs later when adequate authorization was available.

Acquisition of small research sites would be for outplanting of genetic materials, experimental tree nurseries, and for development of superior tree seed sources in locations where we do not have suitable lands to do these specialized types of research testing.

PERMANENT APPROPRIATIONS

Mrs. HANSEN. Insert pages 156 through 163 of the justifications in the record.

(The pages follow:)

ROADS AND TRAILS FOR STATES, NATIONAL FORESTS FUND

Appropriation, 1970	$31,206,198
Budget estimate, 1971	34,292,200
Increase (due to an estimated increase in National Forest receipts in fiscal year 1970)	+3,086,002

The permanent appropriation of 10 percent of National Forest receipts pursuant to the Act of March 4, 1913 (16 USC 501) is transferred to and merged with the annual appropriation for Forest Roads and Trails. The explanation of the use of these funds is included in the justification for that appropriation item.

EXPENSES, BRUSH DISPOSAL

Appropriation, 1970	$12,800,000
Budget estimate, 1971	12,800,000

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate	Increase or decrease
Brush disposal	$8,960,276	$13,600,000	$15,750,000	+$2,150,000
Unobligated balance brought forward	-13,491,696	-16,435,771	-15,635,771	+800,000
Unobligated balance carried forward	16,435,771	15,635,771	12,685,771	-2,950,000
Total available or estimate	11,904,351	12,800,000	12,800,000	- -

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 USC 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 epidemics 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.

FOREST FIRE PREVENTION

Appropriation, 1970	$125,000
Budget estimate, 1971	133,000
Increase	+8,000

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate	Increase or decrease
Forest fire prevention	$90,232	$92,000	$127,000	+$35,000
Unobligated balance brought forward	-65,561	-75,791	-108,791	-33,000
Unobligated balance carried forward	75,791	108,791	114,791	+6,000
Total available or estimate	100,461	125,000	133,000	+8,000

The Smokey Bear licensing program is an important part of the Cooperative Forest Fire Prevention Campaign, and accomplishes its purpose through dissemination to the public of Smokey Bear's forest fire prevention message on commercial products licensed by the Chief of the Forest Service, and by support of the Smokey Bear Junior Forest Rangers and the Smokey Bear awards program through contribution of fees and royalties by licensees. There is a real need to increase the distribution of Smokey Bear items nationwide, thus contributing to improved public information and education concerning the prevention of forest fires. It is proposed to:

(1) Reproduce Smokey and his message on millions of packages of dry cereal.

(2) Establish fire prevention displays in 10,000 shoe departments around the country.

(3) Use Smokey as a key decoration on a series of coordinated outfits for boys.

(4) Produce educational film strips with recorded sound that will feature Smokey and a forest fire prevention message.

Examples of Recent Accomplishments

Under a cooperative agreement entered into June 30, 1968, with Weston Merchandising Corporation, the distribution of Smokey Bear's forest fire prevention message on commercial items more than doubled in fiscal year 1969.

The "Smokey Bear Show" -- a series of 30-minute animated full-color adventure cartoons -- premiered on the ABC television network on September 6, 1969, under a two-year contract.

Smokey Bear Headquarters staff conducted a nationwide forest fire prevention poster contest on behalf of the North American Forestry Commission. The United States entries took two of the three "supreme" awards in the international competition at Ottawa, Canada.

One of the Smokey Bear TV spots -- "Vanishing American" -- won a "supreme" award in its category of the NBC film festival.

Public service time and space donated to Smokey Bear's 1968 Campaign was estimated at not less than $17.5 million, an increase of more than $2 million from the preceding year.

RESTORATION OF FOREST LANDS AND IMPROVEMENTS

Appropriation, 1970	$25,000
Budget estimate, 1971	25,000

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate	Increase or decrease
Restoration of forest lands and improvements	$14,943	$25,000	$25,000	- -
Unobligated balance brought forward	-13,138	-9,514	-9,514	- -
Unobligated balance carried forward	9,514	9,514	9,514	- -
Total available or estimate	11,319	25,000	25,000	- -

Recoveries from cash bonds or forfeitures under surety bonds by permittees or timber purchasers, who fail to complete performance of improvement, protection, or rehabilitation work required under the permit or timber sale contract, are used to cover the cost to the United States of completing such work on lands under Forest Service administration. Funds received as settlement of a claim are used for improvement, protection, or rehabilitation made necessary by the action which led to the cash settlement (Act of June 20, 1958, 16 USC 579c).

PAYMENT TO MINNESOTA (COOK, LAKE, AND ST. LOUIS COUNTIES) FROM THE NATIONAL FORESTS FUND

Appropriation, 1970	$257,955
Budget estimate, 1971	258,000
Increase	+45

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate	Increase or decrease
Payment to Minnesota from the National Forests Fund (total available or estimate)	$146,232	$257,955	$258,000	+$45

The Act of June 22, 1948, as amended (16 USC 577c-577h) provides that the Secretary of the Treasury, upon certification of the Secretary of Agriculture, shall pay to the State of Minnesota at the close of each fiscal year from any National Forest receipts not otherwise appropriated an amount equivalent to three-fourths of one percent of the fair appraised value of certain National Forest lands in the counties of Cook, Lake, and St. Louis situated within the Superior National Forest. The Act further provides that payment to the State shall be distributed to each of these counties in conformity with the fair appraised value of such National Forest lands in each county.

PAYMENTS TO COUNTIES, NATIONAL GRASSLANDS

Appropriation, 1970	$488,000
Budget estimate, 1971	488,000

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate	Increase or decrease
Payment to counties (total available or estimate)	$538,155	$488,000	$488,000	- -

At the end of each calendar year, 25 percent of the revenues from use of submarginal lands are paid to counties under the provisions of Title III of the Bankhead-Jones Farm Tenant Act, approved July 22, 1937 (7 USC 1012). Payments are made on the provision that they are used for school or road purposes, or both.

PAYMENTS TO SCHOOL FUNDS, ARIZONA AND NEW MEXICO

Appropriation, 1970	$124,709
Budget estimate, 1971	125,000
Increase (due to an estimated increase in National Forest receipts in fiscal year 1970)	+291

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate	Increase or decrease
Payments to school funds (total available or estimate)	$90,193	$124,709	$125,000	+$291

Under provisions of the Act of June 20, 1910 (36 Stat. 562, 573) certain areas within National Forests were granted to the States for school purposes. The percentage that these lands are of the total National Forest area within the State is used in determining payments to the States. The receipts from all National Forest land within the State are used as the basis for applying the percentage. For example, if total receipts for the State are $100,000 and if 10 percent of lands are in the "granted for school purposes" category, the payment to the State would be $10,000. The amounts so paid are deducted from the net receipts before computing the 25 percent payments to States.

As soon after the close of the fiscal year as the receipts from National Forests and the area of school lands in the States of Arizona and New Mexico are determined, the payments are made to the States. Payments in fiscal year 1970 to Arizona were $123,259 and to New Mexico $1,450.

PAYMENTS TO STATES, NATIONAL FORESTS FUND

Appropriation, 1970	$78,012,921
Budget estimate, 1971	85,727,875
Increase (due to an estimated increase in National Forest receipts in fiscal year 1970)	+7,714,954

PROJECT STATEMENT

Project	1969	1970 estimate	1971 estimate	Increase or decrease
Payments to States (total available or estimate)	$52,325,638	$78,012,921	$85,727,875	+$7,714,954

The Act of May 23, 1908, as amended (16 USC 500) requires, with a few exceptions, that 25 percent of all money received from the National Forests during any fiscal year be paid to the States in which the forests are located, for the benefit of public schools and public roads of the county or counties in which such National Forests are situated. The amount of this appropriation varies each year in direct proportion to National Forest receipts during the previous fiscal year.

The amounts set aside from receipts collected from the sale of National Forest timber, grazing, special use permits, power, mineral leases, and admission and user fees, before the 25 percent is applied are listed below:

1. Payment to the State of Minnesota covering certain National Forest lands in 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, as amended (16 USC 577c-577h). Receipts collected from the areas covered by this Act are excluded when the 25 percent payment to the State of Minnesota is computed.

2. For lands in certain counties in Utah, Nevada, and California, the States receive 25 percent of receipts only after funds, if made available by Congress, have been set aside for the acquisition of National Forest lands within the specified National Forests under the terms of special acts authorizing appropriations from forest receipts for this purpose.

3. Payments to the States of Arizona and New Mexico under the provisions of the Act of June 20, 1910 (36 Stat. 562, 573), of shares of the gross receipts from the National Forests in those States which are proportionate to the areas of land granted to the States for school purposes within the National Forests.

Working Capital Fund

Mrs. Hansen. Insert pages 164 and 165 of the Justifications in the record.

(The pages follow:)

WORKING CAPITAL FUND

The Working Capital Fund was established by the Act of August 3, 1956 (16 USC 579b), as amended by the Act of October 23, 1962, (16 USC 579b). It is a self-sustaining revolving fund which provides services to National Forests, Experiment Stations, and when necessary, to other Federal agencies, and as provided by law to State and private agencies and persons who cooperate with the Forest Service in fire control and other authorized programs.

The Working Capital Fund requires no cash appropriation. Initially, its assets were purchased by regular Forest Service appropriations and donated to the fund. Where expansion of Working Capital Fund operations is required it generally is financed prorata by benefiting Forest Service appropriations and the resulting assets are donated to the fund. In some instances assets have been obtained without cost to Forest Service appropriations or the Working Capital Fund. In other instances, the expansion was financed by the Working Capital Fund.

The following services were provided by the Working Capital Fund in fiscal year 1969:

1. Equipment service.--This service owns, operates, maintains, and replaces approximately 13,500 pieces of common use motor driven and similar equipment. This equipment is rented to a total of 166 proclaimed National Forests, Experiment Stations and other units, and in some cases to other agencies, at rates which recover the cost of operation, repair and maintenance, management, and depreciation. The rates also include an increment which provides additional cash which when added to depreciation earnings and the residual value of equipment provides sufficient funds to replace the equipment. This service operates 90 repair shops.

2. Aircraft service.--This service operates and maintains 57 Forest Service owned aircraft used in fire surveillance and suppression and in other Forest Service programs. The aircraft are based at 11 locations and are rented to National Forests, Experiment Stations, and in some cases to other agencies, at rates which recover the cost of operation, maintenance, repair, and improvements in the air-worthiness of the aircraft. Replacement costs and the costs of additional aircraft are financed prorata by benefiting Forest Service appropriations. This service operates three aircraft maintenance shops.

3. Supply service.--This service operates the following common services:

   Central Supply.--This service has two locations for procurement, warehousing, and supply of common use items, such as work project tools, provisions, and supplies. Grass seed is procured, stored and issued from two other locations. Issuances and sales are made to National Forests, Experiment Stations, and others at prices which recover cost.

   Photo reproduction.--Four photo reproduction laboratories store, reproduce, and supply aerial photographs, aerial maps, and other photographs of National Forest lands. The photographic reproductions are sold to National Forests, Experiment Stations, and others at cost.

   Sign Shop.--These include 11 small shops which manufacture and supply special signs for the National Forests for use in regulating traffic and as information to the public and other users of the National Forests. The signs are sold to National Forests and Experiment Stations at cost.

   Subsistence.--There are 28 facilities which prepare and serve meals at cost to Forest Service work crews working in remote areas where adequate public restaurant facilities are not available.

Cribbing.--This facility is located on the Angeles National Forest, California to manufacture special concrete structural material used in embankments for erosion control purposes along access roads in the National Forests. This material is sold to National Forests at prices which recover costs.

4. Nursery service.--This service operates 14 forest tree nurseries and cold storage facilities for storage of tree and seed stock and one seed extractory. Tree seed is procured, cleaned, bagged, and stored in refrigerated facilities. Tree and seed stock are sold to National Forests, States, and other Federal agencies at cost.

Volume of Business for the Various Major Activities of the Working Capital Fund
(In thousands of dollars)

	Actual 1969	Estimated 1970	Estimated 1971
Equipment service	$19,038	$21,491	$21,492
Aircraft service	673	782	782
Supply service	2,526	3,226	3,226
Nursery service	2,657	2,593	2,593
Totals	24,894	28,092	28,093

The following is a tabulation pertaining to the capital and earnings of the Working Capital Fund:

Analysis of Capital and Earnings
(In thousands of dollars)

	Actual through June 30, 1969	Estimated through June 30, 1970	Estimated through June 30, 1971
Value of assets donated to the fund	$33,724	$34,498	$35,272
Value of assets acquired from earnings	7,984	10,195	11,150
Earnings reserved for future acquisition of assets	1,651	500	500
Balance of earnings	-894	-500	- -
Total capital and earnings	42,465	44,693	46,922

WORKING CAPITAL EARNINGS

Mrs. HANSEN. You indicate the total capital earnings of your working capital fund will increase from $42.4 million as of June 30, 1969, to $46.9 million as of June 30, 1971. What is the significance of this increase?

Mr. SCHULTZ. The increase is made up from several sources, such as value of assets purchased by program funds and donated to the fund, and value of assets acquired from earnings. That would be principally it.

SALE OF SEEDLINGS

Mrs. HANSEN. Where do you sell your seedlings?

Mr. SCHULTZ. Seedlings are sold to the national forests and to cooperating States and other agencies from the working capital fund nurseries.

TRUST FUNDS

Mrs. HANSEN. Insert pages 166 through 168 of the justifications in the record.

(The pages follow:)

COOPERATIVE WORK, FOREST SERVICE (TRUST FUND)

Contributions are received from cooperators, including counties, States, timber sale operators, individuals, and associations, and are expended by the Forest Service in accordance with the terms of the applicable cooperative agreements. The work consists of protection and improvement of the National Forests, work performed for National Forest users, and forest investigations and protection, reforestation, and administration of private forest lands.

The major programs conducted under this account are described below in terms of the projects reflected in the statement at the end of this section.

1. Construction and Maintenance of Roads and Trails, and

2. Construction and Maintenance of Other Improvements.

   Under the Acts of June 30, 1914 (16 USC 498) and March 3, 1925, April 24, 1950 (16 USC 572) and October 13, 1964 (16 USC 537) deposits for cooperative work are accepted from State and local government agencies, associations, Federal timber purchasers, users of roads, and others for the construction and maintenance of roads, trails, and other improvements and for performing work which is the National Forest users' responsibility, this method of performance of the work being of mutual benefit or of benefit to the public at large. Cooperative deposits received for wildlife habitat improvement for States from their hunting and fishing fees are included in this activity.

3. Protection of National Forest and Adjacent Non-Federal Lands. The Act of June 30, 1914 (16 USC 498) authorizes the acceptance of contributions for the protection of the National Forests and the Act of March 3, 1925, as amended by Section 5, Act of April 24, 1950 (16 USC 572), authorizes the acceptance of deposits for the protection of non-Federal lands in or near the National Forests. The major portion of the obligations is for the protection of private lands from fire. This arrangement helps both parties since there are millions of acres of non-Federal forest land intermingled with Federal ownership on the National Forests. The lands in non-Federal ownership are usually in small tracts. It would be uneconomical for the owner to set up a fire control organization for the protection of his land. The advantage to the Government is that in many cases it would be necessary to suppress the fires on the non-Federal land without reimbursement in order to protect the adjoining Federal land.

4. Sale Area Betterment (including reforestation). Section 3 of the Act of June 9, 1930 (16 USC 576b) provides for deposits of funds by timber sale purchasers to cover the cost of reforestation and special cultural measures to improve the future stand of timber on the areas cutover by the purchaser. Deposits in fiscal year 1969 under this authorization totaled $29.5 million. Fiscal year 1969 accomplishments under this program are reported under the Forest land management subappropriation along with accomplishments for reforestation and stand improvement for that subappropriation.

5. Scaling. Under provisions of the Act of April 24, 1950 (16 USC 572) and of Section 210 of the Act of September 21, 1944 (16 USC 572a) acceptance of deposits from timber purchasers for cooperative scaling service is authorized. Such arrangements are established only when requested by the operator and when the operator pays the extra cost of such services, either in advance or through reimbursement under appropriate payment guarantees.

6. Research Investigations. The Acts of June 30, 1914 (16 USC 498) and May 22, 1928 (16 USC 581i-1) authorize the acceptance of deposits for forestry research. Deposits are received from State and other public agencies, and from industrial, association, and other private agencies to finance research projects of mutual interest and benefit to both parties. The deposits may

be made either in a single sum or on a continuing basis, and may either partially or wholly cover the cost of the research. The cooperative research projects may involve any aspect of forestry and vary widely as to scope and duration. A very common example of such cooperation is for a State to make a deposit to the Cooperative work fund in order to intensify or to speed up completion of a comprehensive survey of the forest resources of the State. Other examples are State contributions toward forest fire research. The results of such cooperative investigations are made available to the general public as well as to the depositor.

7. Administration of Non-Federal Lands. The Act of March 3, 1925, as amended by Section 5, Act of April 24, 1950 (16 USC 572) authorizes the acceptance of deposits for the administration of non-Federal lands. These deposits are made by non-Federal owners having land intermingled with or adjacent to National Forests who wish these lands managed in accordance with good forest management practices. Their holdings are usually too small to warrant the employment of professional foresters to administer such tracts. The advantages to the Government include the avoidance of possible high fire hazard areas resulting from improper cutting practices, the elimination of the necessity of precisely marking the boundaries of the private land, and additional private forest land handled under proper forest practices.

8. Reforestation (private lands). The Act of March 3, 1925, as amended by Section 5, Act of April 24, 1950 (16 USC 572) authorizes the acceptance of deposits for reforestation of non-Federal lands situated within or near a National Forest. This work is limited to areas of non-Federal land within a planting project on the National Forests or to areas in which certain civic and other public-spirited organizations have taken an interest.

9. Statement on Utilization of Funds. Following is a statement of funds received and obligated and balances available by major activities:

COOPERATIVE WORK, FOREST SERVICE -- Trust Fund

Project	Balance Available June 30, 1968	Actual Fiscal Year 1969			Estimate Fiscal Year 1970			Estimate Fiscal Year 1971		
		Funds Received	Obligations	Balance	Funds Received	Obligations	Balance	Funds Received	Obligations	Balance
1. Construction and maintenance of roads and trails	$2,707,243	$5,186,980	$2,849,068	$5,045,155	$4,500,000	$3,501,000	$6,044,155	$6,000,000	$7,699,000	$4,345,155
2. Construction and maintenance of other improvements	469,529	585,429	554,523	500,435	500,000	575,000	425,435	800,000	950,000	275,435
3. Protection on National Forests and adjacent private land:										
(a) Fire	429,178	1,212,318	1,024,857	616,639	1,100,000	1,100,000	616,639	1,200,000	1,325,000	491,639
(b) Other	1,746,910	1,988,327	1,621,225	2,114,012	1,259,000	2,000,000	1,373,012	1,259,000	2,100,000	532,012
4. Sale area betterment on National Forest lands (including reforestation)	40,845,230	29,537,364	21,493,307	48,889,287	35,550,000	24,845,000	59,594,287	33,650,000	31,350,000	61,894,287
5. Scaling of timber	214,620	1,055,858	1,007,435	263,043	1,100,000	1,100,000	263,043	1,100,000	1,100,000	263,043
6. Research investigations	347,630	735,402	713,022	370,010	700,000	750,000	320,010	700,000	975,000	45,010
7. Administration of private lands	22,222	24,919	26,677	20,464	20,000	30,000	10,464	20,000	30,000	464
8. Reforestation (private lands)	97,025	21,859	15,997	102,887	20,000	20,000	102,887	20,000	70,000	52,887
9. Development, administration, and operation of the Robert S. Kerr memorial Arboretum and the Cradle of Forestry	- -	860	- -	860	1,000	1,000	860	1,000	1,000	860
Subtotal	46,879,587	40,349,316	29,306,111	57,922,792	44,750,000	33,922,000	68,750,792	44,750,000	45,600,000	67,900,792
Advanced to FOREST PROTECTION AND UTILIZATION for fighting forest fires a/	-600,000	- -	-600,000	- -	- -	- -	- -	- -	- -	- -
Total	46,279,587	40,349,316	28,706,111	57,922,792	44,750,000	33,922,000	68,750,792	44,750,000	45,600,000	67,900,792

a/ Reflects obligations for fighting forest fires -- $600,000 recovered from 1969 Fighting Forest Fire appropriation.

NOTE: Balances carried forward are due primarily to necessity of deferring work for which funds are deposited until the most practicable time for accomplishment. For instance, funds for sale area betterment are received in advance of timber cutting, but work cannot be started until cutting operations are completed. The time lag sometimes extends for several years, depending on the amount of preparatory work required in the sale area and weather conditions.

Above obligations for 1969 include:

(1) Transfers to National Forests Fund of earned sale area betterment deposits in excess of obligations for sale area betterment work	$72,548
(2) Refunds to cooperators	133,646
	206,194

FISCAL YEAR 1969 OBLIGATIONS

Mrs. HANSEN. Please insert in the record a tabulation of total obligations incurred by the Forest Service for fiscal year 1969. This tabulation should indicate total obligations for each month of the year and should include only those obligations that relate to funds appropriated by this committee on an annual basis.

Mr. SCHULTZ. We will do that.

(The information follows:)

The following fiscal year 1969 obligations were incurred against Forest Service funds appropriated by Congress:

Month:	*Amount (thousands)*
July 1968	$41,505
August 1968	40,825
September 1968	34,323
October 1968	30,075
November 1968	27,945
December 1968	23,159
January 1969	24,988
February 1969	23,630
March 1969	23,020
April 1969	27,740
May 1969	30,535
June 1969	54,093
Total	381,838

The above amounts include cooperative range improvements and roads and trails for States, which funds are merged with forest protection and utilization and forest roads and trails appropriations.

PERMANENT POSITIONS

Mrs. HANSEN. I would also like you to insert in the record a tabulation, once again for annual appropriated funds, of total authorized permanent positions on a monthly basis for fiscal year 1970 through the month of February and indicate permanent position vacancies at the end of each month during that period.

(The information follows:)

Authorized permanent full-time positions and vacancies at end of each month for fiscal year 1970 for funds appropriated annually.

Month	Ceiling	Vacancies
July	16,788	
August	16,788	
September	16,788	
October	16,788	
November	16,788	19
December	16,788	35
January	16,788	84
February	16,788	115

Mr. SCHULTZ. Our permanent full-time personnel ceiling is 20,956 for all funds.

Mrs. HANSEN. How many people do you presently employ?

Mr. SCHULTZ. Slightly under that.

Mrs. HANSEN. How many vacancies do you have?

Mr. SCHULTZ. Probably about 200 vacancies.

Mrs. HANSEN. Why do you have these vacancies?

Mr. SCHULTZ. These positions are in the process of being filled. In other words, we hold some vacant positions for the new graduates from school so that we can place them upon graduation.

PER DIEM AND MILEAGE RATES

Mrs. HANSEN. We would also like you to insert in the record a schedule of the various per diem and mileage rates which were in effect as of June 30, 1969, and those currently in effect.

Mr. SCHULTZ. We have that information and will be glad to insert it.

(The information follows:)

Schedule of per diem rates currently in effect:

(1) Cost of lodging plus $8 not to exceed $25.

(2) When night's lodging is not required, $8.

(3) Within the maximum (items 1 and 2) rates may be adjusted by field offices due to local conditions.

Schedule of per diem rates in effect June 30, 1969:

(1) $16.

(2) $8 when travel was less than 24 hours and a night's lodging was not required.

(3) Within the maximum (items 1 and 2) rates could be adjusted by field offices due to local conditions.

Schedule of mileage rates currently in effect when travel performed is advantageous to the Government:

	Cents
Airplanes	12
Automobiles	10
Trucks	12
Motorcycles	5

Schedule of mileage rates in effect June 30, 1969, when travel performed was advantageous to the Government:

	Cents
Airplanes	12
Automobiles	9
Trucks	12
Motorcycles	5

Mrs. HANSEN. I want to thank you, Mr. Cliff, and the members of your staff for a very excellent presentation. We have had a very in-depth look at your programs and have secured information that I think is pertinent not only to members of this committee but to Members of Congress and to people of this Nation.

Mr. CLIFF. Thank you, Madam Chairman. It is always a pleasure to work with this committee.

Mrs. HANSEN. Mr. Wyatt.

MOVE OF REGION 6 OFFICE

Mr. WYATT. Madam Chairman, I would like to thank the Chief for an excellent presentation by his very able staff here. I have one question. I think the chairman's interests are parallel with mine on this, but we have been increasingly nervous about moves on behalf of the Federal Government to regionalize various activities in the so-called 10 subcapitals in the country. I wonder if you could tell us whether there is any consideration or study going on now which might lead toward moving the regional offices of region 6 from Portland, Oreg., to Seattle, Wash.?

Mr. CLIFF. No, we have no plans or studies that would have anything to do with a move of this kind. We have not made any proposals for such a move. To my knowledge nobody else has proposed that we move the regional office from Portland to Seattle.

Mr. WYATT. I would only like to say that Portland is the geographic center obviously of region 6, and it wouldn't make any sense to me to have this move made, but there has been movement in some areas of Government to attempt to put all of the regional headquarters of all Federal agencies in the so-called 10 subcapitals. I might say that if anything comes up in regard to this, this committee would appreciate being advised so that we can take whatever action we must.

Mr. CLIFF. We will be glad to keep in touch with the committee on it. I might say that the 10 subcapitals were set up primarily to handle those functions of Government that deal with large numbers of people, the urban development programs, the welfare programs and other programs. These 10 regions do not fit at all the distribution of work of the Forest Service. As I recall, about half of these regional headquarters are in the Northeastern part of the United States and in the Chicago and Central States area, whereas we have only one regional office that covers the entire Lake States and the Northeastern States to administer the national forest programs. We have another regional office located near Philadelphia that handles all of the State and private forestry activities in the entire northeastern quadrant of the United States. We have two research regions in this quadrant.

This just illustrates that the subcapitals that were set up to handle these other programs do not coincide at all with our forestry program workloads, and it isn't feasible to make them coincide.

Mr. WYATT. Thank you very much, Chief. I appreciate what you said, but don't let your guard down just because it doesn't make sense, because it doesn't make much sense to transfer the Federal Highway Administration regional office, because they don't deal with large masses of people. They deal directly with the division headquarters in the State capitals, and yet there is under serious consideration approval to transfer the regional headquarters of the Federal Highway Administration from Portland to Seattle on the basis that they are trying to regionalize everything. That is the reason given to me.

TUESDAY, APRIL 7, 1970.

NATIONAL ENDOWMENT FOR THE ARTS

WITNESSES

MISS NANCY HANKS, CHAIRMAN, NATIONAL ENDOWMENT FOR THE ARTS
BARNABY C. KEENEY, CHAIRMAN, NATIONAL ENDOWMENT FOR THE HUMANITIES
MICHAEL STRAIGHT, DEPUTY CHAIRMAN
CLARK MITZE, DIRECTOR, STATE AND COMMUNITY OPERATIONS
LEONARD RANDOLPH, ASSISTANT DIRECTOR, STATE AND COMMUNITY OPERATIONS

Mrs. HANSEN. The committee will come to order. This morning we have the National Endowment for the Arts, and it is a great pleasure

to welcome back the principal witness, Miss Hanks, the Chairman. The Nation is very proud that you are serving. I think all of us who are women feel particularly proud that you were chosen as the Chairman of the National Endowment for the Arts. Will you insert your biography in the record and also insert your general statement in the record and summarize it for us.

(The biography and statement follow:)

NANCY HANKS, GOVERNMENT OFFICIAL

Personal: Born Miami Beach, Fla., December 31, 1927. Daughter Bryan Cayce and Virginia (Wooding) Hanks, 3513 Westridge, Fort Worth, Tex.

Education: Montclair High School, Montclair, N.J., 1945; Duke University, A.B. magna cum laude, 1949; University of Colorado, summer 1946; Oxford University, summer 1948.

Positions held: Member staff, Office of Defense Mobilization, 1951–52; member staff, President's Advisory Committee on Government Organization, 1953; Assistant to Under Secretary, Department of Health, Education, and Welfare, 1953–54; special assistant, Special Projects Office, White House, 1955; assistant to Nelson A. Rockefeller, 1956–59; associate, Laurence S. Rockefeller, 1959–69; executive secretary, Special Studies Project, Rockefeller Brothers Fund, 1956–69. Project coordinator, The Performing Arts: Problems and Prospects; staff coordinator, Prospect for America, the Rockefeller Panel Reports on foreign policy, defense, education, social and economic affairs, and democracy. Adviser, Outdoor Recreation Resources Review Commission, 1961–62; Chairman, National Endowment for the Arts and National Council on the Arts, 1969.

Other activities: Trustee, Duke University; former president, Associated Councils of the Arts; Former member, Council, American Association of Museums; former trustee, Museum of Primitive Art; former member, advisory board, Mary Duke Biddle Gallery for the Blind at the North Carolina Museum of Art; former trustee, Robert College, Istanbul, Turkey; former member, executive committee, The Radcliffe Institute.

Memberships: Phi Beta Kappa, Phi Kappa Delta, and Kappa Alpha Theta.

STATEMENT OF MISS NANCY HANKS

Madame Chairman, it is a great privilege and a personal pleasure for me to appear here this morning on behalf of the National Endowment for the Arts.

I come before this subcommittee with the knowledge that we owe whatever success the Federal arts program has enjoyed to the wisdom and courage of those men and women in the Congress who have struggled to make the program possible. In both the majority and the minority parties, the National Foundation on the Arts and the Humanities has had strong proponents and defenders. I hope that the Arts Endowment may continue to have your support and your trust.

Let me say, too, that I want to make a part of the record of this hearing that I have profound respect for my predecessor, Roger L. Stevens. Mr. Stevens and the 26 distinguished members of the National Council on the Arts have guided the work of the Endowment in such ways that it has been able to use limited funds with great wisdom, producing the greatest possible benefit for the largest number of people in our country.

RESPONSE TO THE PRESIDENT'S MESSAGE

I am here this morning to ask that the subcommittee support funding of the National Endowment for the Arts at the level sought by the President's budget. In his special message to the Congress on December 10, the President said:

"At a time of severe budget stringency, a doubling of the appropriation for the arts and humanities might seem extravagant. However, I believe that the need for a new impetus to the understanding and expression of the American idea has a compelling claim on our resources. The dollar amounts involved are comparatively small. The Federal role would remain supportive rather than primary * * *

"* * * The arts have attained a prominence in our life as a nation and in our consciousness as individuals, that renders their health and growth vital to our national well-being. America has moved to the forefront as a place of creative expression. The excellence of the American product in the arts has won worldwide recognition. The arts have the rare capacity to help heal divisions among our own people and to vault some of the barriers that divide the world."

I have quoted at such length from the President's message for two reasons: First, I believe it is a significant demonstration of his own belief in the need for the arts in everyday life; second, because it is, to such a marked degree, a reaffirmation of sentiments expressed by some of the most distinguished Members of the Congress during debate on appropriations for the Endowment during the past 4 years.

I was delighted by the reception given to the message by Members of the Congress. As each new comment has been made in the Senate and in the House I have found myself hoping that this might be a harbinger for the arts in our country; that we might see the beginning of solid, substantive support for the encouragement of the arts nationwide.

Equally heartening has been the overwhelming surge of support for the message from the people and the press of the Nation. Thousands of letters and telegrams have poured into the White House commending the President for his statement and praising the Congress for the establishment of the arts program in 1965.

Persuasive and emphatic support has come in editorials from newspapers, also. And not, I hasten to add, only from those larger metropolitan news sources in the east and on the west coast where the "arts establishment" is supposed to be strong in influence. Some of the most vividly written and encouraging editorial comment has come, indeed, from newspapers far from the so-called arts centers of our country. The Des Moines Register said: "Bravo, Mr. President!" The Louisville Courier-Journal called it "an enlightened step * * * an investment in enriching the quality of American life." The Troy, N.Y., Record: "The imbalance between the sciences and the humanities in America has become serious. President Nixon * * * is trying to correct that situation." The Christian Science Monitor called it "a minimal step * * * in the right direction." The Anderson, Indiana Bulletin said: "The administration's welcome request that Congress double last year's appropriation for aid to cultural programs is not a piece of extravagance. It is, rather, an enlightened acknowledgment that the arts make an important contribution to life and deserve generous support." The Kansas City Times praised the message and called the funding mentioned a "modest amount."

I mention these commentaries because I firmly believe they represent the growing recognition of a great part of our country of the importance of the arts in our effort to make this a better society with greater meaning for all of our people.

INCREASED DEMAND FOR THE ARTS

The extraordinary popular support demonstrated by newspapers from all areas of the Nation is a reflection of the enormous growth in popularity of artistic productions and the arts in education.

Our Nation's museums continue to experience an astonishing growth in demands placed upon them: The total number of individual visits to museums in 1969 was estimated at 560 million; 5 years ago the total was only 300 million visits. The sale of tickets for nonprofit professional arts performances has increased more than 2½ times in this same 5-year period—up from 13 million tickets sold in 1964 to over 30 million in 1969. In 1960, there were only 75 community arts councils in the United States; today they number more than 600—a dramatic demonstration of our rapidly proliferating concern with the arts at the local level.

There are many other significant "grass roots" indications. There are today approximately 300 dance companies of nonprofessional status; nearly 1,400 orchestras in the semiprofessional or amateur category; 5,000 theatrical groups; between 600 and 700 opera companies—and hundreds of thousands of "Sunday painters." We have become a nation of increasing appreciation for, and eagerness to participate in, the arts.

Encouraging though these signs may be, they have presented for arts organizations a number of serious problems. Demand for the arts, and production of the arts, has placed increasing pressure on them, for they are confronted by

drastically rising costs and the inability of private philanthropy to make up the difference between expenditures and earned income without outside help.

Our symphony orchestras, for example, have had an average increase of 53.2 percent in their budgets in the 3 years between 1965 and 1968. Earned income, at the same time, fell from 62 percent to 55 percent of total costs. Contractual difficulties have been increasingly common—and the orchestras, more than ever before, have been providing genuine services for the communities in which they exist, broadening their scope and becoming, in reality, a service organization for schools in many areas of the Nation.

NEEDS OF ARTS INSTITUTIONS

A report prepared for the Associated Councils of the Arts in October 1969 indicates that total costs for America's major nonprofit institutions in the traditional arts (theater, dance, opera, orchestras, and museums) during 1968–69 were on the order of $720 million. For the performing arts, alone, the estimate was $207 million.

In the museum field, total operating costs were estimated at $513 million; just 2 years ago, the cost was only $400 million. "The Belmont Report," prepared for the Federal Council on the Arts and the Humanities, cited minimum needs for our museums minus capital outlay and research at a level of $15,250,000.

It becomes increasingly apparent that individuals and private philanthropic foundations, despite their significant contributions, cannot be the sole sources of support for these institutions. Despite new support being provided by corporations and by State and local governments, the amounts available are simply not equal to the needs.

Those needs are pervasive. They are not confined to one single field of the arts. They are the result of constantly growing interest in the arts and demand for them in every field.

It is our hope that increased funding for the Endowment will generate substantial increases in the levels of giving from private business, from philanthropic organizations, from corporate interests and, as it has in the case of the State arts councils, from governments at the non-Federal level.

With such funds, the Endowment for the Arts would hope to take meaningful steps toward fulfilling the responsibility placed upon the agency by the Congress "to develop and promote a broadly conceived national policy of support for * * * the arts in the United States."

SCOPE OF PAST PROGRAMS

Let me say, incidentally, that past programs of the Arts Endowment have made an impressive beginning in this direction. Last month we prepared a series of maps showing the geographic spread of grants made by the Endowment as part of its national program. The maps show, conclusively, that nearly every part of the United States has derived some *direct* benefit from grants made in touring, in museum purchases, in education and in music and literature.

In architecture and design the Endowment has made travel assistance grants to students enabling them to make on-site studies of outstanding projects and survey our most pressing environmental problems. The grants have gone to students in 45 States.

Endowment dance programs have reached 41 States. Education grants, in the form of sabbatical leaves and fellowships to teaching artists and experimental programs have gone to individuals and organizations in 51 of the States and territories. Small grants to creative writers, editors, poets teaching in schools and in black colleges have carried the literature program into 46 States and two of the special jurisdictions and similar modest funds have taken our music programs into 42 States. Assistance in theater has been basically confined to aid to regional companies in 25 States and Endowment grants to public media have made possible programing on the educational television stations in all but two States. In the visual arts, despite the fact that a majority of U.S. painters and sculptors use New York City as their "home base," since that is where the greatest market exists, the Endowment has made grants to artists in 33 States across the country. Under its coordinated arts program, the Endowment has taken quality touring programs to more remote areas of the Nation, reaching into 33 of the 55 States and terriories.

We would hope, then, that the Endowment would be able to pursue with increased intensity programs which will be of maximum benefit to the greatest percentage of U.S. population.

Our appropriation request is based on a minimum figure to do an effective program. It would enable the Endowment to maintain existing programs and to embark upon new programs in areas which have not been touched by the agency heretofore because adequate funds were not available.

The funds we are seeking would make it possible for the Endowment to:

1. Initiate badly needed new programs for orchestras, opera companies, and museums;
2. Double the amounts available to the States and
3. Expand activities in matching private gifts.

SYMPHONY ORCHESTRAS

Of the $5.425 million additional funds for programs, up to $3 million would be used to assist our country's 28 major symphony orchestras and at least a portion of the 60 metropolitan orchestras, in their efforts to expand and improve public service and education programs and to raise the quality of their overall performance.

Last year a majority of our symphony orchestras gave 70 percent of their performances in schools, parks, and locations outside their own auditoriums and only 30 percent for their traditional subscription audiences. Those figures are almost precisely the reverse of the situation a decade ago.

The 88 major and metropolitan orchestras are caught in a demand-cost squeeze which expanding audiences intensify. Ticket prices cannot and should not be raised for such increases would simply price the orchestra and our musical heritage out of the reach of nearly all of our citizens, particularly younger people.

OPERA COMPANIES AND MUSEUMS

The Endowment will make $425,000 available to opera companies for support of their programs, for commissioning and production of new works and for the improvement of quality. The amount is small in comparison to the actual needs of the companies, but we are hopeful, again, that grants in this field will generate sufficient additional moneys to offset a portion of the increasingly serious problems with which the companies are faced.

Up to this time, the Endowment has been unable to undertake a program of substantive aid to museums. In fiscal year 1971 we would set aside $1 million as a beginning program of support. In some respects, the problems of the museums are as grave as those confronting our orchestras; they are simply less apparent, superficially, since a cut in museum staff or curtailment of visiting hours is less dramatic than cancellation of an orchestra season.

Demands now being placed on museums for increased services, especially as a supplement to education, have created new costs which cannot be met by traditional income sources.

All three of these programs would be essentially new, in the sense that fiscal year 1971 would mark the first time the Endowment has been able to launch a significant effort to assist orchestras, opera companies, and museums.

The Endowment would also continue its assistance to the American Film Institute in the amount of $1 million for its educational programs and archival work. The Institute, in its first 3 years, has had a dramatic effect upon the art of film-making and is performing a vital public service in its program to preserve existing film masterpieces.

AVAILABILITY OF THE ARTS

More than two-thirds of the increase requested to make the arts more available and accessible to U.S. citizens would go directly to the State and territorial arts councils. The $4,125,000 earmarked for this purpose (sec. 5(h)) would enable the Endowment to make grants of $75,000 to each council, double the amount of the appropriation for the present fiscal year.

The growth of the State programs, not only in number but in the depth of their involvement with the communities they serve, makes such an increase imperative.

The remaining funds are allocated to a variety of programs to make the arts more available throughout the Nation. Included are funds for touring dance and opera companies, for continuation of the program placing poets in schools and colleges, for artists and performances in schools and communities, for the development of national exhibitions in the visual arts and placement of sculpture in more cities and for the filming of live performances in dance, opera and theater so they may be enjoyed by hundreds of thousands rather than a few.

More specifically, the Endownment hopes to assist at least one major dance company to undertake a national tour during the 1970–71 season and plans to expand its coordinated residency touring program, bringing the best professional American modern dance companies to thousands of people who have had little or no previous exposure to the dance. This program would continue to present performances and bring local students into rehearsals and master classes within each community. It is administered with excellent cooperation from State arts councils in 22 States this year. We hope to increase the number participating next year.

POETRY IN THE SCHOOLS

Another extremely fruitful project earmarked for continuation will be the poetry-in-the-schools program which has, since its inception 4 years ago, reached into 16 States. Leading American poets read their works and discuss with English teachers in elementary and secondary schools, ways to make the teaching of literature more exciting and meaningful; younger poets go directly into classrooms and work with the students.

Other programs, such as the one bringing writers-in-residence into developing colleges and another assisting a major arts organization to aline outstanding performing artists, primarily musicians, with educational or community cultural organizations, will also be aided.

The Endowment will continue to assist American cities to commission and place major works of outdoor sculpture in prominent public places. We hope to encourage opera companies to continue and expand their touring activities in the same manner as is now being done through grants to Seattle Opera Company and the Western Opera Theater.

Preliminary discussions indicate the possibility of cooperative efforts between the Endowment and the Corporation for Public Broadcasting, primarily through projects which would demonstrate to the American people the lives and works of our Nation's artists. These projects would also greatly enhance our permanent national archives of artistic performance so that future generations will be able to see the quality and diversity of art produced during our era.

CULTURAL RESOURCES DEVELOPMENT

The increased amount requested in this category will be used for assistance programs for orchestras, museums, and opera companies which were mentioned briefly earlier in this statement. Continued assistance funds for dance and theater are also included.

As you know, the members of the National Council on the Arts have previously felt that available funding precluded major assistance for museums, orchestras, and opera companies. The Council recently recommended that Endowment programs be undertaken in these areas if an appropriation at the full request level is received.

Specific programs are currently being developed for opera companies and museums, in cooperation with professionals in both fields. They may parallel in many ways the orchestra program, for which the largest funding amount has been allocated. This program has been developed over the past few months in consultation with representatives of the orchestras, members of the advisory music panel and experts in artistic and administrative direction.

PUBLIC SERVICE AND IMPROVEMENT

Orchestras will be aided in two main categories: Public service activities and improvement activities.

Public service activities would be aimed primarily at development of and service to broader audiences. These could include such areas as: Programs in schools, ghettos, parks, industries, etc.; special concert series in cooperation with unions, teacher organizations etc.; extended seasons; opening up subscription series to provide nonsubscription nights; lower ticket prices for specific

groups; educational programs developed in cooperation with educational, civic, labor, business, or religious groups; regional cooperative planning; collaborative programs involving other art forms such as opera or dance.

Improvement activities, aimed primarily at upgrading administrative effectiveness and artistic standards, may encompass the following: Projects to improve performance quality, including adequate rehearsal time; flexible use of personnel in smaller ensembles; programing balance to include contemporary with traditional works; professional training to include coaching for local and area performers, and apprentice programs in performance and/or management; and exploration of new ways to improve income, including development personnel.

Applications from the major and metropolitan orchestras will rarely be considered for "general support"; will rarely exceed $100,000; and will be screened through a special advisory panel recently established specifically for the orchestras and opera program. Final recommendation will, of course, be provided by the National Council on the Arts. All grants will be made on a matching (at least $1-for-$1) basis.

Clearly, the orchestra projects aimed at specific performance factors will not apply to our museums program; but other areas, such as programs to develop and serve broader audiences and to improve administrative effectiveness, will likely be encouraged for museums as well.

As noted earlier, the Endowment anticipates continuing its theater and dance programs, which have proven quite effective in strengthening performing companies all over the country, in making possible the production of new work, and in assisting with artistic and administrative development.

ADVANCEMENT OF OUR CULTURAL LEGACY

The $200,000 increase in this category is to develop a critically needed new procedure for handling touring in the country. Unless mechanisms can be improved, we shall not be able to accomplish one of our major goals of getting the arts out into the country. There is a "new road" for the arts developing across the Nation: the Endownment's coordinated residency touring program in some cases acted as its catalyst, and in other cases learned where it is and how to use it. But its potential is not nearly realized. Colleges and universities, communities, and, in some cases, major cities are simply without the expertise or mechanisms necessary to utilize the many excellent noncommercial art groups, and even artists, currently available.

The $1 million for The American Film Institute is also included in this category. Established by the Endowment (in cooperation with The Ford Foundation and the member companies of the Motion Picture Association of America) in June of 1967, the Institute in less than 3 years has had a remarkable impact on the film world. The Endowment's continuing aid will assist the Institute's varied activities, support of college and university studies in film history and technique, advanced training, and the preservation of the Nation's film heritage by locating films, transferring them from nitrate to acetate stock, and storing them safely in the Library of Congress.

The remaining funds are primarily aimed at encouraging new music composition and choreography, and at continuing the valuable work being done in environmental design, visual arts, and literature.

INDIVIDUAL ARTISTS

The Endowment and Council are currently exploring the feasibility of establishing a "fellowship" program to assist individual talents in all disciplines. Grants currently available range from the Endowment's $500 architecture student travel awards to its choreography commissions of up to $10,760 (including an award to the choreographer *plus* 4 weeks rehearsal salaries for an appropriate number of dancers). Programs are aimed primarily at the professional development of the artist and/or at the production of new work.

The Endowment's visual artists program of grants may in the future provide amounts up to $7,500 each, based on an average sabbatical leave amount for an assistant professor in a college or university; many visual artists work on campuses, and this should help "buy time" for them to spend in creative artistic work. Other types of individual aid programs include development grants for young or unknown writers and for experts working in environmental design, and may in the future assist new orchestral composition or provide funds enabling professional training schools, such as music conservatories, to assist worthy students.

At its January 1970 meeting, the National Council on the Arts reiterated its support for individual grant programs, as well as its consistent awareness of the necessity to review and evaluate all such programs on a regular basis. At the upcoming May meeting, the Council will be reviewing in detail all of the Endowment's efforts on behalf of the individual artist.

Opening Statement

Miss Hanks. Good morning, Madam Chairman and members of the subcommittee. It is a real privilege for me to be here this morning, to testify on the National Endowment for the Arts. I am particularly grateful, as was my predecessor, Roger Stevens, who has told me on many occasions of the understanding and support of this committee, for the hard and the marvelous questions that are asked which he felt helped him shape the programs and keep them on track, and so I welcome those questions. Therefore, I will keep my remarks very brief so that we may proceed to that.

As you will recall, the President asked approximately for a doubling of the appropriations. He stated in his message that he felt that this was not extravagant because the need was great and the funds were relatively modest.

Mr. Reifel. Madam Chairman, off the record.

Mrs. Hansen. Yes.

(Discussion off the record.)

Miss Hanks. I think the extraordinary response to the President's message was merely an indication of the increased interest and need for the arts in the country. As I mentioned to you, I believe on an earlier occasion, at the White House there are about 5,000 letters now, and only 12 in opposition, and there are editorials from all over the country, from the small newspapers as well as the large. The letters are now the handwritten ones coming in from individuals which is in contrast, of course, to the first round when the letters were from corporate executives, heads of orchestras, and so forth. But now Mrs. Jones, from wherever, is writing in, which is wonderful.

Increased Interest

When we talk about the increase of interest in the arts, we note that the statistics in the museums in the last 5 years indicate the attendance is up from 300 million to 560 million. I have been in museums in the last 2 weeks in Forth Worth, Tex.; Columbia, S.C.; and in New York, and those museums are just filled with people—most of them young people—and this is the absolutely marvelous thing. I am not only talking about the 11-to-18-year-olds, I am talking—I still call them young—people about 35 and 45 years old. Therefore, it is a very young attendance, and I don't think we can calculate the importance of providing the opportunity to these people who want to see the museum collections. As I walk through the halls of those museums and see the light in a child's eye I know it is extremely important. I know that, naturally, this committee and Members of Congress must concern themselves with the health of our citizens and with their welfare, but I believe that we are talking about spiritual matters that are just as important.

Mrs. HANSEN. Miss Hanks, isn't it true that part of the total well being of a person is related to mental attitudes?

Miss HANKS. Yes.

Mrs. HANSEN. If a person is not exposed to some alternatives such as those that the arts provide, you have omitted a great part of the humanities in life?

Miss HANKS. Oh, I couldn't agree more, and, you know, we don't have the charts, we don't have the statistics to prove anything. You just have to feel it as you walk around.

Mrs. HANSEN. Isn't it true throughout the centuries that the theater, music, and art involved themselves with the problems of the people, and that this was one of the surest and the easiest ways to put across new attitudes? In literature certainly you only have to look back at Dickens to note the institutional reforms that resulted in England because of his works.

Miss HANKS. Also, I think it is not only the new things that are being done, there has been a big increase in attendance at the theater. When I was in Chicago 2 or 3 weeks ago I went to see "School for Scandal." That play is 190-some-odd years old. That audience was a jumping audience. It was young.

I saw "Harvey" in New York on Saturday at the ANTA Theater. This was, of course, a matinee audience so it was understandably very young but very interesting.

When I was in Fort Worth, I went out to Tarrant County Junior College. I have been only vaguely familiar with the development of the community colleges all over the country and they are springing up like mushrooms. I was very interested. This is a 3-year-old college and they have geared in right from the beginning a professional theater corps for their drama programs and they are going to have professional people in music. This is a tremendous change in terms of education because, as you know, at our established universities the arts are brought in, in a performing sense, often with great reluctance. So I think that we are having a really great change not only in attendance at museums and the theater and concerts, but also in the educational structure at that level, and I couldn't be more excited about it.

Then, as you know, more demand for the arts, and more supply, which in any other industry would mean the more profit, in this industry mean increasing deficits. Each concert, for example, generates a certain deficit. Therefore, the more concerts you give the bigger the deficit grows, rather than the other way around. I believe they are in the testimony so I won't go through the statistics on rising costs and that type of thing.

Mr. WYATT. Madam Chairman, may I ask a question at this point?

Mrs. HANSEN. Surely.

CULTURAL FACILITIES IN THE DISTRICT OF COLUMBIA

Mr. WYATT. I am concerned and would like to have your opinion, with the advent of the Kennedy Center and Wolf Trap Farm and Merriweather Post Pavilion at Columbia, and many other activities that are developing, many of which are not in operation yet, are we getting so thin that maybe some of the existing programs, both public

and private, which are financially feasible at the present time may be at the point of going under? I am concerned that perhaps we have made a mistake in not beefing up what we have and expanding the new areas a little more slowly.

Miss HANKS. May I answer that question in two ways? Just last evening I was reading an article in a magazine called "After Dark," analyzing the Washington scene on the basis of in-depth interviews with most of the performing arts organizations. According to the article, you do not have objection or fear expressed by established groups such as the Arena Stage or the Washington Theatre Club or the Washington Dance Group. They welcome the Kennedy Center, for example, with enthusiasm. At least, this is their public stance. I have not talked to them personally about their concerns. I think that the arts organizations in Washington are always going to have great difficulty because the Government is the major industry and Government is not supporting the arts in this city as if it were the major industry. It is simply not doing that.

I would hope that eventually consideration of this factor would come through the District Committee, if that is the appropriate place for it to come, because I think it is a very serious problem.

Mrs. HANSEN. Miss Hanks, isn't part of Washington's problems due to the kind of city it is after 6 o'clock?

Miss HANKS. I understand, from at least what people have said down here and from the article I mentioned, that, for example, Members of Congress and members of the executive branch are spending most of their time still working after 6 o'clock. If it be at a cocktail party or a dinner, they are still concentrating on the business of government.

Mrs. HANSEN. Isn't it true, Miss Hanks, that one of the criticisms of the theater presently in Washington, D.C., is the time of the performance. Isn't it also true that the average family can't afford to go for dinner and then to the theater?

I also think many people are afraid to drive through the streets of Washington at night. It is a city that is empty during the evening hours. It hasn't always been like this. If some of your people led the way in an examination of theater timing and what can be done to create audiences perhaps the current situation might be improved. You need to take a look at what can be done to insure that the arts survive, and at the same time pull the business community into the planning for its survival.

Mr. WYATT. I am interested, for example, in the health, the survival of the National Theater, of the excellent programs at Constitution Hall, the Arena Stage, and Ford's Theater, just at random, programs that I think have been excellent, part of the cultural life in Washington, and I am fearful if we become spread too thin that perhaps some of these programs are going to be on the verge of failure. Maybe they are now. I am not too sure.

NEED FOR AREA PLANNING IN THE ARTS

Miss HANKS. I haven't talked to Mr. Stevens about this problem, though I have spoken briefly to some of the Wolf Trap Farm people who are concerned. However, I think now is not too early for them to

start planning in terms of their audiences, and so forth. I think maybe we might talk with Mr. Stevens about this question of curtain times that you raise.

Mrs. HANSEN. There should be some type of planning done so that young people are not prohibited by financial circumstances from enjoying the arts because this is what can influence and build the kind of community you want in the future.

Mr. Wyatt, Mr. Marsh, Mr. Reifel, and I have all raised questions about the direction of the arts program in Washington, D.C. You have to take into consideration that if you initiate too many programs you will find yourselves faced with limited financing. It might be better to strengthen your present facilities so that they will survive. Perhaps your Arts Council needs to take a look at, coordination of not only the performing arts program in Washington, D.C., but also in other communities.

Miss HANKS. Yes. One thing we might do, too, is discuss this with the ANTA theater board. For next year, the board is coming up with a proposal which we have not yet received, but I see no reason in the world why we can't ask that board to give serious consideration to the questions that you raised about the timing of the house and to set a program of experimenting on a 6:30 or 7:30 curtain, working it out with the stagehands. Because they would have the opportunity to experiment, this might then show the way for the commercial theaters. This might be a very good use of that house to test the idea.

Mrs. HANSEN. You cannot have the answers to some of these problems until there has been some experimentation.

Miss HANKS. A change in times was experimented with in the New York theater—when? Three or 4 years ago? But, very briefly. Some of the producers pulled out and that knocked the experiment out, but with the ANTA theater we don't have to depend on anyone else. We can just go right ahead and maybe lead the way, so I think that we will raise the idea with the ANTA theater people to see if that could be worked in and talk to Roger Stevens and see if he thinks it could be helpful to get some of the major groups in Washington together to talk about this. He might feel that that would be better than his doing it himself, which is, I gather, one of the points.

Mrs. HANSEN. I think you should sit down with the appropriate individuals and discuss the various possibilities.

FUNDS REQUESTED

Miss HANKS. All right; duly noted, happily noted.

The appropriations request, as you know, is for $9,675,000 for general programs, $4,125,000 for the State art agencies, and $2,500,000 to match donations to the Endowment, totaling $16,300,000 in appropriated funds. This figure is very modest in terms of actual dollars and also in consideration of the great needs.

To put the figure in perspective, I should like to note that the Metropolitan Opera alone costs $17.4 million a year to operate, which is $1 million more than we are asking for funding for the total country.

As I believe you would have noted, on Thursday, March 26, the New York State Legislature passed a bill for funding of arts organi-

zations in New York of $20,081,000—$18 million of this is in new money for assistance programs for the performing and visual arts organizations, and also including the New York Public Library; $2,081,000 is to continue the on-going programs of the New York State Council in their experimental work and their general fellowship programs, and so forth. This is a major breakthrough.

I feel, to return to the Federal programing, that it is modest but I believe, with the amounts of money the Administration is asking, that we can have a very effective program. Now, the reason I say that is I believe that we can continue to encourage other funding. I am quite convinced that the New York State program, for example, would not have gone through as easily as it did—there was no opposition to speak of—if the President hadn't sent his strong message in December.

As a matter of fact, I am not even certain that money would have been asked for if the Federal Government had not taken that leadership position.

STATE APPROPRIATIONS

I found a similar reaction when I was in Illinois in talking to Governor Ogilvie. The figures have not come up yet, but I believe he will substantially increase his request for the State of Illinois. I found this also in talking with the Governor of South Carolina when I was down there. So I do believe Federal action will encourage the States importantly, and also private moneys to come in. This is the only way that we can, in effect, have an effective program at this level.

I thought perhaps you might like me, Madam Chairman, to go briefly through the categories of support we would plan for the next year.

Mrs. HANSEN. Please do.

Miss HANKS. I don't want to go into too much detail because I am not certain of the questions you have. The Council and the Endowment in analyzing goals determined that there would be three areas in which we would like to put our emphasis. One, is what we call the availability of the arts. Briefly, this includes the State partnership program and also our touring programs for wider distribution of the arts. For that we would allocate $6 million.

For the cultural resources development, which is to enable the established institutions to better adapt to the new situation, we would allocate $5.4 million.

In what we call advancement of our cultural legacy—that is, the development of new programs and the fellowship programs for individual artists—we would allocate $2 million.

I will go into considerably more detail, in each of the three categories. In the availability of the arts, the increase we are asking this year is from $2,954,000 to $6 million. It is a little over a $3 million increase. More than two-thirds of this increase is for the State programs. We are asking that those programs go from $2 million to $4,125,000 so that each State may have $75,000 in matching funds.

I think perhaps you will be interested to know that in the State of Mississippi—which has been laggard in funding—the legislature has voted $75,000 from the State. Now, to go from zero to $75,000 is marvelous.

Mrs. HANSEN. The State of Mississippi indicated last year that they had a deep interest in the arts and that they were going to work toward greater State funding with the hope that there would also be increased Federal funding.

Miss HANKS. This is just marvelous. We need so much help down in that area. The $4,125,000 would provide, as you know, equal amounts going to each State of $75,000. I remind the committee that if a State is not able to match, then the funds are returned to our general program area for use in the following year. What we do is then accept applications from States for unique programs and the money actually then goes right back out to qualifying States.

Mrs. HANSEN. Is the committee right in assuming that if a State does not have matching funds they will receive no funds from the Federal Government?

Miss HANKS. That is correct.

Mr. WYATT. If they have nothing you give nothing?

Miss HANKS. That is right. Then we use the funds in the following year for State programs of other States.

Mrs. HANSEN. Insert in the record a list of the States who have made appropriations for the arts and the method they used and the amount that they have appropriated.

Miss HANKS. You mean legislative funds?

Mrs. HANSEN. That is right. For example, the State of Washington has increased its level of funding over the years, and I think other States have done the same thing. Many States were also interested, Miss Hanks, in having some administrative money made available within the grant structure.

(The information follows:)

ARTS COUNCILS STATE APPROPRIATIONS—OFFICIAL AGENCIES DESIGNATED BY GOVERNOR TO RECEIVE FEDERAL-STATE PARTNERSHIP GRANTS

State	Paid director	1967	1968	1969	1970
Alabama	M. J. Zakrzewski	0	$50,000	$50,000	$100,000
Alaska		$18,835	47,500	47,500	47,500
American Samoa		0	0	0	0
Arizona	Louise C. Tester	0	19,919	0	23,561
Arkansas	William Bond, Jr	20,694	35,714	38,000	0
California	Albert Gallo	161,920	145,698	168,000	168,000
Colorado	Robert N. Sheets	15,000	25,000	25,750	26,000
Connecticut	Anthony S. Keller	21,500	58,268	76,732	114,423
Delaware	Craig A. Gilborn	0	0	0	45,454
District of Columbia	Gerard Boesgaard	70,100	70,100	20,000	25,661
Florida	Samuel G. Ashdown	9,112	18,233	0	
Georgia	George Beattie	30,400	60,000	48,516	57,060
Guam		0	0	0	0
Hawaii	Alfred Preis	90,000	123,500	118,945	163,579
Idaho	Jo Ann Bensinger	0	0	10,000	10,000
Illinois	S. Leonard Pas, Jr	25,000	100,000	100,000	250,000
Indiana	Michael Warlum	12,500	6	0	25,000
Iowa	Jack E. Olds	0	25,000	25,000	30,730
Kansas	Maurice D. Coats	7,600	65,000	67,949	66,023
Kentucky	William Hull	100,000	100,000	118,515	134,980
Louisiana	James Bezou	25,000	25,000	34,980	32,776
Maine	Richard Collins	10,000	60,000	79,700	90,300
Maryland	Donald Mintz	50,053	50,000	260,000	272,704
Massachusetts	Louis G. Tate	20,894	25,000	100,000	100,000
Michigan	E. Ray Scott	100,000	100,000	109,000	140,000
Minnesota	Dean A. Myhr	5,000	85,000	85,000	113,825
Mississippi	Lida Rogers	0	0	0	0
Missouri	Francis Poteet	199,975	221,917	258,000	201,082
Montana	Edward Groenhout	0	12,500	12,500	25,000
Nebraska	Leonard Thiessen	20,500	12,500	12,500	12,800
Nevada		0	0	0	0

ARTS COUNCILS STATE APPROPRIATIONS—OFFICIAL AGENCIES DESIGNATED BY GOVERNOR TO RECEIVE FEDERAL-STATE PARTNERSHIP GRANTS—Continued

State	Paid director	1967	1968	1969	1970
New Hampshire	John V. McKenna	0	7,500	7,500	10,000
New Jersey	Byron R. Kelley	75,000	75,000	77,353	77,795
New Mexico		36,500	15,000	20,000	20,000
New York	John Hightower	1,504,477	1,897,585	2,491,861	2,256,474
North Carolina	Edgar B. Marston	0	70,106	71,299	86,182
North Dakota		0	0	0	0
Ohio	Donald R. Streibig	12,053	39,356	39,598	223,407
Oklahoma	Donald W. Dillon	0	35,000	35,000	65,739
Oregon	Anthony Reid	0	0	23,859	23,859
Pennsylvania	Vincent R. Artz	40,000	137,473	198,205	201,000
Puerto Rico	Ricardo Alegria	1,048,700	1,263,900	1,352,200	1,356,200
Rhode Island	Mariam Kapsinow	20,000	62,000	99,000	99,279
South Carolina	David C. Sennema	0	65,000	99,354	131,693
South Dakota	Charlotte Carver	0	0	18,000	18,720
Tennessee	Norman Worrell	1,500	50,000	50,000	68,700
Texas	J. Pat O'Keefe	0	80,693	82,000	106,732
Utah	Wilburn C. West	29,000	51,795	52,823	84,000
Vermont	Frank G. Hensel	500	26,500	27,300	28,800
Virginia [1]	Frank R. Dunham	1,002,060	1,166,333	10,000	10,000
Virgin Islands	Stephen J. Bostic	10,000	50,000	140,000	250,000
Washington	James L. Haseltine	7,500	35,920	37,735	80,998
West Virginia	Norman L. Fagan	33,900	59,000	80,100	107,000
Wisconsin	Oscar Louik	0	0	0	0
Wyoming		0	0	0	0

[1] The Virginia State Museum was the official Arts Council of Virginia 1967–68.

STATE USE OF FUNDS FOR ADMINISTRATION

Miss HANKS. We have changed that? Is that change already in effect? I am asking Clarke Mitze, who is director of State and Community Operations. Would you explain how much they are now, how much may be allowed in terms of administrative funds?

Mr. MITZE. Prior to this year we permitted them to take approximately, without setting a hard figure, 10 percent of any one program for administrative costs. With the increase, however, of our total grant we would like them to have the privilege of using more of that, if necessary.

Mrs. HANSEN. This is something the States have asked, and the very distinguished gentleman from Arizona last year asked if there could be some discussion. He had requested and hoped that there would be increased funding for the administrative expenses.

Miss HANKS. We will place in the record, as you requested, the amounts to each State and with the other figures, but I do hope that the committee realizes that almost all of our programs directly affect the States. Our national programs directly, the dance programs, poetry programs, are all affecting the States.

Mrs. HANSEN. We do understand.

Miss HANKS. But I think some of my associates and yours do not.

The funds in this section, which we call the availability of the arts, other than the State program, largely go to touring dance and opera companies, for the placement of poets in schools and colleges, for artists and performances in schools and communities, for the development of national exhibitions in the visual arts and the placement of sculpture in more cities, and for the filming of live performances in dance, opera, and theater.

I won't go through the programs. I believe most of these are continuing programs. On the dance, as you know, 3 years ago we were in

one State and five communities. They used four different companies. This year the program reaches 22 States with ten companies.

Mrs. HANSEN. Insert in the record a list of the 10 touring companies?

Miss HANKS. Yes.

Mrs. HANSEN. Also insert in the record a list of the cities and the areas that the companies toured.

Miss HANKS. Yes.

(The information follows:)

COMMUNITIES SERVED BY COORDINATED RESIDENCY TOURING PROGRAM—NATIONAL ENDOWMENT FOR THE ARTS

California, fiscal year 1970:
- Stanford
- Berkeley
- Santa Barbara
- Long Beach
- La Jolla
- San Diego
- Irvine
- Los Angeles
- Santa Cruz
- Riverside
- Davis
- San Jose

Colorado, fiscal year 1970: Fort Collins

Connecticut:
- fiscal year 1969:
  - New London
  - Danbury
  - New Haven
  - West Hartford
  - Storrs
  - New Britain
  - Fairfield
- fiscal year 1970:
  - New Haven
  - Storrs

District of Columbia, fiscal year 1970

Florida, fiscal year 1970: Tampa

Illinois:
- fiscal year 1968:
  - Chicago
  - Normal
  - Carbondale
  - Decatur
  - Quincy
  - Peoria
  - Rockford
- fiscal year 1969:
  - Decatur
  - Chicago
  - Normal
  - Macomb
  - Edwardsville
  - River Forest
- fiscal year 1970:
  - Chicago
  - Urbana

Indiana:
- fiscal year 1969:
  - Muncie
  - Bloomington
- fiscal year 1970:
  - Bloomington
  - Notre Dame

Maine, fiscal year 1970: Portland

Maryland, fiscal year 1970:
- College Park
- Towson (Baltimore)

Massachusetts, fiscal year 1970:
- Amherst
- Boston

Michigan, fiscal year 1970:
- Kalamazoo
- Ann Arbor
- Detroit
- East Lansing
- Holland
- Marquette

Minnesota:
- fiscal year 1969:
  - St. Joseph
  - Minneapolis
  - Marshall
  - Collegeville
  - St. Paul
- fiscal year 1970:
  - Minneapolis
  - St. Joseph

Missouri:
- fiscal year 1969: St. Louis
- fiscal year 1970:
  - St. Louis
  - Springfield

Montana, fiscal year 1970: Bozeman

New Hampshire, fiscal year 1969: New London

New Jersey:
- fiscal year 1969:
  - Hackensack
  - Ridgewood
- fiscal year 1970: Trenton

North Carolina:
fiscal year 1969:
Mt. Airy
Winston-Salem
Greensboro
Durham
fiscal year 1970:
Mt. Airy
Winston-Salem
Raleigh
Durham
Ohio, fiscal year 1969:
Dayton
Yellow Springs
Oklahoma, fiscal year 1970:
Edmond
Oklahoma
Lawton
Chickasee
Tulsa
Norman
Pennsylvania, fiscal year 1970: Pittsburgh
Rhode Island:
fiscal year 1969: Providence
fiscal year 1970:
Providence
Warwick
Utah, fiscal year 1970:
Provo
Salt Lake City
Virginia, fiscal year 1970: Richmond
Wisconsin:
fiscal year 1969:
Madison
Milwaukee
Green Bay
Menasha
fiscal year 1970:
Wausau
Menasha
Madison
Green Bay

Complete list of dance companies—1968–70 participants in the coordinated residency touring program

Merce Cunningham and Dance Company
Alwin Nikolais Dance Theater
Paul Taylor Dance Company
Glen Tetley Company
Erick Hawkins Dance Company
Lucas Hoving Company
Jose Limon Dance Company
Donald McKayle Company
Anna Sokolow (Lyric Theater)
Alvin Ailey American Dance Theater
Pearl Lang Company
Murray Louis Company
Don Redlich Dance Company
First Chamber Dance Quartet

Mrs. HANSEN. I think it is important that we show exactly what has been accomplished.

POETRY-IN-THE-SCHOOLS PROGRAM

Miss HANKS. Yes. Then in the poetry program, perhaps we should do that as well.

Mrs. HANSEN. Please do.

(The information follows:)

STATES INVOLVED IN THE NATIONAL ENDOWMENT FOR THE ARTS POETRY-IN-THE-SCHOOLS PROGRAM SINCE ITS BEGINNING

Sixteen States have been involved in the poetry-in-the-schools program since its beginning:

1. Arizona: Tucson, University of Arizona (for Spanish-American and Indian students).
2. California: Los Angeles, California State College; San Francisco, Academy of American Poets for San Francisco Bay area.
3. Illinois: Chicago, Illinois Arts Council.
4. Indiana: Indianapolis, Indiana State Arts Commission.
5. Iowa: Des Moines, Iowa State Arts Council.
6. Kansas: Wichita, Kansas Cultural Arts Commission.
7. Michigan: Detroit, Academy of American Poets, Michigan State Council on the Arts.
8. Minnesota: Minneapolis, Minnesota State Arts Council, St. Paul, St. Paul Council on the Arts and Sciences.
9. Missouri: St. Louis, Missouri State Council on the Arts.
10. New Jersey: Trenton, New Jersey Council on the Arts, the Douglass House.

11. New Mexico: Las Cruces, University of New Mexico at Las Cruces (for Spanish-American and Indian students); Santa Fe, St. John's College (for Spanish-American and Indian students).
12. New York: New York City, Academy of American Poets.
13. Ohio: Columbus, Ohio Arts Council.
14. Pennsylvania: Pittsburgh, Academy of American Poets for Pittsburgh school program.
15. Rhode Island: Providence, Rhode Island State Council on the Arts.
16. Texas: El Paso, split with Arizona-New Mexico (for Spanish-American and Indian students).

POETS IN DEVELOPING COLLEGES PROGRAM

Fiscal year 1968

Colleges: Fisk University, Nashville, Tenn.; Miles College, Birmingham, Ala.; Morehouse College, Atlanta, Ga.: North Carolina College, Durham, N.C.; Tougaloo College, Tougaloo, Miss.; Tuskegee Institute, Tuskegee, Ala.; Virginia Union University, Richmond, Va.

Poets: Samuel Allen, Paul Blackburn, Margaret Danner, Julia Fields, Donald Finkel, Isabella Gardner, Milton Kessler, Audre Lorde, A. B. Spellman, Reed Whittemore, Jay Wright.

Fiscal year 1969

Colleges: Miles College, Birmingham, Ala.; Talladega College, Talladega, Ala.; Tougaloo College, Tougaloo, Miss.

Poets: Margaret Danner, William Mason, Alice Walker, Jay Wright.

Miss HANKS. Let me tell you I am very excited. The program is in 10 States and two cities. We talk about seed money or how we generate more money. We put $5,000 into the poetry-in-the-schools program in St. Paul-Minneapolis this year. They are so excited about it that the school system went to the Hill Foundation, which is a local but very large foundation there, and the Hill Foundation is putting in $35,000 to carry the program over the next 3 years. This is for $7 for $1.

Mrs. HANSEN. Please give us the details on this program.

Miss HANKS. Perhaps we will send you a longer memorandum on it, but basically the one in St. Paul, I believe, is putting the poets into reading and teaching in the schools. In one school, or in the school system?

Mr. RANDOLPH. It is a two-city arrangement. It is younger poets going into the classroom working with the students while other established poets work with the teachers in workshops, so you have two things going on at the same time.

Mrs. HANSEN. Are they teaching not only appreciation of poetry but the technique of poetry composition?

Miss HANKS. Yes. And they are providing a great stimulus for reading skills. This is my understanding.

Mrs. HANSEN. Miss Hanks, I hope that you take the opportunity to visit the Santa Fe Indian Art Institute. Mr. Reifel and I were there last year and visited various classes in all the arts. One of the most exciting parts of the day was our visit to the poetry class which had some very capable young people doing some beautiful work.

Miss HANKS. I hope to be in Santa Fe perhaps in July.

Mrs. HANSEN. I hope you will visit there because they are doing some excellent work there in drama, sculpture, painting, poetry, and creative writing, as well as the basic school work. They are reaching those groups of young people who are sensitive and talented and who have been "rejected" by society and who have had difficulty adjusting to ordinary schools. Through the creativity that has been offered at the

art institute they have reached these young Indian people who have this talent, and rescued them from oblivion.

The same thing is possible, I think, in all levels of our society. The physicist and the chemist are of tremendous importance to the United States, but also of importance to the spirit of the Nation are the people who write, paint, sculpture, and compose.

Mr. REIFEL. Off the record.

(Discussion off the record.)

VALUE OF PROGRAMS IN GHETTO SCHOOLS

Mr. STRAIGHT. May I say one thing about the poetry program, Madam Chairman, in terms of the breadth of the program? I spent 3 days visiting schools in the Bedford-Stuyvesant area and the Ocean Hill-Brownsville area of Long Island, both of which have had very intense racial strife and are deeply depressed economic areas, and in these two areas, I would like to mention two examples which indicate that the program is very much broader than poetry itself.

In one fifth grade class which I attended, a black poet was preparing a class for study of black poetry. He began with 19th century spirituals sung by slaves on the plantations, and before he read these spirituals he asked the children of the class to tell him what slavery was. The eighth child to whom he posed the question was the first who could tell him what slavery was. So, the appreciation of poetry became a very much larger question in terms of the students understanding their own past.

In a comparable class in Ocean Hill-Brownsville, another black poet that I was with had worked with a group of fourth grade children who had shown virtually no interest in mastering the disciplines of grammar. He had persuaded all of these children that they had something to say, beginning with dreams that they had had, or fights with their brothers and sisters. He had induced all of these children to write, not poetry but virtually indecipherable scrawls concerning their own immediate experiences, and by demonstrating to them that he was interested in what they had to say, by convincing them that they had something worthwhile to say, he was leaving this group of fourth graders with the incentive to master the hard disciplines of grammar, and thereby reenforcing the teaching not only of poetry and literature but of all English in that school.

Mrs. HANSEN. You mentioned in your supplemental hearing the poetry magazines. Please discuss your relationship and responsibilities in this connection?

Mr. STRAIGHT. There are two questions there, Madam Chairman. One is the American Literary Anthology, which has been the subject of certain questions and criticism, and the other is the Coordinating Council of Literary Magazines, and I will take up either one, according to your choice.

Mrs. HANSEN. I think you should discuss both programs to give us some insight as to how they are managed and the extent of your participation. It has been said repeatedly in this committee through the years that the Government's role is to contribute its resources, not to dominate these programs. We did not want the art world of the United States to feel that government was entering into the dictation of the human spirit.

Mr. STRAIGHT. That is correct, Madam Chairman; and you wrote that very wise belief into the enabling legislation in section 4(c) of the Act which specifies that the Endowment shall not exercise "any direction, supervision or control over the policy determination—or operation of any—organization" which it supports. In our opinion that very wise provision protects the artist and the Government, as well. The Endowment cannot, of course, evade its responsibilities when it reviews grants which it has made and determines whether it should or should not renew them. It must inquire into the maturity and stability as well as the competence and financial responsibility of the organizations it supports. It must satisfy itself that they are law-abiding, competent, responsible organizations, but when the grant is made it cannot act as judge and jury looking over the shoulder of each organization and intervening in its operations, because the Congress has wisely said that that is not the role of government.

COORDINATING COUNCIL OF LITERARY MAGAZINES

On these two projects: the first, the Coordinating Council of Literary Magazines, was organized after many conferences. It began as a service organization to bring the small literary magazines together, and subsequently became an organization in which grants were made.

I know from my own experience, for example, in South Dakota where I spent a week lecturing at the university, that the idea there of reexamining the culture of that region began with a small magazine, the South Dakota Review, which I had something to do with, and I could see that a small grant to that magazine could help to set in motion a new appreciation of our culture, and a new literary tradition.

Endowment grants to the Council have totaled $300,000 over a number of years. They have been matched by contributions from foundations and individuals, including the United States Steel Foundation.

Mrs. HANSEN. Insert in the record the members of the Coordinating Council.

Mr. STRAIGHT. We will be glad to do that, Madam Chairman.

Mrs. HANSEN. Also insert in the record how they are selected.

(The information follows:)

COORDINATING COUNCIL OF LITERARY MAGAZINES—APRIL 1970

BOARD OF DIRECTORS

William Phillips, chairman: Partisan Review and Rutgers University, New Brunswick, N.J.

Jules Chametzky, secretary: Massachusetts Review and University of Massachusetts, Amherst, Mass.

Peter Caws, treasurer: Hunter College and former executive associate for the Carnegie Corp., New York, N.Y.

Russell Banks: Lillabulero, Northwood Narrows, N.H.

James Boatwright: Shenandoah and Washington and Lee University, Lexington, Va.

George Hitchcock, Kayak and University of California at Santa Cruz.

William Roth: regent, University of California; president, San Francisco Museum of Art; director and chairman, executive committee, Pacific National Life Assurance Co.

BOARD OF CONSULTANTS

June Oppen Degnan: Publisher, San Francisco Review, San Francisco, Calif.
Clayton Eshleman: Caterpillar, New York, N.Y.
James Harrison: Sumac, Lake Leelenau, Mich.
Jan Herman: San Francisco Earthquake, San Francisco, Calif.
Robie Macauley: former editor Kenyon Review and now fiction editor Playboy, Chicago, Ill.
Charles Newman: Tri-Quarterly; Northwestern University; Northwestern University Press, Evanston, Ill.; consultant to Illinois Arts Council.
A. B. Spellman: Rhythm and southern education program, Atlanta, Ga.

LIST OF GRANTS WITH MEETING DATES

June 9, 1969

Russell Banks (see Board of Directors).
James Boatwright (see Board of Directors).
Clayton Eshleman (See Board of Consultants).
George Hitchcock (see Board of Directors).
Charles Newman (see Board of Consultants).

October 26, 1969

Russell Banks (see Board of Directors).
James Boatwright (see Board of Directors).
Rober Bonazzi: Lattitudes Magazine, Houston, Tex.
Avin Greenberg: Minnesota Review, St. Paul, Minn.
George Hitchcock (see Board of Directors).

January 20, 1970

Jules Chametzky (see Board of Directors).
James Harrison (see Board of Consultants).
Jan Herman (see Board of Consultants).
Stephen Mooney: Tennessee Poetry Journal, Martin, Tenn.
Charles Newman (see Board of Consultants).

The original board of directors was established as the result of a series of meetings concerning the literary magazines in this country. The board of directors selects the members of the board of consultants after receiving the advice and recommendations of people in the field across the country. The grants committee, with rotating members for each meeting, is composed of some members of the boards of consultants and of directors, as well as other representatives of small magazines. The grants committee reviews and makes recommendations on financial assistance. The Endowment is kept fully advised on the activities and grants programs of the Council.

Mr. STRAIGHT. The Council has given grants to 125 literary magazines in 35 States and special jurisdictions. Many of these magazines are supported by colleges and universities and some are published out of basements on mimeograph machines. The Endowment clearly cannot review every magazine, let alone every poem in every magazine. It can only satisfy itself that the Council is a responsible, competent body which has made sound judgments, and in my opinion there is no question that it has done that. I have seen no serious criticism of its judgment, and although the criticisms which have been made have led us to review all of its work, I found no evidence of any kind of poor judgment or favoritism on the part of the Council.

AMERICAN LITERARY ANTHOLOGY

The second project which has been challenged is the American Literary Anthology which was started in 1966 with the purpose of bringing the best writing in these small literary magazine to a larger audience, and in book form. The selections for the anthology are

made by three panels of three judges each. The judges act independently and they select the works which are chosen and submitted to them from a very large volume of material. The anthology is edited by Peter Ardery and George Plimpton, who, of course, is one of the best known, most widely read and respected of the younger American writers. It is published at cost by a commercial publishing house. The writers whose works are selected are paid for their works and the editors of the magazines in which the works first appear are paid a lesser sum. These payments constitute four-fifths of the grants which have been made to the anthology by the Endowment.

It has been said in criticism of the anthology that it draws upon a limited circle of writers in the area of New York; in fact it has been said that they are friends and associates of Mr. Plimpton himself. The fact is that works by writers in 20 States are presented in volume 3 of the anthology. Moreover, these works first appeared in small magazines published in 21 States and the District of Columbia. Gregarious as Mr. Plimpton is, I don't think that even he has all those friends.

One hundred fifty-eight poems, stories and essays have been selected for the first three volumes of the American Literary Anthology. Of this total, two have been questioned or criticized. The first is a poem of one word which appeared in 1967 in the "Chicago Review," one of the oldest and most respected of our literary magazines, which is published by the University of Chicago.

The second is a long poem which was published in the "New Mexico Quarterly." The first poem was criticized by some because the poem was felt to be of little worth. The second was criticized because the poet was a U.S. Senator. The Senator incidentally returned the standard fee of $500 which was paid to him.

Mrs. HANSEN. What do you mean? Doesn't a U.S. Senator have a right to write poetry?

Mr. STRAIGHT. That was said by some critics and it was also said that the money was awarded to him because he was a Senator. I think this is plainly untrue.

Mrs. HANSEN. I don't know why Senators don't have the same rights to write poetry as anybody else.

Mr. STRAIGHT. I certainly agree with you, Madam Chairman.

The poem is a remarkable poem.

(Discussion off the record.)

Mrs. HANSEN. I can see no reason to criticize a person just because he happens to be a U.S. Senator. I wrote poetry long before I came to Congress.

Mr. STRAIGHT. The second poem, by Senator McCarthy, was picked by three judges whose integrity is beyond question. One is a former consultant in poetry to the Library of Congress, the second now holds that highly honored position, the third is a member of the faculty of the Massachusetts Institute of Technology and the winner of many nationwide poetry awards. The first poem was as I said written in 1967, and chosen and paid for in 1968 and is hardly therefore a club with which to beat Miss Hanks and the Endowment in the fiscal year 1971.

My own opinion is that the organization of the American Literary Anthology is open to some question. I believe that it should be organized as a corporation, with nonprofit status, and that if it is so organized, it will be eligible for foundation and private support as well as Government support. In my opinion it can and should stand ultimately on its own feet. I believe the Endowment should encourage that development, and in fact in the early days of Miss Hanks' administration, I asked her permission to meet with Mr. Plimpton to propose just this course. Mr. Plimpton is now engaged in applying for and I hope will soon receive a certificate of tax exemption for the corporation which he is organizing. In my opinion the Endowment will probably endeavor to reduce its own support for the anthology and to see that that support is replaced by foundation and individual support and also by the earned income of the anthology which is establishing a place for itself in American letters.

Mrs. HANSEN. What is the selling price of the anthology?

Mr. STRAIGHT. It sells in a hardback and in paperback, Madam Chairman, and I will have to get those figures for you and put them in the record.

Mrs. HANSEN. Please do. Also insert in the record the number of copies that have been sold.

Mr. STRAIGHT. I will do that.

(The information follows:)

THE AMERICAN LITERARY ANTHOLOGY

	Volume I	Volume II	Volume III [1]
Cost per copy:			
Hardback	$6.95	$5.95	$5.95
Paperback	2.95	2.95	2.95
Sales per volume:			
Hardback	2,961	[2] 2,751	[3]
Paperback	2,046	[2] 2,488	

[1] To be released around May 1970.
[2] Still being sold; no final figures available.
[3] Not yet released.

DEVELOPMENT OF CULTURAL RESOURCES

Miss HANKS. I think it is important and it has certainly made us look in great detail into this program as we hope to and keep track of all the programs that we have.

We will go on, with your permission, to the second objective of the Endowment which we call cultural resources development. We are requesting an approximate increase of $3.8 million in this category from $1,600,000 last year to $5,400,000 in this coming year. This is the program that perhaps you have heard about: assistance basically for orchestras, museums, and opera companies which would be new in this coming year, with continued assistance for the dance and theater companies that we have had in the past.

Mrs. HANSEN. How many are participating at the present time in this program?

Miss HANKS. In resident theater companies, we supported 22 in fiscal 1970.

Mrs. HANSEN. How many cities and areas did this reach?

Miss HANKS. About 20. We will have to check those figures. We are in 20 cities in 15 States in the resident theater program this year. We also supported the experimental workshops.

Mrs. HANSEN. Insert in the record a list of the States that have theater companies.

Miss HANKS. All over the country? I believe there is only one in New York.

(The information follows:)

Fiscal 1970 resident professional theaters program

A Contemporary Theater (Seattle)	$7,500
Actors Theater of Louisville	13,500
Alley Theater (Houston)	20,000
American Conservatory Theater (San Francisco)	25,000
Arena Stage (Washington, D.C.)	25,000
Asolo Theater Festival (Sarasota, Fla.)	10,000
Center Stage (Baltimore)	20,000
Center Theater Group (Los Angeles)	25,000
Cleveland Play House	15,000
Dallas Theater Center	15,000
Goodman Theater (Chicago)	12,500
Hartford Stage Co.	15,000
Milwaukee Repertory Co.	25,000
Minnesota Theater Co. (Tyrone Guthrie Theater)	25,000
Negro Ensemble Co. (New York City)	25,000
Playhouse in the Park (Cincinnati)	25,000
Seattle Repertory Theater	20,000
Stage West (Springfield, Mass.)	5,000
Theater Co. of Boston	20,000
Theater of the Living Arts (Philadelphia)	22,000
Washington Theater Club (D.C.)	25,000
Yale University Theater (New Haven)	20,000

Miss HANKS. We also have the workshop program, experimental theater, and there were grants to 25 of those as well.

Mrs. HANSEN. Insert the information in the record.

(The information follows:)

Fiscal 1970 professional workshop and experimental theaters program

American Place Theater (New York City)	$10,000
Barbwire Theater (San Francisco)	2,500
Caravan Theater (Boston)	1,500
Chelsea Theater Center (Brooklyn)	5,000
Chicago City Players	5,000
Company Theater (Los Angeles)	10,000
The Cubiculo (New York)	2,500
Dancers Studio Foundation (New York City)	2,500
Free Southern Theater (New Orleans)	10,000
Free Theater Fund (Chicago)	5,000
Group Concept (New York City)	2,500
The Interplayers (San Francisco)	2,500
The Julian Theater (San Francisco)	2,500
La Mama (New York City)	15,000
Loft Theater Workshop (New York City)	5,000
New Dramatists Committee (New York City)	5,000
New Lafayette Theater (New York City)	5,000
New York Free Theater (New York City)	5,000
The Open Theater (New York City)	30,000
The Performance Group (New York City)	15,000
Society Hill Playhouse (Philadelphia)	5,000
Studio Watts Workshop (Los Angeles)	5,000
Theater Workshop (Boston)	7,500
Thresholds (New York City)	5,000
Two Arts Playhouse (New York City)	5,000

Miss HANKS. In dance we have supported the Joffrey Ballet and American Ballet Theater, which were the two major companies and then we gave funds of much lesser amounts to some of the contemporary dance companies, but of course we also support them through the coordinated dance program that I discussed earlier and we will put those in the record.

(The information follows:)

COMPLETE LIST OF DANCE COMPANIES—1968–70 PARTICIPANTS IN THE COORDINATED RESIDENCY TOURING PROGRAM

Merce Cunningham Dance Co.
Paul Taylor Dance Co.
Glen Tetley Co.
Erick Hawkins Dance Co.
Lucas Hoving Co.
Jose Limon Dance Co.
Donald McKayle Co.
Anna Sokolow (Lyric Theater)
Alvin Ailey American Dance Theater
Pearl Lang Co.
Murray Louis Co.
Don Redlich Dance Co.
First Chamber Dance Co.

PROPOSED AID TO SYMPHONY ORCHESTRAS

Miss HANKS. The Council, in my judgment very wisely, in the past felt that the level of funding of the Endowment precluded giving grants to orchestras, museums, and opera companies. Therefore, it is our hope, with the increased funds, that we will be able to move into these three critical areas. The application guidelines have been prepared to assist 28 major symphony orchestras and at least a portion of the 60 metropolitan orchestras, basically to do two things. One, to improve their public service activities, and secondly, to improve their administrative or artistic standards.

Mrs. HANSEN. Does this include the District of Columbia Symphony?

Miss HANKS. Yes, the National Symphony would be eligible to apply.

The specific guidelines are currently being developed for opera companies and they will be similar to the orchestra program, although it would be our intention this year to fund them at a much lower level. For the museums, guidelines are being developed, and although, as you perhaps know, their needs are just as critical as orchestras, the program will be much smaller this year, because, as you know, a museum doesn't close its doors as an orchestra would have to do. Museums just close off a few floors, and so it is not in that sense a crisis situation.

Mrs. HANSEN. Miss Hanks, please discuss some of the financing problems relative to museums, symphony orchestras, and operas. Why do they find themselves in such financial difficulties?

Miss HANKS. There are several factors. Take the orchestras, for example. Ten years or so ago approximately 70 percent of their activity was for what we call regular subscriptions, and 30 percent was for public service activities which would include the youth concerts, touring, and performances for other than their regular subscribers. Those

figures are in exact reverse today. More than 70 percent of the activities of the orchestras, on an average, are for public service activities, and only 30 percent of the performances are for the regular subscribers. This makes a big difference. Although the boards of trustees of these organizations are working very hard to raise contributed funds to support the public service activities, they are not able to raise enough money to cover these activities.

In the symphony orchestras, I have some figures here. There has been an average increase of 53.2 percent in their budgets in the 3 years between 1965 and 1968. This is a fantastic jump.

Mrs. HANSEN. What is the basic ingredient of this rise in costs?

Miss HANKS. Labor cost. Earned income at the same time fell from 62 to 55 percent of the total cost. The earned income was constantly rising, and substantially, but as a percentage of the total cost it was going down.

The contractual difficulties are increasingly common. We had strikes or near-strikes in approximately eight orchestras last year, and we have new contracts coming up in September, not only for higher wages but also for extended seasons. Those are the basic problems in the orchestras, the increased public service and also these rapidly rising labor costs.

In the museums, the people pouring in are their basic problem, because their costs have had to go up in terms of labor, more guards, more educational curators.

MUSEUM COSTS

Maintenance is much higher. The more people you have in, there is everything from the chewing gum wrappers on the floors to—well, I won't go on with the problems that they are having, but they are substantially with children.

The museums also are having serious problems in terms of conservation of the objects that they already have. We not only don't have enough conservators in this country and much more training has to be done in that area, but also the costs are very high for the upkeep of collections in science, history, and art.

Mrs. HANSEN. Isn't there an undersupply of trained museum people?

Miss HANKS. Oh, yes.

Mrs. HANSEN. What is the Smithsonian doing to assist?

Miss HANKS. I very frankly do not know. We can check on that. I just don't know if they have any training programs.

It would be our hope perhaps a little more specifically in the public service activities for the orchestras, we would permit each orchestra to come in and apply for funds at what it would call its priority need, because we do not want to tell them exactly what they should spend their funds for. In terms of public service we would include programs in schools, ghettos, parks, industries, rural areas, special concerts in cooperation with unions, teacher organizations, extended seasons, opening up of the subscription series to provide non-subscription nights, lower ticket prices for specific groups, educational pro-

grams of all types. Also we wish to emphasize regional cooperative planning along with States and collaborative programs involving other art forms such as opera and dance.

(Discussion off the record.)

HELPING ORCHESTRAS HELP THEMSELVES

Miss HANKS. In improvement activities, we are anxious to help the orchestras upgrade administrative effectiveness as well as artistic standards, by assisting with such things as adequate rehearsal time, flexible use of personnel and smaller ensembles, programing balance to include contemporary as well as traditional work, and professional training to include coaching for local and area performances. We are particularly anxious, and the Council passed a resolution on this, that we help orchestras improve their earned and contributed income, perhaps through hiring professional development personnel, so that they can increase their own earning power. We will accept applications from the major and metropolitan orchestras; we cannot possibly touch the over 1,000 community orchestras at this time, or perhaps ever.

The applications in the orchestra program, and this will be true in the others, will be reviewed by a special panel of orchestra professionals, who will be able to judge the applications.

Mrs. HANSEN. Who selects the panel?

Miss HANKS. I select the panel on the basis of recommendations from the orchestra field itself. They recommend and then we appoint. This panel will operate under the guidance of the music advisory panel as well, so in effect, with the orchestra grants, although it seems a little cumbersome at the present time, we thought it important to first have the review of orchestra professionals in the orchestra panel. Then there will be a further review by the music panel which presumably views the total musical situation in the Nation as well as just the orchestra, so that they can put that into context. Then, of course, all applications will go to the National Council on the Arts for its review, before coming to the chairman for approval.

All of the programs we hope to start in museums, orchestras, and opera companies are essentially new. It is the first time that we will be able to do anything significant in these fields. We will continue the dance and theater programs; it will depend on a variety of factors how much we will be able to increase the present grants in those areas.

In the third category, which we term "Advancement of our Cultural Legacy," we view the increase as modest: it is from $1,785,000 to $2 million. That is an increase of approximately $200,000. At the present time it is our intention to use this $200.000 to develop and fund a new procedure for touring in this country. We have found in our experience with the coordinated dance program that procedures are simply not adequate for what in effect is a "new road." Particularly in dance, but this is also true in other areas, the high quality professional organizations are located basically on the two coasts, and if we are to make the arts more available in this country, we are going to have to establish better procedures for booking and touring them. This is presently not being handled by the commerical managers to the extent necessary. Our discussions are not only with the commercial managers but with the few non-profit managers in the country. Unless

we are able to in effect develop better procedures, the potential of getting the arts out in the country will simply not be possible.

FILM—AN AMERICAN ART FORM

The largest portion of moneys allocated in this section is $1 million for the American Film Institute. As the committee will recall, this Institute was established by the Endowment in cooperation with the Ford Foundation, and members of the Motion Picture Association in June of 1967. We have looked into the Institute in great detail. I have visited the site in Los Angeles and have talked at great length with the Director. The Institute, in less than 3 years, has had a remarkable impact on the film world.

The Endowment's support in the coming year will assist various activities and I might briefly describe these. First there is the archival program that is worked out in cooperation with the Library of Congress. They are moving ahead on schedule in saving and preserving the classic films. As you know, most of the films made before World War II were printed on nitrate stock which just dissolves no matter what you do with it. The Institute is reclaiming the films, and reprinting them on acetate.

Within a year or two they will be able to start on the news clips, but not until they finish the classic film program. In my judgment, particularly with the new means of communication that we have in this country, if you let these films go, it is just like burning a book. There is no difference in the world.

Mrs. HANSEN. This is part of the American past.

Miss HANKS. It is part of the American past.

Mrs. HANSEN. Which will be of great use to researchers in the future.

Miss HANKS. Tremendous. As you know, they found quite a few of these films in Eastern Europe which didn't even exist in this country. Some of the great American films were highly valued, and were preserved in Czechoslovakia and Poland.

COST OF PRESERVING FILM CLASSICS

Mr. MARSH. Could I interrupt here. I think this is a very interesting point that you have made here. Have you explored the possibilities of the use of counterpart funds in either trying to reclaim these films or rehabilitate the films, because these counterpart funds do exist in Poland or Czechoslovakia.

Miss HANKS. Mr. Marsh, it is not costing them anything to get the films. It is my understanding they do not pay a fee for the film. They in effect borrow it, and put it on acetate. The only cost is in the transfer from one film to another. In other words, they are not having to buy the films.

Mr. MARSH. Then it is actually a relatively inexpensive proposition obtaining a copy of the film? The expense occurs in the technical end?

Miss HANKS. In transfer.

Mr. MARSH. Which is done in this country to preserve the film?

Miss HANKS. That is correct. They have a very interesting presentation on this process. I would hope that in a matter of weeks, this subcommittee and any other people you would like to suggest, could

see the film the Institute has put together. It is a half-hour show of clips. You can see right before your eyes the disintegration of film, and then how they are able to bring it back and preserve it. It is fascinating.

Mrs. HANSEN. How many films have they been able to save?

Miss HANKS. We will have to check that.

Mr. MARSH. In that regard, can you put in the record what it costs generally to preserve one film of 15 minutes or 30 minutes duration so we can have some idea what the cost per film is.

(The information follows:)

THE AMERICAN FILM INSTITUTE

How many films

The American Film Institute's Archival service reports that approximately 4,000 films have been added to the American Film Institute collection. Of these 4,000, approximately 225 have been transferred from nitrate to acetate stock. Of the remaining titles, the Institute estimates that approximately 3,000 require transfer.

The cost

A feature (1½ hours) film may cost, for transferral from nitrate to acetate, anywhere from $2,000 to $10,000, depending on factors such as age of film, whether it is black and white or color, silent or with sound, its condition at time of transferral, et cetera. A rough average might be about $3,000 per film.

Mr. MARSH. Is that a rather constant figure or does it relate to the quality of the film, its condition?

Miss HANKS. I think they have to spend considerably more money if they have a film in bad shape, in terms of transferring. The way they work this is just marvelous, which is why I would like you to see this demonstration of the work that they are doing. I think it is wonderful too that the Library of Congress is working in cooperation with them.

FILM EDUCATION

The second area they have is what they call the educational program. They are working to improve or keep up with the growth rate of interest in film in the colleges and universities. There has been an 84-percent increase in 3 years alone in film courses in colleges. They are now taking a look at the secondary schools where the study of films is coming in. It is the hope of the Film Institute that through its informational service and in holding conferences for people teaching these courses, that they can have a very high level of teaching, and without it, in my judgment, we will have a low level. When you increase the college courses by 84 percent in 3 years, you don't really have the people to teach, so that the teachers in effect are going to have to be taught in this field.

The third area is the advance training program that they have in California. This basically is a tutorial program. The young students, most of whom have graduated from college, are brought into the Institute in several ways. First of all, there is a continuous showing of great films, new and old. They bring in one or two outstanding producers or directors or film technicians every week to lecture to the students, and then the students go out for a period of 3 to 6 months to work on a tutorial basis with a great director or producer. The hope is to raise the level of all standards in the film world, from the technical to the artistic to the substance of our films. The Council feels that support of the Institute is one of the more important things that they have done in the past and feels very strongly that it should continue its support to keep it going.

The remaining funds of——

Mrs. HANSEN. Who makes the determination on which film is preserved?

Miss HANKS. The Film Institute.

The remaining funds in this category, in the program moneys, of approximately $800,000, are aimed at encouraging new music composition, new choreography, and also continuing the wonderful work that is being done in our architecture program in environmental design. Also the encouragement of young writers in literature, and the encouragement of our visual artists to explore further in their own area.

IMPROVING THE ENVIRONMENT

Mrs. HANSEN. Miss Hanks, as we become increasingly aware of our environment, have you made any grants in relation to the landscape field?

Miss HANKS. We would be happy to submit for the record the particular grants that were made in this particular field. We, of course, have on the Council one of the outstanding landscape architects in the country, Lawrence Halprin, and he watches this with great concern and interest. The proposals are now coming in for 1971. I just don't know how heavily they are in landscape architecture, but I think they are a big proportion.

ENVIRONMENTAL DESIGN PROJECTS

AMERICAN GUIDE SERIES - $26,000

A grant to Carl Feiss to develop a program for producing an American Guide Series on significant architecture, landscape architecture and planning.

EXHIBITION AND BOOK ON AMERICAN ARCHITECTURE - $25,000

A grant to G. E. Kidder Smith for an exhibition and book of photographs of American architecture, landscape architecture and planning.

GRANTS TO SCHOOLS OF ARCHITECTURE AND DESIGN

A program of matching grants provided $30,000 each to schools of architecture and design to undertake environmental design projects of significant scale and relevance. The following nine schools were awarded grants totaling $270,000:

Institute for Architecture and Urban Studies (New York City)
To study the design potentials of the city street as a fundamental element of urban open space design.

Massachusetts Institute of Technology (Cambridge)
To develop a design training program in which ghetto talent will be sought and developed.

University of Kentucky (lexington)
To investigate methods of strip mining that leave landscape intact for alternative future developments.

University of Minnesota (Minneapolis)
To study alternative forms of suburban growth.

University of Notre Dame (Notre Dame)
To study new forms of land use resulting from advanced scientific and technical information in geology.

University of Pennsylvania (Philadelphia)
To pursue advanced studies in ecological analysis and regional design.

University of Southern California (Los Angeles)
To design a new town in a mountain valley, utilizing new methods of design analysis and synthesis.

Tulane University (New Orleans)
To further investigate design possibilities for the Vieux Carre riverfront expressway in New Orleans.

University of Tennessee (Knoxville)
To design a regional transportation town which will serve the future transportation needs of a group of small towns in eastern Tennessee.

NEW TECHNOLOGIES AND ARCHITECTURE - $7,000

A grant to John Eberhard to prepare the basic research for a book on the potential applications of "new technologies" on environmental design. The book when published will be entitled SYSTEMS DESIGN AND URBAN PLACES.

UNIVERSITY OF PENNSYLVANIA/PROF. E.A. GUTKIND - $23,000

A grant to University of Pennsylvania to enable Gabriel Gutkind to prepare for publication the last five volumes of an eight-volume series entitled "International History of City Development," written by the late Prof. E.A. Gutkind.

BASIS DESIGN MANUAL - $25,000

A grant to Prof. Ralph Knowles to develop a basic design manual, based on his courses and experiments with the effects of natural forces on three-dimensional architectural and urban forms, for distribution in schools in architecture, planning, and landscape architecture.

AMERICA THE BEAUTIFUL FUND - $42,000

A matching grant to the Natural Area Council of New York and the America the Beautiful Fund of Washington, D.C. enabled students of architecture, planning, and landscape architecture to obtain practical experience through work in selected public agencies on nearly 50 significant design projects throughtout the country.

HAWAII STATE FOUNDATION ON CULTURE AND THE ARTS - $50,850

A grant to develop effective design techniques and means for preserving Hawaii's natural beauty by supporting a series of studies by the Oahu Development Conference and other community action groups working with professional designers.

HIGHWAY SIGNS AND GRAPHICS - $10,000

A grant to Ronald Beckman to conduct a study aimed at the improvement of highways signs and graphics to enhance the safety and appearance of the highway.

REDESIGN OF AN OLD INDUSTRIAL RIVER AREA - $10,000

A grant to Lake Michigan Region Planning Council to develop an exemplary design plan for Little Calumet River Basin in southern Illinois and northwestern Indiana.

TOCKS ISLAND REGIONAL ADVISORY COUNCIL - $10,000

A grant to support a design action conference which permitted local officials, civic leaders, and citizens to confer with leading designers on environmental design excellence in the areas bordering the new national park -- the areas impacted by the creation of the park. (The area includes portions of six counties in New Jersey, New York, and Pennsylvania.) The park and the areas surrounding it will serve the recreational needs of the people in a portion of the eastern seaboard of "megalopolis," extending from New York to Philadelphia.

Environmental Design Grants

The recipients of the grants and their projects are as follows:

Mr. Sidney Cohn — City Planning

University of North Carolina, Chapel Hill, North Carolina

"A simulation game for the study of community architectural design control procedures." $5,000

Mr. William K. Cooper — Architecture

Washington, D. C.

"A study of architectural and planning form-generators to improve knowledge of the design process and to improve the level of resulting design solutions." $4,900

Mr. James R. Cothran — City Planning

Atlanta, Georgia

"An investigation into downtown pedestrian malls -- their history, development and future prospects." $2,000

Mr. Laurence S. Cutler — Architecture

Cambridge, Massachusetts

"The development of transitional industrial building systems -- transitional from present limitations and restraints to more rational methods likely in the near future." $5,000

(more)

Environmental Design Grants

Mr. Alton J. De Long — City Planning

Pennsylvania State University, University Park, Pennsylvania

"A study of descriptive language in relation to environment." ... $5,000

Mr. Frederick C. Eichenberger — Architecture

North Carolina State University, Raleigh, North Carolina

"Development of a theory of cylindrical perspective for architectural spatial representation." $3,000

Mr. Franklin L. Elmer, Jr. — City Planning

Columbus, Ohio

"A case study of 'German Village,' a historic district in Columbus, Ohio." $5,000

Mr. Francis Ferguson — City Planning

Columbia University, New York, New York

"A study of the urban design process." $5,000

Mr. John F. Furlong — Architecture and City Planning

Brookline, Massachusetts

"The development of methods to portray architectural and urban environments through projected images on a wide screen." $4,600

(more)

Environmental Design Grants

Mr. Myron A. Guran — Architecture

University of Oregon, Eugene, Oregon

"Explorations in space-time changes in structural and geometric forms." $5,000

Mr. Eugene R. Kremer — City Planning

Washington University, St. Louis, Missouri

"The development of insights into the relationship between environmental design and other cultural and societal influences." $5,000

Mr. Richard R. Langenbach — Architecture

Cambridge, Massachusetts

"A study of the historic Amoskeag Millyard in Manchester, New Hampshire -- one of the nation's earliest efforts in industralized large-scale building." $4,000

Mr. John B. Mackinlay, Jr. — Architecture

Orinda, California

"The development of design criteria and techniques for building in deep-snow areas." $5,000

(more)

Environmental Design Grants

Mr. Hal M. Moseley, Jr. City Planning

Bloomfield Hills, Michigan

"A graphic reference manual to describe the many categories of designed environments and their component parts." $3,000

Mrs. Louise H. Ordione Landscape Architecture

Yellow Springs, Ohio

"The development and dissemination of knowledge of indoor planting for the purpose of creating biologically healthfull interior designs."..... $5,000

Mr. Gary O. Robinette Landscape Architecture

Washington, D.C.

"The development of a vocabulary on planting design for use by environmental designer. An illustrated document will be prepared for publication."..... $4,800

Environmental Design Grants

Mr. Donald C Royse — City Planning

St. Louis, Missouri

"A study of the various ways in which people infer social characteristics from cues in the everyday physical environment."..... $5,000

Mr. Robert M. Sarly — City Planning

Boston, Massachusetts

"A comparative study of new towns in Israel and in the United States."..... $5,000

Mr. Roger D. Sherwood — Architecture

Cornell University, Ithaca, New York

"A comparative analysis of housing in the form of case studies, with the development of design guidelines."..... $5,000

Environmental Design Grants

Mr. Nathan Silver — Industrial Design

Brox, New York

"The programming, design, management and operation of a prototype 'hardware supermarket' of available design components from industry." $5,000

Mr. Leonard D. Singer — Industrial Design

Chicago, Illinois

"A study of the environmental and design influences resulting from the widespread usage of disposable products." $5,000

Mr. Michael F. Southworth — City Planning

Boston, Massachusetts

"A project to create a set of city information elements and systems designed for young children." $5,000

Mr. Carl F. Steinitz — Landscape Architecture

Cambridge, Massachusetts

"A program for the support of graduate student assistants in the Harvard University Laboratory for Computer Graphics, now engaged in exploration of analysis of visual appearance in the city." $5,000

(more)

Environmental Design Grants

Mrs. Erma B. Striner — Interior Design

Washington, D.C.

"A study of the design and planning of spaces and furniture appropriate to housing for low-income people." $5,000

Mr. Erik A. Svenson — City Planning

Washington, D.C.

"A study of the temporal factors influencing the comprehension of urban form." $5,000

Mr. Richard Tatlock — Landscape Architecture

Boston, Massachusetts

"A study of the public use of water-and-land resources, illustrating the impact of waterfront and water-based activities on traditional land-use planning concepts." $5,000

Mr. Philip Thiel — City Planning

Seattle, Washington

"Preparation of a number of past studies for publication on the subject of notation systems for describing motion through various designed environments." $4,900

(more)

Environmental Design Grants

Mr. Robert L. Vickery, Jr. City Planning

University City, Missouri

"A study of the private street system of St. Louis, Missouri, with reference to future applications, density of population, form, and character." $4,200

Mr. Donald R. Watson City Planning

Guilford, Connecticut

"A broad study of the physical environment from a highly conceptual design viewpoint, covering major theories and avenues of examination." $5,000

Mr. Joseph Watterson Architecture

Washington, D.C.

"A compilation of significant articles from the past issues of the Journal of the American Institute of Architects." $1,500

Mr. Douglas S. Way Landscape Architecture

Harvard University, Cambridge, Massachusetts

"A study of analysis of air-photo techniques for use in environmental design." $5,000

(more)

Environmental Design Grants

Mr. Harry J. Wexler — City Planning

New Haven, Connecticut

"The development of comparative case studies and materials for teaching designers the role and impact of legal institutional forces in architecture and planning." $5,000

Mr. Myer R. Wolfe — City Planning

University of Washington, Seattle, Washington

"An evaluation of the role of 'urban design' in the normal processes of city planning. The proposed study will envolve such variables as resources, scale, socio-economic factors, aspiration levels, and public policy determinants." $4,000

Mr. David L. Young — Landscape Architecture

Baton Rouge, Louisiana

"A study of landscape materials, their properties, advantages, limitations, and installation." $4,900

Environmental Design Grants

(Institutions or groups)

America The Beautiful Fund

Washington, D.C.

"This organization will continue its work in matching young designers to small public agencies for communities in which there is a need and receptivity for innovative design."..... $10,000

Boston Architectural Center

Boston, Massachusetts

"A pilot project to test methods of surveying historical buildings and enclaves in old and depressed urban areas. The work will be undertaken as a combination research and teaching program."... .....$10,000

Environmental Design Grants

Kent State University, Dept. of Architecture

Kent, Ohio

"The development of a series of full-size construction 'mock-ups' of typical building construction systems. These will be built around a university's architecture building as a teaching aid for architectural students, as signposts for the architecture school, and as sculpture for passersby." $10,000

Massachusetts Institute of Technology, Dept. of Architecture

Cambridge, Massachusetts

"An investigation of possible solutions to the unique housing problems of the American Indian and Eskimo." $10,000

Metropolitan Museum of Art

New York, New York

"A grant to assist in the establishment of a new curatorship in architecture and urban design. This would lead to important exhibitions using existing collections formed in the 1800s to 1890s under the Willard Museum of Architecture of the 'Met,' many additional objects and collections, and new and borrowed materials." $5,000

(more)

Environmental Design Grants

Philadelphia Museum of Art

Philadelphia, Pennsylvania

"The development of an exhibit emphasizing the environmental significance of publicly-owned and controlled urban property (streets, sidewalks, expressways, public buildings, parks, service vehicles, etc.)."
$10,000

School of the Art Institute of Chicago, Dept. of Environmental Design

Chicago, Illinois

"The development of a methodology for tracing abstract ideas into physical forms, with the hope of creating a means to generate many types of visual and physical designs. $10,000

Tocks Island Regional Advisory Council

Stroudsburg, Pennsylvania

Establish several innovative programs simultaneously in a key design region of the United States:

1. an artist-in-residence in the regional landscape.
2. use of special design consultants. $10,000

(more)

Environmental Design Grants

University of California at Berkeley, Dept. of Landscape Architecture

Berkeley, California

"A state-of-the-art study of notational systems for the visual evaluation of urban and natural landscapes." $10,000

University of Florida, College of Architecture and Fine Arts

Gainesville, Florida

"The experiment in techniques of simulating and visualizing designed spaces." $8,700

University of Wisconsin, Environmental Awareness Center

Madison, Wisconsin

"The development of an 'environmental awareness center' -- a center for teaching the general public about environmental design and husbandry." $9,600

-end-

Mrs. HANSEN. There has been an increasing awareness, particularly whenever public buildings are built, of the relationship of landscaping.

For eample, last year when I visited the Navajo schools, one of the greatest concerns of the young people, when we sat down to discuss their needs, was one simple thing. They wanted landscaping. They wanted grass. In that particular country grass is very difficult to grow due to a lack of water, but they wanted some beauty around the schools. This basic ingredient of landscaping was what the young people asked for all through the Navajo country.

Miss HANKS. That is very interesting.

Mrs. HANSEN. I thought this was one of the most interesting things that was discussed. You would have thought they would have wanted other things.

Miss HANKS. That is something that they are totally deprived of in that area out there. Their concern is wonderful.

Mrs. HANSEN. I think when the United States builds a building, in the Indian areas, it has an obligation to encourage the use of local plant life for landscaping to the fullest possible extent. There is a great deal of beauty there. But there has been no attempt to do this. We have built them completely bare buildings. This isn't meeting the objectives of a school.

Miss HANKS. Council members in architecture, Lawrence Halprin, O'Neil Ford and Albert Bush-Brown, are meeting and talking and taking a whole new look at the architectural program. I will raise this particularly with Mr. Halprin when I see him next week, this comment and your interest in this, as well as look at the applications that have come through.

Mrs. HANSEN. I overheard a group of citizens make a comment about a public building that was being built in the West. They said, "Isn't it funny, the United States can spend several million dollars for buildings, and yet they can't seem to get anything beside it except a stone walk." There is a deep-seated desire for beauty, and I think the U.S. Government has ignored it too many times.

VISUAL POLLUTION AND SLUMS

Miss HANKS. Of course I believe this. I think we have visual pollution that is worse than anything going. I was out in Quincy, Ill., 2 or 3 weeks ago. Quincy is on the Mississippi, a small but wealthy town. The whole main street has great big beautiful old homes, but small beautiful homes as well. Then you go on the next street or into the newer sections of town, with homes that cost just as much money, and you see a shocking and typical example.

Mrs. HANSEN. Many development firms are building the slums of the 1980's right now.

Miss HANKS. Or even slums of earlier than that, because if people are not living with something that is beautiful there is no incentive to keeping them up. In the whole design area, you see some of these new modern homes, a total lack of balance in terms of say the pillars in the front or the proportion of the porches. I mean some designer just said, "You have to have a pillar to hold up the thing" and that is it. They have the stronger metals that will hold it up, so therefore, you don't need the large concrete well proportioned pillars.

The fellowship program, which we are exploring to assist individual talents will also be in this section.

Mrs. HANSEN. How has this program been progressing? We have had a great many inquiries about fellowships.

Miss HANKS. I would prefer going off the record.

(Discussion off the record:)

Miss HANKS. We are actively exploring a cooperative effort for a major fellowship progrtm in the Endowment. This was raised by the Council at its meeting in January, in which they discussed a position paper on individual grants. The original proposal for a fellowship program in all the arts came from Gregory Peck and we have been following up on his good advice.

NEED FOR PROGRAM EVALUATION

That completes my comments on the three program goals. We would also like to allocate with the committee's permission in this coming year $400,000 in the area of program development and evaluation. As you know, under the special provision given us by Congress, we are allowed to set aside 3 percent of our funds for this purpose. If we used all 3 percent, this would bring us to a total of $564,000, but we are not requesting that amount. We are requesting only $400,000. This, however, is a substantial increase over last year. In the current fiscal year we are spending $100,000 to $130,000 in that area.

Mrs. HANSEN. The better your evaluation the less criticism you will receive.

Miss HANKS. The shorter the criticism. And much better programs. We cannot sit here in Washington, with this wonderful staff that we have, of too few people, I always have to say that; even if we are able to have the staff we need, we can't sit here and determine the programs. We must call on expert advice from all over this country, and this costs money. The Council, again and again, in its meeting in January, stated that they did not feel that we were doing anywhere near the evaluative work that we should be doing on past programs, particularly since so many of them have been in the pilot area. What is the point of doing a pilot project if you do not evaluate the results.

Mrs. HANSEN. Now is the time to evaluate the results.

Miss HANKS. To really evaluate 5 years of programing is the intent in this area. The other funds that we would use here would be for planning what we hope may be a major breakthrough in transportation of national exhibitions. At the present time national exhibitions in the visual arts have come almost to a grinding halt. There are still a few, but the transportation is so expensive, and more importantly the damage factor is so serious that people will not lend their works. When I visited a museum recently, I found they had borrowed a Rembrandt from the Metropolitan Museum and it arrived with a big hole in it. You know the Metropolitan is just not going to send another Rembrandt tomorrow to that museum. It wasn't the museum's fault. It just happened in transportation.

We have had very interesting conversations with the Defense Department who have worked on similar problems, and also with two New York designers, who although usually highly competitive are so excited about the possibilities they have agreed to work together on a prototype plan for new transportation methods.

MATCHING GIFTS TO TREASURY FUND

That completes my comments in the program area. In the area of gifts, donations, and matching funds, we are requesting sums of $5 million for the Foundation, allocation of $2.5 million for the Arts Endowment. In our discussions at the supplemental hearing a week or so ago, we noted that we have already committed more than $1 million for the fiscal 1970 funds that we have, which is why we are asking for the supplemental.

Very frankly, we have indications that within a very short period of time, we could raise $2,300,000. We were thinking then in terms of the supplemental appropriation.

My point is, I have absolutely no question that $2.5 million could be raised, and put to very good purposes. As the committee knows, if by chance we couldn't raise the matching money, it is not drawn out of the Treasury, so it is not a loss item.

I think if you would like, that I won't talk any more but just answer questions.

Mrs. HANSEN. You have given an excellent review of your programs this morning, Miss Hanks, probably the best review we have ever had. You have done an extremely able job. The committee is very proud to have you.

Miss HANKS. Thank you very much.

JUSTIFICATION MATERIAL

Mrs. HANSEN. Insert pages 1 through 36 of the justifications in the record.

(The pages appear on pp. 389 through 424.)

STATUS OF AUTHORIZATION

Mrs. HANSEN. What is the current status of your legislative authorization for fiscal year 1971?

Miss HANKS. The bill has passed the House committee by the outstanding vote——

Mrs. HANSEN. The House subcommittee?

Miss HANKS. The House committee.

Mrs. HANSEN. The full committee?

Miss HANKS. The full committee with a vote of 22 to 1. The committee report is out. There was a minority view on the committee report, which was signed by Mr. Scherle, Mr. Eshleman and Mr. Landgrebe.

(Discussion off the record.)

Miss HANKS. They do not include Treasury funds. Treasury funds to match private donations are separate and open-ended for all 3 years.

WESTBETH HOUSING PROJECT, NEW YORK

Mrs. HANSEN. What is the current status of the artists housing project in New York?

Miss HANKS. Mr. Straight has been there and is in constant communication with them. This is Westbeth.

NATIONAL ENDOWMENT FOR THE ARTS
SUMMARY STATEMENT FOR FISCAL YEAR 1971

The National Endowment for the Arts, the Federal agency charged by Congress with responsibility for developing and promoting a "broadly conceived national policy of support for the...arts in the United States," (Public Law 89-209) proposes a Fiscal Year 1971 program budget totalling $18,800,000; plus $1,200,000 in administrative funds. This proposal is pursuant to the President's December 10 message to Congress, and would be utilized in the following manner:

Definite Appropriation	- For General Programs:	$9,675,000
Definite Appropriation	- For State Arts Agencies:	4,125,000
Indefinite Appropriation	- To Match Donations to the Endowment:	2,500,000
	Total Appropriation :	$16,300,000
Donations.....	:	2,500,000
	TOTAL PROGRAM :	$18,800,000

The growing interest of the public in the arts is the primary reason for the increasing costs and acute financial problems that now threaten many of our established cultural resources and seriously inhibit the growth of new institutions. As public service activities have increased, as costs of both labor and materials have risen sharply, the gap between expenditures and earned income has grown to the point where private philanthropy is no longer able to make up the difference and a more viable partnership must be created between private and governmental sources.

The bulk of our funding will be directed to the arts and artist as they relate to audience, including youth. In addition, the National Council on the Arts deeply respects the artist as the creative force, and will continue to further the creative process.

To meet the rapidly changing conditions, a new program rather than a modest percentage increase in the existing one is required. Therefore, the Endowment has set three goals:

- to encourage broad dissemination of the arts of the highest quality across the country

- to work toward solutions of some of the core problems that plague arts institutions in their efforts to provide greater public service

- to provide support that leads toward improving quality and standards for our audiences and encouraging creativity among our most gifted artists.

The National Council on the Arts recognizes the grave difficulties confronting the major institutions in the arts, but urges that the "crisis" or "panic" attitude not be allowed to overshadow the extraordinary vitality and diversity of the arts in America today. It cannot be stated as an absolute fact that a particular major symphony, for example, will suddenly fold or that museums that have existed for many years as part of their communities will suddenly cease to exist. However, it can be stated as fact that without federal funds in partnership with private and other governmental monies, the orchestras and museums and other arts organizations will find it impossible to continue and expand their public services -- services that represent an exciting and important departure from established tradition. Further, it can be stated as a fact that without assistance the quality which has made many of our organizations world-famous will decline.

Failure to meet community needs or to maintain high standards is not a valid alternative to closing the doors of our arts organizations. Nor is it acceptable in a civilized society.

In sum, unless a concerted effort by all elements of our society -- private and governmental alike -- is launched, the Nation faces the erosion of some of its most remarkable and irreplaceable resources and it faces an inability to enhance the quality of life for all Americans.

The budget proposed represents the results of careful consideration by the Council and Endowment. It required making very difficult decisions as to priorities because the needs of the arts have increased so dramatically. However, with program funds of $18,800,000 and administrative funds of $1,200,000 the Arts Endowment could have an effective program. The budget takes into account that over the past four years each Endowment dollar has generated three dollars from other sources. Without the level of funding requested, the Endowment would have to continue solely on the pilot project basis.

There follows a brief description, with selected examples of specific programs, of each of the three goals set by the Endowment; a comment on Program Development and Evaluation; and a section on Gifts, Donations, and Matching Funds.

1. Availability of the Arts

The National Endowment for the Arts will place greater emphasis on encouraging wider distribution of artistic resources throughout the Nation. Enjoyment of and benefit from the arts should not be limited by geographic location or economic condition, although availability of the arts in this country has too long been governed by these two highly restrictive factors.

The Endowment wishes to increase funds to expand its highly successful program of federal-state partnership grants to provide $75,000 in matching funds for each state.

Institutions will be encouraged to serve wider geographic regions and more representative audiences. For example, the coordinated residency touring program for dance is now in 22 states; it should be extended. San Francisco's Western Opera Theater reaches 6 states; other companies home-based in cities such as Seattle, Minneapolis, Boston, Indianapolis, Atlanta should also be encouraged to reach out.

In visual arts, we are exploring (with the Army as well as private designers and transportation experts) new means of transportation. Damage and security problems have combined to bring almost to a halt the touring of major national exhibitions.

The possibilities are limitless, not only in terms of improving geographic distribution, but in being better able to reach the schools and youth of the Nation as well.

Fiscal Year 1971 distribution of funds in this category would approximate $6,000,000.

2. Cultural Resources Development

The National Endowment for the Arts will undertake a program of assistance to enable professional institutions to adapt themselves more effectively to the changing needs of their publics by alleviating some of their more pressing financial problems.

The Endowment's experience during the past four years, particularly in the fields of dance and theater, indicates that relatively modest sums can be effective in strengthening established institutions and stabilizing new ones. With severely limited funds, the Council had wisely determined that it was unable to recommend assistance programs for museums, orchestras, and opera companies. Conversations with leading music and museum authorities have enabled the Council to determine that if the funds requested are appropriated, limited but effective assistance can be introduced in these fields as well.

Fiscal Year 1971 destribution of funds in this category would approximate $5,400,000.

3. Advancement of our Cultural Legacy

The National Endowment for the Arts will continue its program of providing support for innovative projects, and will encourage new opportunities for audience and artist alike.

The Endowment intends to focus on the need for new services and institutions. The American Film Institute, already established, is one example. Support will be required for its archival work (in cooperation with the Library of Congress), advanced film training, and education to improve standards. Another example is the need for a new procedure for scheduling tours which may necessitate the establishment of a new organization.

Funds will also be used to encourage the development of talent and the exploration of new areas of environmental problems.

Fiscal Year 1971 distribution of funds in this category would approximate $2,000,000.

Program Development and Evaluation

Among the responsibilities the National Council on the Arts takes most seriously are those of continuing review of the programs and procedures it has recommended and of formulating policies for future encouragement of the arts. The Council is ever aware that the Endowment is a new agency of government, dealing with a new concern of government. It is also keenly cognizant that the arts and demands placed upon them by the public are constantly changing and further that requirements vary considerably from field to field, and, indeed, from region to region.

Therefore, the Council and staff of the Endowment view it as necessary to devote more attention in the future to program development and evaluation.

In planning and development we require more assistance from experts individually and through meetings for group discussion. There is a crucial need for research and analysis and a program of systematic data collection. Solutions for major problems, such as transportation in the visual arts and touring in the performing arts, require exploration. Evaluation of previous programs and projects is another high priority.

Fiscal Year 1971 distribution of funds in this category would approximate $400,000, an increase in actual amount over previous years, but still just above 2% of total program funds and thus considerably less than the 3% permitted in previous years.

Gifts, Donations and Matching Funds

Based on previous experience and exploratory conversations as to the future, the Endowment believes that the $2,500,000 requested will be received in gifts without difficulty. This is approximately the same as the actual figure of gifts in 1969, and pledges for an amount almost up to the $1,000,000 appropriated to date for Fiscal Year 1970 are already in hand, with fully one-third of the Fiscal Year still remaining. In a week's time, for example, restricted gifts of $350,000 for orchestras and opera companies were pledged. If more funds in this category were currently available (FY 1970), it would require little effort on the part of the Endowment to attract additional private donations. The importance of this program of Federal-private cost-sharing, and the wisdom of Congress in establishing it, cannot be overstated. In this instance, it is enabling the Endowment to move quickly on a partnership basis into two critical areas. In the future, for example, it might enable us to make a meaningful contribution toward the arts in education and

in the disadvantaged areas.

In summary, the Endowment and the Council now plan to move into what must be considered essentially a new program to meet new needs and the growing national attention to the arts.

The following tables show (1) Summary of Funds Available; (2) Analysis by Activities*; (3) Summary of Obligations by Objective*; (4) Summary of Obligations by Art Form; (5) Summary of Obligations by State and National; (6) Summary of Obligations by Recipient.

The summary tables are followed by Program Descriptions:

I. Availability of the Arts

II. Cultural Resources Development

III. Advancement of our Cultural Legacy

IV. Program Development and Evaluation

V. Gifts, Donations, and Matching Funds

Additional background material, including a list of current and former National Council on the Arts members and a description of Endowment Operating Principles, concludes the presentation.

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* Objective I, Availability of the Arts, includes past objective identifications Federal-State Partnership and Wider Distribution of the Arts; Objective II, Cultural Resources Development, includes the former Sustaining Institutions of the Arts; and Objective III, Advancement of our Cultural Legacy, includes Individual Artists Assistance, Research and Education, New National Opportunities, and National Cooperation programs.

NATIONAL ENDOWMENT FOR THE ARTS Table 1

SUMMARY OF FUNDS AVAILABLE

	1969 Actual		1970 Estimate	1971 Request	Increase
Appropriation, Definite					
Direct Program	$3,700,000		$ 4,250,000	$ 9,675,000	$5,425,000
States Program	1,700,000		2,000,000	4,125,000	2,125,000
Appropriation, Indefinite					
Matching Funds	2,356,875		1,000,000	2,500,000	1,500,000
Total Appropriation		$ 7,756,875	7,250,000	16,300,000	9,050,000
Gifts and Donations		2,356,875 1/	1,000,000	2,500,000	1,500,000
Transferred from H.E.W.		100,000			
Recovery of Prior Years Obligations		115,720			
Unobligated Balance Prior Year		422,447	3,165,378 3/	-0-	
Total Available for Obligation		10,751,917	11,415,378 4/	18,800,000	7,384,622
Obligations	6,370,639		11,415,378 4/	18,800,000	
Transfers to Humanities	900	6,371,539			
Unobligated Balance		$ 4,380,378 2/	$ -0-	$ -0-	

1/ Includes $1,215,000 equity in ANTA Theatre received.
2/ $3,713,750 of the unobligated balance was raised after July 22, 1969, the date on which the Second Supplemental Appropriation Act, 1969, became effective.
3/ Does not include $1,215,000 equity in ANTA Theatre which is not available for obligation.
4/ Does not include $1.0 million FY 1970 supplemental appropriation requested.

Table 2

NATIONAL ENDOWMENT FOR THE ARTS

ANALYSIS BY ACTIVITIES

Activity	FY 1969 Amount Available	FY 1970 Amount Estimated	FY 1971 Amount Requested	Increase	PAGE REF.
Availability of the Arts	$3,189,850	$ 2,954,956	$ 6,000,000	$3,045,044	A-19
Cultural Resources Development	1,178,250	1,604,166	5,400,000	3,795,834	A-21
Advancement of Our Cultural Legacy	1,962,829	1,785,034	2,000,000	214,966	A-23
Sub-Total	6,330,929	6,344,156	13,400,000	7,055,844	
Program Development and Evaluation	39,606	100,000	400,000	300,000	A-24
Gifts and Donations	104*	4,971,222	5,000,000	28,778	A-25
Unobligated Balance	3,165,378**	---	---	---	
Total	$9,536,017	$11,415,378	$18,800,000	$7,384,622	

* Gifts, donations and matching funds have been distributed by objective (except for one miscellaneous item in FY 69) in years for which actual expenditure figures are available.

** Does not include equity in ANTA Theatre which is not available for obligation.

Table 3

NATIONAL ENDOWMENT FOR THE ARTS

SUMMARY OF OBLIGATIONS BY OBJECTIVE

Objective	FY 68 Actual Amount	%	FY 69 Actual Amount	%	FY 70 Estimate Amount	%	FY 71 Request Amount	%
Availability of the Arts	$4,060,949	50.3	$3,189,850	50.4	$ 2,954,956	46.6	$ 6,000,000	44.8
Cultural Resources Development	1,526,960	18.9	1,178,250	18.6	1,604,166	25.3	5,400,000	40.3
Advancement of our Cultural Legacy	2,482,095	30.8	1,962,829	31.0	1,785,034	28.1	2,000,000	14.9
Sub-Total	8,070,004*	100.0	6,330,929	100.0	6,344,156	100.0	13,400,000	100.0
Program Development and Evaluation	-0-		39,604		100,000		400,000	
Gifts, Donations and Matching Funds			104**		4,971,222		5,000,000	
Total	$8,070,004		$6,370,637		$11,415,378		$18,800,000	

* Does not include $2,600,000 grant to the American Film Institute.

** Gifts, donations and matching funds have been distributed by objective (except for one miscellaneous item in FY 69) in years for which actual expenditure figures are available.

NATIONAL ENDOWMENT FOR THE ARTS Table 4

SUMMARY OF OBLIGATIONS BY ART FORM

Art Form	FY 68 Actual	FY 69 Actual	FY 70 Estimate
Architecture, Planning and Design	$ 814,550	$ 326,750	$ 279,750
Coordinated Programs[1]	601,265	544,550	454,642
Dance	620,690	641,627	786,850
Education	181,595	192,700[4]	380,000
Literature	578,915	332,000	557,121
Music and Opera	1,154,969	861,620	398,425
Public Media	2,903,805[2]	222,200	195,000
Theatre	1,396,728	1,266,350	782,000
Visual Arts	569,200	336,800	510,368
Misc. Contracts	1,341	---	---
Sub-Total	8,823,058[3]	4,724,597[5]	4,344,156
Program Development and Evaluation	---	39,606	100,000
Federal-State Partnership Grant - 5(h)	1,846,946	1,606,332	2,000,000
Gifts, Donations and Matching Funds	---	104[6]	4,971,222
TOTAL	$ 10,670,004	$ 6,370,639	$ 11,415,378

1/ Formerly Variety of Art Forms

2/ Includes a grant of $2,600,000 to American Film Institute. $303,805 is the total program expenditure for Public Media without this grant.

3/ Includes matching gifts acutally obligated.

4/ Includes $100,000 in funds transferred from Office of Education.

5/ Includes matching gifts actually obligated.

6/ Gifts, donations and matching funds have been distributed by art form, except for one miscellaneous item in FY-69.

NATIONAL ENDOWMENT FOR THE ARTS

Table 5

SUMMARY OF OBLIGATIONS BY STATE AND NATIONAL

Program	FY 66		FY 67		FY 68		FY 69		Total	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
National Project*	3	$ 532,250	19	$ 2,006,185	24	$ 4,923,563	32	$ 1,609,260	78	$ 9,071,258
States	146	1,241,108	316	5,625,836	514	5,782,552	528	4,761,379	1504***	17,410,875
	149	$ 1,773,358	335	$ 7,632,021	538	$ 10,706,115**	560	$ 6,370,639	1582	$ 26,482,133

* Certain programs affect the entire Nation, or a large portion, and cannot be credited to any particular State.

** Includes $36,111 of refunds and deobligations not shown on other charts.

*** In some cases, a grant to a single recipient affected activities in more than one State, resulting in a larger total number of projects in the breakdown by States than in the breakdown by recipient.

NATIONAL ENDOWMENT FOR THE ARTS — Table 5 (A)

NATIONAL PROJECTS

FY 1966

American Ballet Theatre (national tour)	$ 350,000
American P.E.N. (international conference)	40,000
Martha Graham Dance Company (national tour)	142,250
FY 66 Total	$ 532,250

FY 1967

American Lyric Theatre Workshop (research)	$ 300,000
Artists Technical Research Institute (research)	15,000
Association of American Dance Companies	25,000
Authors League Fund	30,000
Carnegie Hall/Jeunesses Musicales	31,500
Educational Broadcasting Corporation (TV distribution)	625,000
Mass Media/Education Research-Fordham (research)	71,780
Inter-American Foundation for the Arts (international project)	150,000
International Theatre Institute/ANTA (international conference)	35,000
Joffrey Ballet (Northwest tour)	100,000
MacFadyen Arts Resources Study (research)	30,995
National Educational Television (TV distribution)	87,500
National Repertory Theatre (national tour)	105,000
Metropolitan Opera National Company (national tour)	213,000
Resident Theatre Evaluation - S. Schmidt	15,000
Southeast Regional Opera Study - Beaton	35,000
Thorne Music Fund	50,000
Literary Anthology - George Plimpton	54,010
National Chamber Institute - Schneider	32,400
FY 67 Total	$ 2,006,185

FY 1968

American Ballet Theatre (national tour)	$ 394,830
American Federation of Arts (critics project)	10,500
American Film Institute	2,600,000
American National Opera Company (national tour)	449,740
American P.E.N. (national Center)	20,000
Association of American Dance Companies	15,000
Association of American University Presses	28,500
Center for Inter-American Relations	75,444
College Circuit Tour - dance - A. Ewing	5,000
Coordinated Residency Touring - dance - C. Reinhart	5,000

NATIONAL ENDOWMENT FOR THE ARTS Table 5 (B)

NATIONAL PROJECTS (continued)

Kaplan Fund (artists housing)	$ 750,000
Kodaly Fellowship Program - A. Ringer	29,340
Literary Anthology - George Plimpton	16,649
Martha Graham Dance Company	25,000
Modern Language Association Conference, in conjunction with American P.E.N., on Writers in the Universities	5,000
Music Critics Association for American Musical Digest	64,000
National Association for Regional Ballet	18,130
National Book Committee, Inc.	39,000
National Educational Television American Regional Theatre Project	75,000
National Guild of Community Music Schools ($24,700 to H. Zipper; $7,500 to the organization)	32,200
National Music Council (International Music Congress)	32,000
Study of Dance Recording Methods - D. Turnbaugh	9,120
Study of Federal, State, and local music programs - A. Sapp	24,110
Theatre Development Fund	200,000
FY 68 Total	$ 4,923,563

FY 1969

Affiliate Artists, Inc.	$ 50,000
American Association of Museums	10,000
American Choral Foundation, Inc.	25,000
The American Federation of Arts	10,000
American International Music Fund, Inc.	25,000
American Musical Digest	50,000
American National Theatre and Academy (A.N.T.A.)	438,000
American Symphony Orchestra League	1,250
Artists' Technical Research Institute	10,000
Associated Councils of the Arts (Two Grants)	79,000
Association of College and University Concert Managers	2,300
Central Midwestern Regional Educational Laboratory	100,000
Coordinating Council of Literary Magazines (Four Grants)	103,000
Experiments in Art and Technology	50,000
Film Culture Non-Profit Corporation/Filmmaker's Cinematheque	30,000
Foundation for American Dance/City Center Joffrey Ballet (Two grants: for general support, for touring activities)	197,200
Goldovsky Opera Institute (National tour - 22 states)	85,000
International Folk Music Council	5,700
Music Critics Association, Inc.	38,000
National Art Education Association (1969 World Congress of the International Society for Education Through Art - I.N.S.E.A.)	35,000

NATIONAL ENDOWMENT FOR THE ARTS — Table 5 (C)

NATIONAL PROJECTS (continued)

National Educational Television (American Regional Theatre Project)	$ 85,000
National Guild of Community Music Schools	15,000
New York City Opera (Training program for conductors and singers)	40,000
P.E.N. American Center (Two Grants)	5,100
U.S. Theatre Centre/International Theatre Institute	20,000
Young Audiences, Inc.	60,000
Program Development and Evaluation	39,710
FY 69 Total	$ 1,609,260
FY 66, 67, 68, and 69 TOTALS	$ 9,071,258

NATIONAL ENDOWMENT FOR THE ARTS

Table 5 (D)

OBLIGATIONS BY STATE

State	FY 66 No.	FY 66 Amount	FY 67 No.	FY 67 Amount	FY 68 No.	FY 68 Amount	FY 69 No.	FY 69 Amount	Totals FY 66-69 No.	Totals FY 66-69 Amount
Alabama	4	$ 10,500	2	$ 38,053	9	$ 50,983	10	$ 43,984	25	$ 143,520
Alaska	1	1,000	2	42,053	2	46,383	2	37,609	7	127,045
Arizona	1	1,000	5	64,303	3	59,383	5	32,659	14	157,345
Arkansas	0	--	2	37,553	3	48,383	3	32,159	8	118,095
California	13	172,019	31	623,750	65	885,640	45	491,744	154	2,173,153
Colorado	2	2,000	3	40,050	10	56,863	6	74,109	21	173,022
Connecticut	8	27,500	7	168,000	12	118,428	13	118,253	40	432,181
Delaware	1	1,000	1	37,053	0	--	1	1,000	3	39,053
Florida	1	1,000	5	54,553	7	61,883	7	34,534	20	151,970
Georgia	0	--	3	38,053	14	68,105	7	50,909	24	157,067
Hawaii	2	8,500	2	49,653	3	82,633	3	41,159	10	181,945
Idaho	1	1,000	1	25,000	1	835	2	31,159	5	57,994
Illinois	6	25,500	14	209,203	16	123,343	19	141,382	55	499,428

OBLIGATIONS BY STATE ... 2

Table 5 (E)

State	FY 66 No.	FY 66 Amount	FY 67 No.	FY 67 Amount	FY 68 No.	FY 68 Amount	FY 69 No.	FY 69 Amount	Totals FY 66-69 No.	Totals FY 66-69 Amount
Indiana	1	$ 7,500	5	$ 99,300	6	$ 107,630	8	$ 34,600	20	$ 249,030
Iowa	4	23,500	2	25,500	5	79,383	5	61,159	16	189,542
Kansas	3	3,000	3	38,053	5	55,729	9	35,034	20	131,816
Kentucky	0	--	3	61,750	3	59,383	6	82,859	12	203,992
Louisiana	1	36,500	7	328,800	9	105,883	12	181,509	29	652,692
Maine	1	7,500	1	25,000	4	40,058	3	41,409	9	113,967
Maryland	3	3,000	4	82,553	7	131,760	9	63,409	23	280,722
Massachusetts	9	97,000	19	201,553	13	281,263	18	136,959	59	716,775
Michigan	4	70,375	11	333,500	19	158,503	13	117,859	47	680,237
Minnesota	2	2,000	6	97,553	13	167,383	13	199,009	34	465,945
Mississippi	1	1,000	2	27,000	5	54,583	3	34,959	11	117,542
Missouri	2	8,500	7	67,500	7	73,933	6	42,509	22	192,442
Montana	1	1,000	3	30,500	1	39,383	4	47,859	9	118,742
Nebraska	1	1,000	2	34,633	5	37,360	4	37,909	12	110,902
Nevada	0	--	1	25,000	2	24,453	1	30,909	4	80,362

Table 5 (F)

State	FY 66 No.	FY 66 Amount	FY 67 No.	FY 67 Amount	FY 68 No.	FY 68 Amount	FY 69 No.	FY 69 Amount	Totals FY 66-69 No.	Totals FY 66-69 Amount
New Hampshire	1	$ 7,500	2	$ 47,053	4	$ 41,426	1	$ 30,909	8	$ 126,888
New Jersey	3	9,500	8	72,000	9	89,948	11	54,609	31	226,057
New Mexico	2	30,000	1	34,893	6	56,943	4	193,159	13	314,995
New York	29	275,500	58	708,310	79	763,127	119	816,239	285	2,563,176
North Carolina	3	9,500	5	52,373	23	145,580	13	58,759	44	266,212
North Dakota	1	1,000	1	25,000	1	13,175	2	30,223	5	69,398
Ohio	1	7,500	12	109,778	21	124,168	17	56,959	51	298,405
Oklahoma	1	1,000	2	38,053	2	40,133	2	37,859	7	117,045
Oregon	1	1,000	2	30,000	5	56,993	4	38,109	12	126,102
Pennsylvania	6	192,375	9	214,053	11	98,160	15	90,484	41	595,072
Rhode Island	0	--	5	330,000	8	83,923	5	133,109	18	547,032
South Carolina	2	2,000	2	26,000	4	27,500	5	33,784	13	89,284
South Dakota	1	1,000	1	25,000	3	10,335	2	37,609	7	73,944
Tennessee	3	9,500	4	48,500	7	55,433	7	68,784	21	182,217
Texas	3	3,000	8	120,053	15	127,063	15	76,034	41	326,150

OBLIGATIONS BY STATE ... 4

Table 5 (G)

State	FY 66 No.	FY 66 Amount	FY 67 No.	FY 67 Amount	FY 68 No.	FY 68 Amount	FY 69 No.	FY 69 Amount	Totals FY 66-69 No.	Totals FY 66-69 Amount
Utah	1	$ 1,000	3	$ 40,301	5	$ 50,703	8	$ 61,894	17	$ 153,898
Vermont	1	7,500	3	60,000	9	55,689	10	90,159	23	213,348
Virginia	4	49,575	4	73,500	6	55,623	7	50,689	21	229,387
Washington	1	1,000	7	108,500	9	200,683	12	82,259	29	392,442
West Virginia	0	--	2	50,500	2	44,383	2	37,609	6	132,492
Wisconsin	4	61,000	2	37,544	13	172,052	12	135,134	31	405,730
Wyoming	0	--	1	37,053	2	40,383	2	31,909	5	109,345
American Samoa	0	--	0	--	0	--	0	-	0	--
District of Columbia	5	57,764	16	330,900	18	291,431	11	132,659	50	812,754
Guam	0	--	1	25,000	1	39,383	2	35,309	4	99,692
Puerto Rico	0	--	2	51,000	1	39,383	2	37,609	5	127,992
Virgin Islands	0	--	1	25,000	1	39,383	1	30,909	3	95,292
TOTAL	146	$1,241,108	316	$5,625,836	514	$5,782,552	528	$4,761,379	1504	$17,410,875

Table 6

NATIONAL ENDOWMENT FOR THE ARTS

SUMMARY OF OBLIGATION BY RECIPIENT

Grants to	FY 67 No.	FY 67 Amount	FY 68 No.	FY 68 Amount	FY 69 No.	FY 69 Amount
Individuals	183	$1,201,063	187	$ 682,560	254	$ 489,465
Colleges & Universities	9	272,430	11	194,336	75	594,519
Institutions	56	2,846,350	168	5,835,025	112	2,317,530
Professional Associations	8	229,225	20	833,049	15	927,350
Schools	6	714,000	-	--	3	67,700
State & Community Agencies	12	381,100	24	1,276,747	29	328,033
State Programs Sec. 5(h)	54	1,987,853	53	1,846,946	52	1,606,332
Misc. Contracts	-	--	-	1,341	-	104
Program Development Evaluation	-	--	-	--	-	39,606
TOTAL	328	$7,632,021	463	$10,670,004	540	$6,370,639

PROGRAM DESCRIPTIONS

I. AVAILABILITY OF THE ARTS

Actual FY 69	Estimate FY 70	Estimate FY 71
$ 3,189,850	$ 2,954,956	$ 6,000,000

The Endowment wishes to help satisfy and encourage the growing demand of the Nation's citizens, from the largest cities to the smallest coummunities, for more exposure to and participation in the arts. The program to assist State arts councils, communities, and arts institutions to meet this burgeoning interest will use approximately $6,000,000. While not neglecting our major urban populations, it will focus particular attention on broadened audiences and on geographic areas away from major metropolitan centers.

The largest portion of the funds to attain this objective ($4,125,000) will be made available under Section 5(h) of Public Law 89-209. The provisions of this Section specify that all States, including Guam, Puerto Rico, American Samoa, the District of Columbia, and the Virgin Islands, are eligible to apply for funds appropriated for purposes of advancing cultural programs. Each State must submit a plan to the Endowment for approval by the Chairman of the Endowment. Funds appropriated are allotted equally among the States. States failing to apply for the full allotment available lose claim after July 1st of the fiscal year for which funds where appropriated and such funds become absorbed into the general purposes of the Act under Section 5(c).

Plans as submitted carry a full description of proposed productions and projects, estimated budgets, objective, evaluation procedures, and a full description of administrative responsibility. State and/or private funds may be used to match Federal funds for programs.

States are not required to conform to either the objectives of the National Council on the Arts or its policies or priorities. However, the States are informed of all major conceptual positions on the part of the Endowment and generally choose to adopt positions similar or parallel to national ones. Each of the State agencies is required to submit an annual report evaluating the previous year's programs and to include a standard financial accounting.

In Fiscal 1968, with a $2 million appropriation, each eligible State received up to $39,383 (some States, unable to meet matching provisions, received considerably less). In Fiscal 1969, with the appropriation reduced to $1.7 million, the maximum amount per eligible State was $30,909; this amount increased, with an FY 1970 $2 million appropriation, to a $36,383 maximum. For Fiscal 1971, a doubling of this amount, to $4,125,000, is being requested, making

$75,000 available to each of the State agencies. Active Councils now exist in all but one of the 55 States and jurisdictions under the Endowment's purview.

State legislative appropriations have increased steadily over the three years in which this program has been operative, even in the year (Fiscal 1969) which saw the Endowment's appropriation for the States reduced. At recent hearings concerning re-authorizing legislation for the National Foundation on the Arts and the Humanities, Congressional subcommittees heard that during Fiscal 1969, State legislatures had appropriated a total of $6.8 million for the arts; the State councils had stimulated an estimated additional $12 million from other sources.

Cooperation between the Endowment and the State agencies continues to grow through regional meetings and increased communication betweenthe State and federal offices. State council directors or chairmen are often present at meetings of the National Council on the Arts, and the Endowment's advisory panels will include at least one State agency director or chairman as a new means of strengthening the partnership between the Endowment, the States, and the panels.

The Endowment shares the States' conviction that the proposed increased in federal funding will greatly aid their already highly effective efforts to better serve America's artists and the public.

The remainder of the funds planned for expenditures under this program ($1,875,000) will assist regional or national programs to bring the arts to all our citizens. In the past, such programs have included national tours of American Ballet Theatre and the Martha Graham Dance Company; the growing Coordinated Residency Touring Program for Dance; the exciting Poetry in the Schools Program; the Endowment's public media/educational radio and television programs which have reached millions of Americans;and funds provided to organizations such as the Federation of Rocky Mountain States, the Pacific Northwest Ballet Assocation, and the Western Opera Theater for touring projects covering from three to eight States.

In addition, the Endowment is exploring means to bring major art exhibitions to all sectors of the Nation. Programs such as these, aimed at a wider geographic distribution of the arts and designed as well to serve special audiences, are a growing need and a historic departure for most of our orchestras, musuems, dance, theatre, and opera companies. Previously, these institutions had been primarily concerned with support from and service to a fairly small segment of the population in a confined geographic area. This is no longer the case. The demand for the arts throughout the country, and the rising costs of performance, make a broader base of participation and support a double advantage.

These programs, in addition to enriching the cultural life of our citizens and helping broaden the base of support for the arts,

directly benefit our artists and our arts institutions. A good example of this three-fold effect is the Endowment's coordinated residency touring program in dance, mentioned earlier. Through the national coordination and funding provided by the Endowment, combined with the exceptional cooperation and further financial support of State arts councils, Fiscal 1970 is seeing 10 outstanding American dance companies performong a total of 68 weeks of dance in 22 States around the country. Thus, many Americans are experiencing dance-in-depth (the program includes master classes and open rehearsal periods) for the first time in their lives; the base of support for dance has been broadened to include many local communities and educational institutions; and American dancers are able to perform in lengthened seasons, under better touring conditions than ever before, for increasingly knowledgeable and enthusiastic audiences.

The same effects have been realized with the Endowment's support for the Pacific Northwest Ballet Association which makes the rich resources of the City Center Joffrey Ballet (home-based in New York City) available during a summer residency to citizens from the States of Washington, Idaho, and Oregon.

II. CULTURAL RESOURCES DEVELOPMENT

Actual FY 69	Estimate FY 70	Estimate FY 71
$ 1,178,250	$ 1,604,166	$ 5,400,000

Growing public interest in the arts has placed our outstanding arts institutions in the nearly impossible position of providing an ever-increasing number of public services without concurrent increasing financial support. For example, in 1968-69, seven major symphonies played 70% of their total performances for public service audiences in schools, parks, special youth concerts, and on tour. Subscription concerts comprised only 30% of their season - almost exactly the reverse of the rule a generation ago. Museums, whose annual number of visits reached an astonishing 560 million in 1967, are facing comparable financial burdens. The Endowment feels that the Nation's investment, both financial and cultural, in these two as well as in all other groups of outstanding arts institutions, must be protected.

Orchestras, museums, theatre, dance, and opera companies all know that increasing admissions prices could not cover costs unless they became totally prohibitive (museums estimate up to $8 per visit would be necessary); and all share a reluctance to "cut out" the very people who are just now availing themselves of the artistic resources which this Nation offers. Indeed, to expect admissions fees to cover costs would be to exclude just about everyone, and

would, of course, result only in closed doors. This is no more acceptable in our civilized society than would be the shutting of our institutions of higher education, whose admissions (tuition) fees cover only one-third of their total necessary expenditures.

The Endowment plans to expend approximately $5,400,000 towards assisting our arts institutions to strengthen their position, broaden their bases of participation and support, and enhance their services, in a major effort to develop this Nation's great institutional resources in the arts.

It might be well to note here that in the past the National Council on the Arts has felt the resources available to it were insufficient to assist orchestras, opera companies, or museums in any significant way. For the future, it has recommended continuation of its highly effective aid programs to theatre and dance companies; and if the Endowment receives the full amount proposed by the President and the Bureau of the Budget, the Council recommends programs for orchestras, opera companies and museums as well. Effective assistance at a figure below the $5.4 million requested for all arts institutions would not be possible. Orchestras alone estimate their net deficit at $8.5 million and museums' minimal annual need is estimated at $15 million.

Drawing on the experience of the Endowment and on New York State's highly successful museum aid program, it is planned that assistance will be provided by the Endowment in several categories: efforts to reach broader audiences, to meet the needs of new publics, and to improve artistic and administrative effectiveness. For example, funds may be provided for projects to enhance the public service of the institutions or to aid the institutions to acquire and maintain key administrative or artistic staff.

As with other Endowment programs, applications would be reviewed by panels of peers. Criteria for panel recommendations would include: performance and administrative standards, length of time organization has functioned as a continuing entity, professional organizations with paid staff and contracts for services, services to the community, and financial needs.

The Endowment's proposed assistance program for the professional organizations has in no way the intent of locking them into old programming, but at the same time does not wish to insist on new ideas, to the exclusion of old ones that are valid.

The three main principles of the proposed assistance program are:

1) the individual institution would be requesting the funds it felt of highest priority to its own ability to be effective, i.e., the government would not be setting the priorities;

2) the program would encourage the development of new activities that would enable organizations to reach larger audiences,

but could support maintenance and improvement of established activities; and

3) the government's role would include that of stimulating private support.

As with the Endowment's program aimed at increasing the availability of the arts to all Americans, this program for cultural resources development also aids America's creative and performing talents. As one Council member recently stated, "the orchestra should be thought of, not as an institution, but as an instrument composed of 100 individual artists."

III. ADVANCEMENT OF OUR CULTURAL LEGACY

Actual FY 69	Estimate FY 70	Estimate FY 71
$ 1,962,829	$ 1,785,034	$ 2,000,000

Programs to help advance the cultural legacy of the Nation might include creation of, or assistance to, organizations aimed at meeting newly identified needs in the arts; development of our individual creative talents; solutions to problems of our physical environment; encouragement and support for international cooperation in the arts; and examination of opportunities for innovative programs, including in education and in disadvantaged areas, to help increase the value and relevance of the arts to all Americans. It is anticipated that $2,000,000 would be used in these areas.

The Endowment, continuing to focus on the need for new services and institutions, hopes to continue its aid to The American Film Institute, created in 1967 with Endowment assistance. Support for archival (in cooperation with the Library of Congress) and cataloguing work, for advanced film training, for film production, and for education to improve standards is anticipated. The Endowment also plans to aid the National Opera Institute, newly created in Fiscal 1970 to provide a variety of coordinating and assistance programs to the field, and may also attempt to meet the growing need for more effective touring mechanisms for our non-profit professional performing companies. This latter goal, an important one when considering concepts of overall benefit to arts groups, may result in the creation of a new national service organization.

Additionally, in accordance with the Council's expressed commitment to aiding the individual artist, the Endowment plans programs of individual fellowships or grants to performing and creative artists of exceptional ability to encourage the development of their talents or exploration of possible solutions to an area of

increasing national concern, our environment.

As an example of funding in this area, to encourage the development of exceptional talent in the visual arts, the Endowment plans what in academic terms would be called "fellowships." These grants, similar to those which might be made available to creative writers, will buy time for artists to explore and experiment, and will not be awards for past performance but rather grants for future development. As with other Endowment programs, consultants and panels will be utilized to assure exceptional quality and fair regional representation. If our museums and literary publications of the future are to be filled with quality, our young artists will need to be given the opportunity to learn their craft.

Our programs for advancement of our cultural legacy might include support for festivals or conferences in the arts which enable artists and cultural leaders from all over the world to come to the United States. Americans can thus share with others the common bonds which unite artists of all nationalities; and our visitors will be given the opportunity to exchange information and to view first-hand America's arts resources which are today world-renowned and respected. The Endowment also hopes to assist American artists, administrators, and arts educators to attend important international meetings abroad.

In addition, the Endowment's and the Council's shared concern for the arts in education and in disadvantaged areas might find its focus in specific projects, such as bringing the professional artist into the secondary school to create and teach as an integral part of the school environment. It is hoped that projects of this sort may have a profound effect on the lives of Americans at every social and economic level.

IV. PROGRAM DEVELOPMENT AND EVALUATION

Actual FY 69	Estimate FY 70	Estimate FY 71
$ 39,606	$ 100,000	$ 400,000

Should Congress appropriate the full amount requested herein, and should the Endowment be successful in attracting private donations in the amount specified, a total of $564,000 would be available in Fiscal 1971 under the special 3% provision for program development and evaluation. The Fiscal 1970 estimate for this purpose is approximately $100,000; the Endowment proposes to expend approximately $400,000 in Fiscal 1971. This sum would be utilized for data collection and analysis, advisers, consultants, meetings, evaluations, and research into possible new areas of programming, including, as mentioned earlier, nationwide touring exhibitions of

outstanding works of art.

The necessity for consistent efforts to examine developing needs in the arts and also the validity and effectiveness of Endowment programs has been a recurrent theme throughout meetings of the National Council on the Arts, a theme which was reiterated with special emphasis at the last meeting, January 1970.

The need for information, often of a statistical nature, is essential to future planning of government programming for the arts. The required data gathering is very expensive. However, national service organizations in the arts are becoming increasingly proficient at collecting the statistical data which has up until fairly recently been scarce indeed. The Endowment, with the limited funds requested, hopes to encourage this activity where it exists, stimulate it where it does not, and compile, coordinate, and analyze this vital information. Statistics on the arts, as in other fields, are important not for their own sake, but for the story they help tell in terms of artistic and human conditions concerning artist and audience alike.

V. GIFTS, DONATIONS, AND MATCHING FUNDS

	Actual FY 69	Estimate FY 70 *	Estimate FY 71
Appropriations	$ 2,356,875	$ 1,000,000	$ 2,500,000
Gifts	$ 2,356,875	$ 1,000,000	$ 2,500,000

Public Law 90-348 liberalized the provisions of sections 10(a)(2) and (3) of Public Law 89-209 to permit the Endowment to receive and match from the Treasury restricted or unrestricted donations, subject to a prior recommendation from the Council on acceptance of each donation. This doubled amount is then granted to arts organizations, and is, in many cases, matched again by the grantee.

Such a system works to the advantage of the donor, who may receive as much as $4 benefit for every $1 invested; to the advantage of the Federal program which sees its projects as least half-funded, in many cases three-quarters funded, by private resources; and to the advantage of the grantee who benefits not only directly from the funds received, but later in raising additional funds from having had this important Endowment "stamp of approval."

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* Does not reflect the FY 70 supplemental currently being requested of $2,000,000 for the National Foundation on the Arts and the Humanities.

Perhaps it was the advantage of this type of grant-making authority which prompted Senator Alan Bible to say in the Congress on June 26, 1968:

> "The point was made by the Senator from New York, within the Appropriations Committee, as he argued for a larger figure, as to what might happen if there are more gifts. I assured him then, so far as I was able, that so far as I was concerned, if there were firm gifts, they would be made conditional upon a congressional appropriation and that then they certainly should be submitted to the Supplemental Appropriation Subcommittee at the proper time, because there would then be a good possibility of having that amount increased to take care of the munificence of some fine benefactor."

The Arts Endowment's record with regard to these funds has been notably successful. In Fiscal 1966, $34,308 was received; this amount increased to $1,983,075 in Fiscal 1967, enabling the Endowment to utilize the entire amount ($2 million) made available by the Congress for these two Fiscal Years. In Fiscal 1968, although the appropriation for this Fund was reduced, (the total appropriation for both Arts and Humanities Endowments was $1 million), the Endowment received $674,291 from private sources. In Fiscal 1969, the Endowment attracted donations totalling $2,356,875, thus utilizing not only the regular FY 1969 appropriation ($1 million total to the Arts and Humanities) but also a special supplemental as had been suggested by Senator Bible ($3 million total to the Arts and Humanities). Thus, the Endowment through Fiscal 1969 has attracted a grand total of $5,048,549 from private resources towards this unique partnership between the Federal government and the private sector.

Some of the gifts received in the past and grants made as a result are as follows:

- $1.3 million from The Ford Foundation was used to establish The American Film Institute.

- $300,000 from the Bristol-Myers Company assisted the Educational Broadcasting Corporation to produce and distribute nationally, free of charge to all educational television stations in the country, 19 arts programs in the SUNDAY SHOWCASE series.

- $200,000 from a wide variety of individual, corporate, and foundation donors made possible a total of $1.2 million for arts programming in 16 inner cities during the summer of 1968.

- $500,000 pledged by the L.A.W. Fund, Inc. helped establish the National Opera Institute.

- $80,000 from the Sears-Roebuck Foundation resulted in a $160,000 grant to support Affiliate Artists' program of placing professional performing artists in association with educational and arts institutions throughout the Nation.

- The Association of Producing Artists (APA), the American Conservatory Theatre, the American Shakespeare Festival Theatre and Academy, the New York Shakespeare Festival, the Martha Graham Center of Contemporary Dance, and the American Ballet Theatre have all benefited by grants from donations matched by Treasury Funds. Some of these grants were given at critical times and actually meant the difference between collapse and survival.

The Endowment, already able to move quickly in Fiscal 1970 into two areas of severe financial difficulty, symphony orchestras and opera companies, anticipates that a portion of the Fiscal 1971 matching funds might further this assistance program and one to museums as well. In addition, it is hoped that this type of funding might enable the Endowment to provide support to two additional areas of special significance: arts in education and in deprived areas.

Since the Endowment to date has utilized not only the regular appropriations but also supplemental funds to match private donations, it expects that the $2,500,000 requested for Fiscal 1971 will be received in gifts without difficulty.

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DONATIONS CREDITED TO THE NATIONAL ENDOWMENT FOR THE ARTS
FISCAL YEARS 1966-1967-1968-1969

FISCAL YEAR 1966

Martin Foundation	$ 20,000.00
"Saturday Review"	200.00
Charles Mark	10.00
Frederick Gash Foundation	1,000.00
Pennsylvania Academy of Fine Arts	200.00
Brown University	100.00
Memphis Park Commission	100.00
Wisconsin Idea Theatre Foundation	100.00
Union League of Chicago	98.28
Cue Benefit Trust Acct.	10,000.00
Sullivan Productions, Inc.	2,500.00
	$ 34,308.28

FISCAL YEAR 1967

Carnegie Committee on Educational TV	$ 74.85
Stanford University	500.00
Carpenter Foundation	200.00
Seymour Knox Foundation	10,000.00
The Hill School	400.00
Bristol-Myers	300,000.00
Harry G. Steele Foundation	500.00
De Paul University	100.00
Yale University	150.00
Charlotte-Mecklenburg Board of Education	1,000.00
Music Educators National Conference	75.00
Martin Foundation	20,000.00
T. Edward Hambleton	125,000.00
Lucia Chase Ewing	100,000.00
Florence Anspacher	125,000.00
American Federation of Musicians	75.00
The Ford Foundation	1,300,000.00 *
	$1,983,074.85

FISCAL YEAR 1968

Mortimer Fleischhacker Foundation	25,000.00
Melvin Swig	27,500.00
Zaffaroni Foundation	27,500.00
Elise and Walter Haas Fund	27,500.00

* $1,300,000 was transferred from the Ford Foundation to the American Film Institute as the National Council on the Arts resolved that, as donations became available, up to $1,300,000 would be provided by the Endowment from matching Treasury funds to support establishment of the Institute.

FISCAL YEAR 1968 (continued)

Lucie Stern Foundation	27,500.00
Cyril Magnin Family Foundation	30,000.00
Mae and Benjamin Swig Charity Foundation	10,000.00
The Maya Corporation	5,000.00
Two Anonymous Donors	9,969.68
Hurok Concerts, Inc.	15,000.00
North Carolina Association of Colleges and Universities	150.00
Opera Company of Boston	10,000.00
Mrs. Edgar Tobin	5,000.00
Twentieth Century Fund, Inc.	50,000.00
Rockefeller Brothers Fund, Inc.	50,000.00
R. B. Tobin	5,000.00
David Lloyd Kreeger Charitable Foundation	10,000.00
David Lloyd Kreeger Charitable Foundation	1,500.00
Mrs. Paul B. Magnuson	1,000.00
American Security and Trust Company	1,000.00
Edward Burling, Jr.	2,000.00
Alice B. Spalding	1,000.00
H. A. Spalding	15,500.00
Eugene and Agnes E. Meyer Foundation	15,000.00
George A. and Lillian Shapiro (in name of Judith A. Goldfarb)	10.00
Fitzgerald Family Fund, Inc.	1,000.00
J. P. Hendrick	121.09
Sale from Shares (Hendrick)	1,878.91
Martin Foundation	60,000.00
The Frederick Gash Foundation, Inc.	1,500.00
Ann B. and Jack W. Warner Foundation	500.00
The Benjamin Family Foundation, Inc.	1,500.00
Edith and Francis Keppel	100.00
Helen Hayes	300.00
Marie Granves Bullock	300.00
The Leonard Bernstein Foundation, Inc.	300.00
The Sol Bloom Family Foundation, Inc.	300.00
Khedouri & Louise Zilkha Foundation	500.00
William Morris Agency Foundation, Inc.	1,000.00
Walter Reade Foundation, Inc.	300.00
George Stevens, Sr.	1,000.00
Hurok Concerts, Inc.	750.00
Konrad H. and Gay H. Matthaei	600.00
Charles W. Lyon, Jr.	1,500.00
Frank G. Lyon	1,500.00
Loretto Heights College	100.00
Eleanor H. Howard	150.00
Howard University	300.00
Joseph V. Reed	1,500.00
Robert E. Wise	1,500.00
Albert & Mary Lasker Foundation, Inc.	600.00
Livingston & Frances F. Biddle	300.00
Cass Canfield (Harper and Row)	300.00
Sarah D'Harnoncourt	50.00

FISCAL YEAR 1968 (continued)

Lucia Chase Ewing	750.00
Lucia Chase Ewing	300.00
Leon Lowenstein Foundation, Inc.	200.00
MCA Foundation Ltd.	1,500.00
Gregory Peck	1,500.00
Oliver Smith	300.00
Lily Auchincloss Foundation	150.00
The F. and Henry Klein Foundation	150.00
The Whitehead-Stevens Productions, Inc.	450.00
John F. Wharton	150.00
The Field Foundation	10,000.00
Nelle Harper Lee	1,500.00
American Can Company Foundation	12,500.00
Jules and Doris Stein Foundation	1,000.00
Roger G. and Katherine S. S. Hall	150.00
H. A. Spalding	1,500.00
Stone-Brandel Center	12,500.00
Trustees of the Atlantic Richfield Foundation	50,000.00
Faigel Leah Foundation, Inc.	2,600.00
Alice M. Kaplan	400.00
Lester Osterman	150.00
Jerry Silverman, Inc.	300.00
Isaac Stern	1,500.00
Elizabeth Arden Sales Corporation	150.00
Sam S. Shubert Foundation, Inc.	1,500.00
Nordlinger, Riegelman, Benetar & Charney	100.00
Alfred R. Stern	300.00
Stella M. Spence	450.00
T. Edward Hambleton	600.00
Nederlander Amusement Corporation of Maryland (James Nederlander)	150.00
Mary Frances Allen	300.00
Helen Hayes	600.00
The Phyllis and Bennett Cerf Foundation, Inc.	300.00
Lanvin-Charles of the Ritz Foundation, Inc.	300.00
Rebekah Harkness Foundation (Harkness School Account)	1,200.00
JuJamcyn Theaters	300.00
Clara Woollie Mayer	150.00
John A. Blum	150.00
Malcolm Starr, Inc.	300.00
Gilman Foundation, Inc.	300.00
Jerome S. Neuman	150.00
Jerome A. and Estelle R. Newman Assistance Fund, Inc.	150.00
C. Gerald and Barbara Goldsmith Foundation	300.00
James W. and Diana K. Harpel	150.00
Saul J. Turell	300.00
Mrs. John L. Loeb	300.00
Charlotte F. Niarchos	300.00
Lester Turner Mertz	300.00
Alexander C. Ewing	1,000.00
Milton M. Bergerman	150.00

FISCAL YEAR 1968 (continued)

Weissberger and Frosch, Counselors-at-Law	300.00
Oliver Rea	300.00
Roger L. Stevens	3,000.00
Lucia Chase Ewing	1,500.00
Albert W. Selden	150.00
Mildred Custin	150.00
John O. Crosby	80,000.00
Barbara Bain (Robbin Bain) (for Mr. and Mrs. Arno Schefler)	300.00
Lewis Galantiere	150.00
John D. Rockefeller, 3rd	25,307.47
Robert W. Dowling	1,453.97
	$ 674,291.12

FISCAL YEAR 1969

Dansk Importing Company, Inc.	$ 400.00
Harris & Sloan Brokerage Co.	100.00
IPCO Hospital Supply Corporation	100.00
Elmer C. Kubie	150.00
David and Elaine Kend Foundation	100.00
Betty and Sol Young Foundation	150.00
Syska & Hennessy, Inc.	100.00
William Newman	25.00
Arthur and Gloria Ross Foundation	50.00
Overseas Foundation, Inc.	300.00
Joseph B. Martinson	450.00
R. & Phyllis G. Diebenkorn	150.00
Elizabeth L. Klee	150.00
Judith Dunnington Peabody	150.00
Anne White Paine	150.00
20th Century Fox Film Corporation	250.00
David & Lee Evins Foundation	150.00
Nathan Cummings	150.00
John M. Grissmer	27,500.00
Lila Acheson Wallace Fund, Inc.	50,000.00
Gregory Peck	6,500.00
Roger Stevens	3,500.00
Robert E. Simon, Jr.	5,000.00
Billirene Fund	100.00
The American National Theatre and Academy	1,215,000.00
Cranbrook Academy of Art	300.00
T. Roland Berner	5,000.00
The Edgar M. Leventritt Foundation	10,000.00
Estate of M. Victor Leventritt, Deceased	5,000.00
Robert S. and Margaret C. Johnson	500.00
Heineman Foundation for Research, Educational, Charitable & Scientific Purposes, Inc.	1,000.00
Melanol Foundation, Inc.	1,000.00
AMERACE ESNA Corporation	1,000.00
JSO Foundation, Inc.	2,000.00
The Edgar M. Leventritt Foundation, Inc.	15,000.00

FISCAL YEAR 1969 (continued)

The J. M. Kaplan Fund, Inc.	$ 7,500.00
Beatrice Abbott Duggan (Mrs. Stephen P. Duggan, Jr.)	1,000.00
Robert E. Simon, Jr.	3,550.00
Samuel J. Bloomingdale Foundation, Inc.	500.00
John W. Strauss	2,000.00
Rosalie L. Berner	10,000.00
William Heller Foundation, Inc.	2,650.00
Joseph Verner Reed	125,000.00
Sterling Grace and Co.	2,200.00
Leopold Adler II	1,000.00
Atlanta Newspapers, Inc.	25,000.00
The Coca-Cola Co.	25,000.00
The First National Bank of Atlanta	25,000.00
Georgia Power Company	25,000.00
Lockheed-Georgia Co.	25,000.00
Rich's, Inc.	25,000.00
Sears, Roebuck & Co.	25,000.00
Southern Bell Telephone & Telegraph	25,000.00
The Atlanta Merchandise Mart	15,000.00
The Mead Corp.	15,000.00
Great Southwest Corp.	10,000.00
Trust Co. of Georgia Foundation	10,000.00
Roger L. Stevens	100,000.00
L.A.W. Fund, Inc.	500,000.00
	$2,356,875.00

GRAND TOTAL	$5,048,549.25

NATIONAL COUNCIL ON THE ARTS MEMBERS AS OF FEBRUARY 15, 1970

Miss Nancy Hanks, Chairman

Members with terms expiring in 1974

Jean Dalrymple
Executive Director, The American National Theatre and Academy

Duke Ellington
Bandleader and Composer

O'Neil Ford
Architect

Richard Hunt
Sculptor

Robert Merrill
Metropolitan Opera Singer

Gregory Peck
Actor and Producer
President, Academy of Motion Picture Arts and Sciences

Rudolph Serkin
Concert Pianist

Edward Villella
Dancer

Members with terms expiring in 1972

Marian Anderson
Concert Artist

Lawrence Halprin
Landscape Architect

Huntington Hartford
Art Patron

Charlton Heston
Actor and Producer
President,
Screen Actors Guild

Harper Lee
Author

Jimilu Mason
Sculptor

Sidney Poitier
Actor and Producer

Donald Weismann
University Professor and Painter

Nancy White
Editor-in-Chief
Harper's Bazaar

Members with terms expiring in 1970

Robert Berks
Sculptor

Albert Bush-Brown
Vice President for Facilities Planning
University of Buffalo

Paul Engle
Poet

Ruth Carter Johnson
Chairman of the Board
Amon Carter Museum of Western Art

Oliver Smith
Theatrical Designer

Isaac Stern
Concert Violinist

R. Philip Hanes, Jr.
Vice Chairman,
Associated Councils of the Arts

George Stevens, Sr.
Motion Picture Director and Producer

Former Members

Leonard Bernstein (1965-68)

Anthony Bliss (1965-68)

David Brinkley (1965)

Agnes de Mille (1965-66)

Rene d'Harnoncourt (1965-68)

Richard C. Diebenkorn (1966-69)

Ralph Ellison (1965-66)

Reverend Gilbert Hartke (1965-66)

Helen Hayes (1966-69)

Herman David Kenin (1965-68)

Eleanor Lambert (1965-66)

Warner Lawson (1965-68)

Elizabeth Ashley Peppard (1965-66)

William L. Pereira (1965-68)

Richard Rodgers (1965-68)

David Smith (1965)

John Steinbeck (1966-68)

James Johnson Sweeney (1965-68)

Otto Wittman (1965-66)

Minoru Yamasaki (1965-69)

Stanley Young (1965-66)

Roger L. Stevens, Former Chairman
(1965-69)

OPERATING PRINCIPLES OF THE NATIONAL ENDOWMENT FOR THE ARTS

The Endowment's programs have been developed with special emphasis on the following operating principles: (a) cooperation with the artistic and arts education communities, (b) selectivity and quality, and (c) economy through cost sharing.

(a) Cooperation with the artistic and arts education communities. The Endowment has sought the cooperation and participation of professional representatives in all the art fields and in art education to assure that proposed projects and studies are consistent with the needs of the art form and to avoid unnecessary duplication of effort. These committees, panels, and individual study grantees form the foundation for judgments made concerning the quality of applications and the desirability of proposed projects. These experts help to develop criteria and priorities for the staff and the National Council on the Arts. It is the sincere dedication of artists and arts educators and their accessibility to the staff which has in great measure accounted for the success which Endowment projects have enjoyed with the general arts community and the public. More than 300 separate projects have been launched without serious criticism from any knowledgeable organization or persons. This is largely due to the Endowment's use of experts. More than 180 artists, critics, and educators in the arts are involved in advising on projects and policies, many of them serving without compensation. In addition, professional staff members are in constant communication with national organizations in all the fields of the arts, attending conferences and board meetings, listening to and weighing all opinions. As larger appropriations for administration become available, this activity will be further increased.

(b) Selectivity and quality. In selecting projects and programs to be funded and developed, areas of need which are most critical are given the highest priority providing they are compatible with other Endowment principles. This selection process involves widespread inquiry in the particular field of the arts, extensive study and examination of the many areas of deficiency, and the development of effective programs to assist in solving the problems identified and given highest priority. This principle and procedure will become increasingly important as larger appropriations are available to the Endowment. From the first meeting of the National Council on the Arts a policy has been in force which insists on the highest possible quality for all projects. The combination of extensive competition for the limited number of grants and the diligent scrutiny of the staff and advisors has assured maximum quality for the amounts invested.

(c) The legislation establishing the Endowment encouraged the use of Federal funds to supplement rather than replace resources available to an arts institution, and included provisions to help stimulate new sources of funding for the arts. To further this end, some of the Endowment's programs (e.g., the museum purchase plan and dance's production challenge grants) specify that matching non-Federal funds must not be provided from "regular" financial resources, but must represent new sources of funds.

Thus, excluding the States program, during the first four years of its existence, the Endowment made 1,533 grants for a total Federal funds investment of $17.9 million; this in turn encouraged the investment of nearly $42 million from other resources. Since contracts and grants to individuals are not of a matching nature, the Endowment actually generated this $42 million from a Federal investment of $13.9 million, representing a return, not of $1 for $1 as required by the legislation, but of $3 for every Federal $1.

During the first four years, it was recognized by the National Council on the Arts and the leadership of the arts throughout the country that the limited funds available to the Endowment could not create a major impact on the problems of the arts. The Endowment, therefore, has been engaged primarily in activities which can only be labeled as pilot or experimental projects. Funds were used to study and test the most effective methods of assisting artists and arts institutions in solving the problems which are chronic and to which no solution seems imminent. In general, the first four years was a time of exploration, experimentation, and the defining of major problems and goals. This period has come to a close. The Endowment now stands prepared to initiate or extend specific programs of a permanent nature as a result of its experience.

Programs funded in FY 1970 have been carefully developed and are designed to be flexible enough to take into account the constantly changing situations in all the arts. Pilot projects have proved the efficiency of approaching programming for the arts by this method, and the objectives described earlier in this presentation largely form the basis for specific areas of concentration. In addition, the Council and the Endowment remain constantly aware of their responsibility to review, evaluate and revise their programs to meet existing and even developing or future needs in the arts.

Mr. STRAIGHT. The Westbeth development, Madam Chairman, is now fully occupied in residential——

Mrs. HANSEN. How many families are in the Westbeth development?

Mr. STRAIGHT. 384 families. They include 150 painters, 49 sculptors, 27 photographers, 29 writers, 26 musicians, 38 actors, 18 dancers, 14 film makers, 11 playwrights, seven poets, nine composers, seven architects, seven stage directors, seven print makers, three designers, four graphic artists, five craftsmen, four theater producers, and as the New York Times said, "hundreds of children and lots of pets."

Mrs. HANSEN. How are the occupants selected? Is there a board?

Mr. STRAIGHT. There is an independent committee, Madam Chairman, made up of experts who pass on the qualifications of the prospective tenants who apply. A great many apply, and there is now a waiting list of a thousand families seeking tenancies.

Mrs. HANSEN. Isn't this the first project of this kind in the United States?

Mr. STRAIGHT. It is, Madam Chairman, although there is a small project not far away, which was initially financed by Mr. Kaplan who joined the Endowment in this one. The French have a somewhat similar project outside Paris, and the British have a similar project in the London docks. I understand from Mr. Hugh Willatt who is now visiting us that this project is a great success. It has been going somewhat longer than our own, so that is good prospectively for us.

The certificate of completion on the residential part of Westbeth should be issued very shortly, and it will permit Westbeth to transfer from present high rates of interest to 40-year FHA mortgages at 3 percent.

There remains the nonresidential part of the Westbeth project.

In the main building there is a shopping arcade, which will be very easy to lease to small art-related and service shops. In the two additional buildings, tenancies were planned for a theater company, which would have workshops and rehearsal space, in addition to a theater auditorium, and a moderately priced restaurant and additional working space for the artists who have smaller apartments in the residential part of Westbeth.

Those two projects require additional financing. The present position of FHA is that in the present housing crisis, while it will provide full financing to complete work on the residential parts of Westbeth, it does not feel able to finance work on the nonresidential parts. This will be a matter of negotiation between Mr. Kaplan and the FHA, which we will, of course, follow very closely.

Mrs. HANSEN. Do you think there will be a need to use private financing?

Mr. STRAIGHT. I think so, Madam Chairman. The area itself, of course, has been run down in recent years. It consisted of dilapidated warehouses, and old and shabby docks at the time that the project was taken over and commenced. More recently and in part because of the Westbeth project, a substantial public housing development has been planned just south of Westbeth by the city of New York. The market north of the project is going to be moved out to Kings Point and that becomes an area for rehabilitation. Transportation will improve, and, I believe, the area in which Westbeth is sited will, in the next 10 to 15 years, be completely transformed.

Mrs. HANSEN. This will be a major factor in the transformation.

Mr. STRAIGHT. I believe so. Meanwhile it is difficult to persuade a theater company to come in and itself spend the capital required to finish the wing of Westbeth, which is intended for theater use. It will take occupancy, but it will not itself finance the reconstruction of the wing, and therefore the question of capital cost has risen. I think it may be that if FHA financing is not available, the directors of Westbeth will have to rethink the uses to which those two wings may be placed, and see if they can find commercial tenants who themselves will pay a part of the capital cost of finishing them.

Mrs. HANSEN. Insert in the record the schedule of rental charges for the various living quarters?

Mr. STRAIGHT. Yes, ma'am. They are $110 to $195 a month. The families must earn no more than $7,150 for a single man or woman, and $11,750 for a family to qualify under FHA middle-income housing.

(The information follows:)

WESTBETH/ARTISTS' HOUSING PROJECT/THE J. M. KAPLAN FUND, INC., NEW YORK CITY

Rent schedule, per FHA regulations:

Efficiency	$110/$119
One bedroom	134/144
Two bedroom	160/170
Three bedroom	182/193

Mrs. HANSEN. I think the committee can take pride for its interest in this program. As you are well aware, it came about in lieu of the fellowship program. It was felt perhaps assistance to the artists could be better given in the form of housing. The committee owes a great deal to Mr. Roger Stevens' leadership in this field. He had a tremendous amount of imagination and foresight to develop this program.

(Discussion off the record.)

MEMBERSHIP OF THE NATIONAL COUNCIL ON THE ARTS

Mrs. HANSEN. Please insert in the record the names and titles of the current membership of the National Council on the Arts.

(The information follows:)

NATIONAL COUNCIL ON THE ARTS MEMBERS

Miss Nancy Hanks, Chairman

Members with terms expiring in 1974

Jean Dalrymple, executive director, the American National Theatre and Academy.

Duke Ellington, band leader and composer.

O'Neil Ford, architect.

Richard Hunt, sculptor.

Robert Merrill, Metropolitan Opera singer.

Gregory Peck, actor and producer, president, Academy of Motion Picture Arts and Sciences.

Rudolf Serkin, concert pianist.

Edward Villella, dancer.

Members with terms expiring in 1972

Marian Anderson, concert artist.
Lawrence Halprin, landscape architect.
Huntington Hartford, art patron.
Charlton Heston, actor and producer, president, Screen Actors Guild.
Harper Lee, author.
Jimilu Mason, sculptor.
Sidney Poitier, actor and producer.
Donald Weismann, university professor and painter.
Nancy White, editor-in-chief, *Harper's Bazaar*.

Members with terms expiring in 1970

Robert Berks, sculptor.
Albert Bush-Brown, vice president for facilities planning, University of Buffalo.
Paul Engle, poet.
R. Philip Hanes, Jr., vice chairman, Associated Council of the Arts.
Ruth Carter Johnson, chairman of the board, Amon Carter Museum of Western Art.
Oliver Smith, theatrical designer.
Isaac Stern, concert violinist.
George Stevens, Sr., motion picture director and producer.

STATE PROGRAMS

Mrs. HANSEN. We discussed the State grants program which has a limit of $75,000 for Federal participation. This provision does not prohibit the States from appropriating more than $75,000.

Miss HANKS. That is correct, and many of them spend a great deal more.

Mrs. HANSEN. What limitations do you plan, to make certain that other Federal funds are not used by the States as matching funds for your grants?

Miss HANKS. Mr. Mitze and Mr. Randolph, both of whom are here today, review the applications with great care. They also advise the States on the occasions of their meetings with them, which are approximately three or four times a year, that this is not allowable, so this is very carefully checked on all occasions. The applications are just coming in now for 1971 and the review procedure has started.

Mrs. HANSEN. Do you have an adequate review procedure?

There are those who might say that there is greater potential in some States for the use of State matching funds. How do you rationalize giving a grant of the same amount to a State with a high population and greater interest in the arts, compared to another State where the population is much lower, and possibly there is not as great an interest in the arts?

Miss HANKS. We do this through our national programing. The funds in the national programs, if you analyze them by States, a great number of them are going into States with higher populations. In effect the national program itself becomes a formula, though we don't have it as a formula, for the State programs. In other words, take California or Illinois, with much bigger populations, $75,000, particularly in Illinois, is a very small part of their budget, but many of our national programs are operated through Illinois and in Illinois.

IMPACT OF NEA PROGRAMS ON THE STATES

Mrs. HANSEN. Isn't it true, Miss Hanks, that you are trying to stimulate and assist States that have a great potential for art development but the legislatures have been reluctant in the past to appropriate funds?

Miss HANKS. This is very definitely true. We work on that all the time. Atlanta and Georgia are examples of the problem of the whole Southeast region. We pay particular attention to applications coming from that region.

Mrs. HANSEN. Interestingly enough, I think there have probably been as many Southern States proportionately sending in requests for State assistance as any other section in the Nation. I think this has been very interesting, that there has been widespread support throughout the South.

On page 20 of the justifications you say the remainder of the funds planned for "availability of the arts" will assist regional or national programs to bring the arts to all our citizens. Please explain, in detail, just what your program plans are in this connection.

Miss HANKS. Very briefly, we will continue and expand the coordinated residency touring program in dance. As I mentioned, we are in 22 States now, and 67 communities. We hope to increase the number participating in the coming year. We also hope, with transfer funds from the Office of Education, to add an educational component to that program. In other words, we would ask that a company stay in a community perhaps as much as 2 or 3 days longer, to give performances and workshops directly in the schools.

Another program that falls into that category is the one we discussed briefly, the poetry in the schools program.

Mrs. HANSEN. Does HEW still participate in the arts program?

Mr. KEENEY. No, ma'am. That is still in the authorization but not in the budget.

Mrs. HANSEN. Why? I thought they had done a successful job of stimulating interest in the schools.

Mr. KEENEY. They put it in another program.

SCULPTURE IN PUBLIC PLACES

Miss HANKS. Also in this program, we would like to continue assistance to American cities to commission and place major works of outdoor sculpture in prominent places within the community. We have a piece of sculpture in Grand Rapids, in Philadelphia and one in Seattle. There is one going into Wichita. There is inclination on the part of the Council that these grants, in the future, may be of smaller denomination than they have been in the past. As perhaps you will recall, the program is now at $45,000 for each piece of sculpture.

We are very excited about one other area, even though the amounts of money are small. I have had long conversations with John Macy who is head of the Corporation for Public Broadcasting, and we are going to work on a cooperative basis using the Corporation's funds and our own to develop more programs in film for the arts. Of course, this gives us much wider distribution.

Mrs. HANSEN. Give us a detailed explanation of how you plan to use the $5.4 million for cultural resources development.

Miss HANKS. Yes. The figures that I give you will depend on the level of appropriations. They would change if the appropriations were higher than requested. They would change if they were lower, because the Council feels very strongly that we must reach toward some balance. At the present time, the Council passed a resolution at

its meeting in January that up to $3 million of the funding in this category would go to the orchestras.

In opera, there would be approximately $425,000 available to the opera companies.

OPERA COMPANIES

Mrs. HANSEN. How many opera companies are there in the United States? I know Seattle has one that is very ambitious.

Miss HANKS. There are hundreds of opera companies. Our problem, and the reason for going slowly in developing this program, is that we have had difficulty selecting the number that would be eligible to apply. The Endowment is funding on a small basis a meeting of 41 companies that are getting together for the first time. They have had two meetings. The third will be held at the end of this month in Washington. I believe it is 41 companies who are working together, in terms of coordinated planning, exchange of sets, storage space for sets and so forth. We will have to work out this program; $425,000 is very small. Actually, in the category we were discussing a little earlier, we do have funds in there for touring programs of opera, such as the Western Opera Theater, which is an offshoot of the San Francisco Opera, and tours in the West.

ASSISTANCE TO MUSEUMS

In the third area, in the museum category we hope to allocate an initial program of up to $1 million. This would be in fields that the museum leadership feels are most important. It would not include capital funding at all, which, of course, is a tremendous need on their part, nor would it include basic research into collections and that type of thing. Heavy emphasis would be placed on their public service programs, and also in attempting to help them raise their standards by a variety of means. One that we are finding most fruitful, with a pilot project we have carried out is increasing the liaison between the museum and the university, so that the university academic talent is brought in, to work with the museum. Also we hope more students from the universities will be trained in the museums. I think the more of this we can do, the better.

I personally believe that our cultural resources should be used just like our libraries, by all our educational institutions, not only museums but the theaters and orchestras, and hopefully we will push more in that direction.

LEVEL OF ASSISTANCE

The resident theater programs and the other programs in theater and dance will continue at approximately their present level, unless we are able to generate Treasury funds.

Mrs. HANSEN. What is the present level of funding?

Miss HANKS. It is about $1 million for each: $800,000 for dance and $1,250,000 for theater.

These figures will be over $5.4 million. The total is $4 million for orchestras and museums, $425,000 for opera, and then $1 million each really for theater and dance. This is over the $5.4 million, but part of

the dance support will increase availability of the arts through touring, and is thus carried under our first goal. In addition, we have asked the orchestras in particular to attempt to use the Treasury fund.

Mrs. HANSEN. The committee will adjourn until 1 o'clock.

AFTERNOON SESSION

ASSISTANCE TO SYMPHONIES

The committee will come to order.

We discussed this morning the financial difficulties of the symphony orchestras, and I am sure you have received many requests for financial assistance. What is the procedure you follow in determining what grants will be made to which symphonies?

Miss HANKS. The applications come in or inquiry comes in concerning an application. It is reviewed by Mr. Walter Anderson, who is Director of the music program, and his staff. When applications come in they are also reviewed by the grants office to see if they are complete. In many instances Mr. Anderson and his people work with orchestras to develop sounder proposals because sometimes they come in quite vague. On these applications in the future another step will be added. They will go to an orchestra panel, and from them to the music panel, and then to the National Council for review.

Mrs. HANSEN. Is the final approval made by the National Council?

Miss HANKS. Yes.

Mrs. HANSEN. In your justifications you say "museums estimate up to $8 per visit would be necessary."

Miss HANKS. Yes.

Mrs. HANSEN. On what is this based?

Miss HANKS. Cost of running a museum divided by the number of visits.

Mrs. HANSEN. Are there any museums in this country that charge admission prices of $2 or more per visit?

Miss HANKS. I am not aware, Madam Chairman, of any museum that charges that amount.

Mrs. HANSEN. The reason is that you would deprive people of low or medium incomes with families from attending museums.

Miss HANKS. Actually, most museums in the country at the present time are not charging admission. The exceptions that come quickly to my mind are the Museum of Modern Art and the Boston Museum. I believe Philadelphia is instituting a modest charge. However, I think every museum in this country, certainly the big ones, is considering putting in a charge.

Mrs. HANSEN. It would have to be a very minimum charge or you will deprive the very people you want to use the facilities from using them.

Off the record.

(Discussion off the record.)

Mrs. HANSEN. To what extent, if any, are private donations to these activities declining?

Miss HANKS. In every instance I know by field, the private donations are increasing.

ADVANCEMENT OF OUR LEGACY

Mrs. HANSEN. You are requesting $2 million for advancement of our cultural legacy. Will you itemize this request of $2 million for us?

AMERICAN FILM INSTITUTE

Miss HANKS. Yes; $1 million of that is for the American Film Institute, which has been in operation 3 years. We have looked at it very closely and believe it is extremely important for it to be continued.

Mrs. HANSEN. Was this the same amount granted last year?

Miss HANKS. No; their original grant was in 1967 and was in what amount?

Mr. RANDOLPH. $1.3 million, matched by the Ford Foundation; for $2.6 million.

NEW TECHNIQUES FOR TOURING

Miss HANKS. $1.3 million, so it is $1 million this coming year.

Then we would plan to use $200,000 for a mechanism for touring. We believe it is extremely important to realize the potential of getting the arts out of the major centers across the country. Our discussions indicate that a new mechanism is needed for this purpose. This would, of course, benefit all the arts and it is certainly not anything that one organization could do itself.

The remaining $800,000 will be in the area of music composition, choreography, and in the visual arts. Also in that figure is our program in architecture and environmental design and the literature programs. That would total the $2 million.

Mrs. HANSEN. Off the record.

(Discussion off the record.)

Mrs. HANSEN. Does the Film Institute receive any other financial support?

Miss HANKS. Yes, it has received financial support from the Ford Foundation and also from the member companies of the Motion Picture Association of America. It is planned that this funding will continue as part of the matching of the Endowment's program. They have had preliminary discussions with Ford and also with the movie industry.

Furthermore, the Film Institute in terms of long-range funding, although this will take them perhaps 2 years to set up, is looking into a program of membership. For a certain fee a person would receive the literature that was produced by the Institute and be able to go to some film performances. This is being worked out with the movie industry and I think is an imaginative way of long-range funding.

Mrs. HANSEN. On page 24 of the justifications you say:

Our programs for advancement of our cultural legacy might include support for festivals or conferences in the arts, which enable artists and cultural leaders from all over the world to come to the United States.

Please elaborate on this statement.

ARTS CONFERENCES

Miss HANKS. Well, as you will note, this is stated, rightly I think, with the word "might" in it because at the moment except for the PEN Conference on Translation—isn't that correct—the one this year, we do not anticipate international conferences in 1971. On the other hand, sometimes they come up very quickly and we would like to have the leeway of enabling Americans to participate in them here, as is sometimes very necessary, and I think it is extremely important that we have much more dialog and association among artists here and abroad. We have had far too little.

Mrs. HANSEN. Isn't it true that our image would be better abroad if we had more dialogue?

Miss HANKS. I think much better.

Mrs. HANSEN. We should be known as a nation that is interested in culture and the arts.

Miss HANKS. Oh, I think so, and it couldn't be more unfortunate that the State Department programs have been cut.

Mrs. HANSEN. How much have you budgeted in 1971 for this activity?

Miss HANKS. Nothing particularly. At least, at the moment we do not anticipate major expenditures.

Mrs. HANSEN. What sort of costs would you subsidize with such grants?

Miss HANKS. To bring in speakers who would raise the level of the conference itself, or for travel expenses for delegates who would be important but could not attend otherwise for financial reasons.

Mrs. HANSEN. Please give us an illustration.

Miss HANKS. Well, the PEN Conference on Translation, I think, is the one that we have this year for $7,500. Let me see if it is described. Well, it is not there. I will have to submit something.

Mrs. HANSEN. Insert the illustration in the record.

Miss HANKS. I will submit it for the record.

(The information follows:)

AMERICAN P.E.N. (POETS, PLAYWRIGHTS, ESSAYISTS, EDITORS, AND NOVELISTS) TRANSLATION CONFERENCE. FISCAL 1970.

The largest portion of the National Endowment for the Arts' $7,500 grant will be used to provide travel and per diem expenses for approximately 25 experts, one-third of whom will come from Europe, Asia, and the Near East for the 6-day conference. The remaining participants will come to New York from all over the United States.

A smaller portion of the Endowment grant will be directed toward costs of administering the conference, including office supplies, mailings, secretarial help, hall and meeting rooms rental, printing of program, and so forth.

Matching funds are being provided by Weybright and Talley, Publishers, Inc., and the Janeway Foundation.

FELLOWSHIP PROGRAM

Mrs. HANSEN. Describe the type of grant you will make to encourage the development of exceptional talent in the visual arts.

Miss HANKS. Yes. In 1971 we plan to handle this program differently from the way it has been handled in the past. We would like to give what we call fellowships rather than awards, and they will be at the level of $7,500 each. I worked out the figure in discussion with Dr. Keeney. It is basically a figure based on the sabbatical leave for a semester on an associate professor level. These grants will be given to visual artists selected by nominations from the field. Applications, of course will also be reviewed. We have people appointed in all regions of the country who are submitting the nominations. They will go to panels, a national panel of six or perhaps seven members, that will review the nominations and will, unfortunately, be able to pick only approximately 20. I am certain the nominations will be several hundred.

Mrs. HANSEN. $400,000 is requested for program development and evaluation, which we discussed this morning. Do you have a breakdown of items under "other categories"?

Miss HANKS. Yes, I do. I will have to refresh my own memory here. The $100,000 is for the prototype planning in transportation of national exhibitions. There is $200,000 for program development particularly directed to the new institutional support in orchestras and museums and opera companies, but it will also include funds for data collection and analysis. We are simply not able, nor are the organizations, to do the necessary long-range planning without better figures than we have.

You would be interested to know that in New York State, when the $20 million as appropriation was enacted, one of the few limitations the legislature put on it was that a statewide accounting system be developed for all arts organizations in New York. This is going to be a tremendous grind for them, but also extremely important. I am going to meet tomorrow afternoon with them, with the thought that what they develop there we can use as a suggestion for arts organizations all over the country because, you see, right now every accounting system is different. Some people call education one thing and some call it another, and we really can't tell what is going on.

ACCOUNTING SYSTEMS

Mrs. HANSEN. Doesn't each State designate its own accounting system?

Miss HANKS. No; the arts organization by itself designates its own system of accounting.

Mrs. HANSEN. For example, the State appropriates through its legislature so much for participation in your program. This would come under the State division of accounting?

Miss HANKS. I am just not familiar enough to know.

Mrs. HANSEN. They are all audited by the State auditor, in the States that make provision for audit. I know in the State of Washington everything that is under the jurisdiction of appropriation by the legislature is audited by the State. I assume there is no uniformity.

Miss HANKS. No. Some of it is from the back of an envelope. The other $100,000 will be for the serious problem we discussed earlier, $100,000 for program evaluation to take a good look at the programs the Endowment has had in the past which we want to continue in the future to see how they might be improved or in some instances changed considerably.

An example of this, I think, is the review of the Literary Anthology. The method of financing should be changed. I think we particularly need this and the literature program people feel very strongly we need an evaluation of the grants made in that area, but this goes right across the board. The theater people want to send out evaluators and at the moment we simply don't have the funds available.

Mrs. HANSEN. You could probably provide them with a much better type of program.

Miss HANKS. Oh, I hope so. Also, it will show that the Government is interested in the quality on the spot and not just something on paper, and it also lends encouragement to what they are doing.

Mrs. HANSEN. $2.5 million is requested for gifts, donations, and matching funds. Relate your experience in securing matching funds during the past 2 years?

MATCHING FUNDS

Miss HANKS. I think that the funds can be matched with no difficulty. As you know, if they are not matched they never leave the Treasury, so it is not a loss to the Federal Government. Just in my own experience here with the orchestra program, we were able to generate, in private moneys, $355,000 in several days. Because of preliminary inquiries that we have had with organizations as well as corporations, we have every reason to believe that we have already some $2,300,000 that we could raise in a matter of months. And here we are still in last quarter of 1970.

Mrs. HANSEN. What has been the sources of your largest contributions?

Miss HANKS. These are foundations. Would you like to have us submit for the record a listing of the donations?

Mrs. HANSEN. Please do.

Miss HANKS. I thank that this will show not only the tremendous variety between individuals, foundations, and corporations, but will show the range of gifts, which is running from $50 to $100, to a couple of hundred thousand.

(The listing follows:)

Gifts received by National Endowment for the Arts in fiscal year 1970 as of April 9, 1970

Paul Kohnstamm	$50
New York Community Trust	5,000
N. L. Pines Foundation, Inc	5,000
J. M. Kaplan Fund, Inc	15,000
Sears-Roebuck Foundation, Inc	80,000
Faigel Leah Foundation, Inc	250,000
Mrs. Alexander (Agnes) Albert	50,000
Mrs. Richard H. Thompson	15,000
The Corbett Foundation	50,000
The Louis D. Beaumont Foundation	25,000
The Louis D. Beaumont Foundation (total of $50,000)	25,000
The Alvord Foundation	25,000
Hattie M. Strong Foundation	25,000
Arthur N. Reicher	100
Sybil W. Stoller	500
Saul and Joan Cogen	500
Raymond King Myerson	500
Leonard and Rose A. Sperry Fund	500
Stuart and Sandy Newmark	100
Chet and Jon Lappen	500
Western Packers	500
Nancy Featherstone	50
Bertram R. and Erna E. Sheldon	100
Hal Linker Productions	100
Jay and Marian Heller	100
The Rosenberg Family Foundation	500
The Ford Foundation	150,000
The Ahmanson Foundation	500
Seed & Feeding Corporation	50
Mr. and Mrs. Kurt Mann	50
People's Finance and Thrift Co., of Beverly Hills	50
Fred E. and Helene G. Sonderling	100
Fisher Supply Co	100
Paul and Ruth Hanna Lehmann	100
Yvonne M. Brown Memorial Foundation	50
Leonard and Margery G. Jacobs	100
South Camden Garage	1,000
Princeton Gardens, Inc	1,000
Jay and Belle Jerome	1,000
Paul R. Trichon	3,500
Stanley and Pearlia Brenner	500
Joseph H. Savitz	1,000
Max M. Leon	2,000
Christian and Cecily Castenskiold	100
Betty J. Dranow	50
The Meselson Foundation	100
Eleanor R. Piacenza	150
Petersen Publishing Company	200
Helen Clavin	200
Doris M. Levinson	50
Harold H. and Ernestine M. Heath	18,000
The Corbett Foundation	5,000
Universal Money Order Co	100
Ruth M. Goodhill	100
Hyman L. and Sydelle Hymson	150
M. Weinstein, Inc	50
Martin Padway Foundation	100
Richard J. Riordan	2,550
TRW	400
Lionel Ruby	100
Mala Pick	100
The Jeanne Rich Foundation	300
Eugene Marias	50
Sybil W. Stoller	6,500
Frederick R. Waingrow	3,500
Anonymous	600
Anonymous	4,400
Mrs. Alice A. Smith	3,000
K. N. Dayton	1,000
Archie D. and Bertha H. Walker Foundation	2,500
The McKnight Foundation	5,000
Anonymous	2,000
Elva Fund, Inc	500
Anonymous	1,000
May D & F	1,500
Boettcher Foundation	10,000
Shell Oil Company	1,000
Total	805,550

Mrs. HANSEN. That would be excellent. What percentage of your contributions have been contributed for a specific activity?

Miss HANKS. This year 99 percent, if not 100 percent.

Mrs. HANSEN. What is the current status of your cooperation in the ANTA theatre project?

Miss HANKS. Mr. Straight has been looking into this program.

Mr. STRAIGHT. The ANTA theatre agreement, Madam Chairman, was signed in 1968. Subsequently, the Endowment paid off the second mortgage on the property, leaving a first mortgage of $715,000, which is due in 1976. The Endowment holds an equity in ANTA and is cur-

rently cooperating with the ANTA Board in the completion of its current season. Miss Hanks, as she mentioned, saw "Harvey" there, for the next season coming up the board has prepared a program but not yet submitted it to us. The present agreement with ANTA runs out on December 31. Prior to that time we must either renew the contract with ANTA to cooperate in the running of the theatre or make other arrangements which will protect the Government's equity in the property.

Mrs. HANSEN. I compliment you Miss Hanks, and Mr. Straight, and the members of your staff on an excellent presentation. I think it has been the best we have ever had.

Miss HANKS. Thank you very much. We appreciate the opportunity to be here.

Mrs. HANSEN. We appreciate having you.

Mr. Reifel?

Mr. REIFEL. Thank you, Madam Chairman. I have no questions. I agree wholeheartedly with your appraisal of the wonderful presentation made by Miss Hanks and her assistants.

Miss HANKS. Thank you.

Mr. REIFEL. We are deeply grateful.

Mrs. HANSEN. Off the record.

(Discussion off the record.)

NATIONAL ENDOWMENT FOR THE HUMANITIES

WITNESSES

BARNABY C. KEENEY, CHAIRMAN, NATIONAL ENDOWMENT FOR THE HUMANITIES
LOUIS HAUSMAN, DIRECTOR, PLANNING AND ANALYSIS
ARMEN TASHDINIAN, ASSISTANT TO THE DIRECTOR OF PLANNING AND ANALYSIS

Mrs. HANSEN. We now have The National Endowment for the Humanities. We have the pleasure of welcoming back Dr. Barnaby Keeney, the chairman, as principal witness.

GENERAL STATEMENT

Dr. Keeney, please insert your general statement in the record and summarize it for us.

Mr. KEENEY. Madam Chairman, it is a pleasure to be back here with you and the members of the subcommittee. I will highlight the statement and place the rest in the record.

(Mr. Keeney's statement follows:)

STATEMENT OF BARNABY C. KEENEY

Madam Chairman, members of the subcommittee, It is a pleasure and an honor to appear before you again to present our appropriation request as submitted by the President of about $20 million for the National Endowment for the Humanities, composed of $13.8 million outright appropriation, $2.5 million matching funds contingent upon the receipt of another $2.5 million gifts. The rest is for administration.

These are times when we are blessed with the greatest knowledge in history and cursed, perhaps, with the least understanding of ourselves and what to do with our knowledge. It is ironical that in 1969 man's greatest triumphs in exploration were achieved, and in the same year it became clearly apparent and openly recognized that man's very technological progress, his partial conquest or perhaps rape of a reluctant nature, has so outraged nature that human civilization and indeed human life may be severely reduced and perhaps obliterated in our own times. These are times when we must use not only the knowledge which is readily applied to physical things, but to use all of the knowledge we have of human values and intangible things and to seek more. As chairman of the National Endowment for the Humanities, I should speak of course for the most neglected part of all human knowledge in our times, from which the humanities have begun to be saved in large part through the wisdom of Congress in establishing this small and still inadequate institution.

Now, with your permission I shall concentrate on new programs and upon programs that have been substantially expanded, but I of course stand prepared to testify on present programs and upon the implementation of those programs in past years, and as much as I can for this year.

NEW PROGRAM—JUNIOR COLLEGE FACULTY FELLOWSHIPS

The only new program is a program of fellowships for junior college faculty members. At the present time it is estimated that one-half of all the college freshmen presently enrolled are in junior colleges. Many of these institutions are very new. Many of them are staffed with teachers who were either up-graded from high school or who were prepared to teach in senior colleges and universities, and for one reason or another have gone to junior colleges. Some of them are superannuated. Some are very young. This program is aimed at the younger members of the junior college faculties on the assumption that it is they who will be able to influence the future and it is they who need to be improved. These fellowships are to be the equivalent of postdoctoral fellowships, but since some junior college faculties do not have the doctorate, the requirement will be somewhat looser. The Office of Education plans a program of predoctoral support, so there is no conflict. Members of junior college faculties are presently eligible for the fellowships offered under our existing programs but few of them have been awarded fellowships and few have applied. This year there will be three fellowships and five summer stipends.

The needs differ from the needs in senior colleges and in universities and as a result the qualifications of junior college faculty members do not match our existing programs. In the first place, research is not emphasized and is sometimes discouraged in junior colleges. Most of these people who succeed in their applications for existing fellowships are research scholars. There is, on the other hand, a great need of the faculties of junior colleges for further study, not in this case for degrees, although some of them need to finish their degrees, but for enlarging their qualifications by further study of their own field or related field or for broadening the rather narrow scholarship that comes out of the Ph. D. In many junior colleges there exists an ambition among the faculty and administration to grow into 4 year colleges or even into universities, which distracts those persons in these institutions from their teaching and from working out programs which are suitable at the level of the first 2 years of college.

This request is for $250,000 which will supply approximately 25 fellowships.

EXPANDED PROGRAMS—INSTITUTIONAL GRANTS

The remainder of the programs of which I shall speak are substantially expanded. The first one is greatly expanded, the program of institutional grants for educational planning and development for which $4,100,000 is requested, an increase of $3,140,000. We have been developing this program for several years through planning grants, of which there are many, and through small grants to improve the capacity of institutions to teach the humanities, either as a whole or as a broad part of their educational program. Vermont has already been granted funds to carry out the plans made on a planning grant. A good example is the grant to Emory University and Atlanta University, an unusual coupling of a predominantly white university and a predominantly Negro university in the same town, to wit, Atlanta, in order to work out together a better program for equipping students to understand the circumstances of American urban life,

including race. A good example of a grant to a college is one to Hiram College in Hiram, Ohio, which has received funds for 2 years now to improve its teaching of the humanities at the undergraduate level in a way that we hope may become an example to other institutions. These grants in the past have been at a rather low financial level and of 1 year's duration, which is not adequate for this sort of a program which will require several years.

The purpose of the institutional grant is to support (through the award of substantial sums of money) the improvement of all instruction in the humanities as might be the case in a college, or a part of the total program in the humanities, as might be the case in a university. In the colleges we would plan to award approximately $500,000 for a period of 5 years in a way that I shall describe in a moment. In a university we would plan to award approximately $1 million over a period of 5 years in a similar manner. We would intend to obligate the whole amount of this year's funds, so that the amount obligated would exceed the amount spent.

The situation in instruction in the humanities urgently requires remedy. On the one hand, the traditional teaching is oriented toward the past and is a very good preparation for living in the past. On the other hand, the contemporary cry for relevance leads to present-oriented teaching, which is perhaps a very good preparation for living in the present, but the present will not be with us long and will not even be with us when the students now in college have graduated. This is intended to focus on first-rate human problems which are of permanent, and that means future, importance.

There are various means of doing this. First of all, the faculty can be enlarged and strengthened either in numbers or in competence. Second, teaching programs can be revised, curricula can be devised, and courses can be originated. Third, physical means may be improved. While we do not make grants for building purposes, we may for some programs support the development of a library, the use of a computer, or the provision of audiovisual material, which is generally sadly lacking.

We would hope and expect that out of these institutional grants would come exemplary programs at the undergraduate level, that will not only improve the instruction itself, but which could be repeated in other institutions, and that at the graduate level, there would be a great improvement in the teaching of the humanities in graduate school, which is now a far better preparation for research than for teaching, and which is no preparation at all for teaching in junior colleges, where half of our students start.

I have already mentioned the amounts involved. In the case of a grant over 5 years to a college, the first year's funding might consist for the most part of an outright grant; the second to fourth year a combination of gifts and matching and outright with the outright decreasing and the matching increasing; and the fifth year entirely gifts and matching, so that the college would be gradually weaned from Federal support and would develop private sources of funds.

This program, if it is to be started, should be started for a long period of time and it should be contemplated that four to eight institutions a year under the pending authorization would be granted, as has been the case in the National Science Foundation, which has developed a very successful program of institutional aid along these lines.

The second area of major expansion is in grants for educational projects at the collegiate level. This would provide a total of $1,500,000, $839,000 more than is available for this year, to improve or to originate and test a particular instructional program to improve a particular department or group, as for example has been the case at the State University of New York at Brockport. (This is a tested program that is of proven value and that needs to be expanded at this time.) Under it we have funded a most interesting program at the University of Nevada, with which the chairman is perhaps familiar. Others are at the University of Arizona at Tucson, where the university helps high schools to prepare to teach the background of minority groups and at Stanford, where a seminar on Mexican American problems is supported.

PUBLIC PROGRAMS

In the public program we asked for an increase of approximately $600,000, from $410,000 to $1 million, for public dissemination. Examples of uses of these funds would be the National Humanities Series, which is an experimental program started this year with preliminary signs of success under which academic human-

ists and performers provide programs for people in small towns who are interested in literature, history, and philosophy in their various forms. Another would be a film series dedicated, for example, to the issues of the American Revolution and the constitutional period and to today's issues, or to such a subject as the opening of the West.

It has been proposed by the authorizing committee that we engage in State programs or regional programs similar to those of the arts endowment with the purpose of putting under local control Federal money combined with locally raised money to encourage local initiative in the pursuit of the humanities. It would have the advantage that it would make it easier for us to reach through such a device the three-quarters of the population which is not presently involved in academic institutions, and which needs to be reached. It would also have certain obvious political advantages. It would have the disadvantages in that there are no really well-established State or regional institutions, that there is a lack of leadership and a good deal of the money would probably be used for programs of rather low quality. However, we intend to take the urging of the authorizing committee very seriously and to set up experimental programs, perhaps in a region and in one or more states.

An alternative to this is a program of establishment of humanities agents in various enterprises to work with humanistic resources in a state or a region. For example, there are approximately 3,300 historical societies in the country. Some of these are very well established. Some of them are small, struggling enterprises, which do not know how to do what they ought to do, namely, to bring the past to bear upon the present. What the humanities agent would do in this case is spread the good ideas of the better established and more original societies to other societies throughout the country or through that part of the country for which he is responsible, and to try to work a general improvement thereby. Another possible use would be in connecting the public libraries in the country with the college equivalent examination plan. There are available now examinations administered centrally to determine whether or not a person who is not now enrolled in college has completed the equivalent of a part of a college education. To prepare himself he has to use a public library usually, and the public libraries are not always prepared to help such aspirants. The humanities agent charged with the college equivalent plan would work from libraries and help libraries to set up services, provide books and bibliographies for these people.

AMERICAN REVOLUTION BICENTENNIAL CELEBRATION

Public Law 89–491 charges the National Endowment for the Humanities to cooperate with the American Revolution Bicentennial Commission. We ask an increase of $100,000 to fund a grant for that purpose. I have already given an example of one sort of program. It is a series of films devoted to the ideas of the Revolution, which could be used at meetings, or on television, or in schools. Other examples of support are involved in funding of local planning and establishment of archives of the Revolution. It has been proposed that a number of documents from the period be circulated by various means to communities throughout the country. We expect increased interest in the celebration of the bicentennial as a result of the report of the Bicentennial Commission, which should be released this summer, and it seems prudent to provide increased funding.

FELLOWSHIPS

In well-established programs of fellowships which have demonstrated their worth and in which there is a very considerable excess of applications to grants awarded, we propose an increase of $600,000 for the fellowships for younger scholars, where this year we had 436 applications and were able to make 80 awards. I would expect that the number of applications next year would increase. In the senior fellowship program we ask an increase of $400,000. In this program the disparity between applications and awards is even more extreme and the quality of the unsuccessful applicants is such that one would wish to support a good many of them. There are presently 3,000 fellowships of this sort available to people in the sciences, whereas there are only 600 available in the subjects of the humanities. Finally, we wish to increase our program for the development of Negro colleges through small grants to them to improve teaching in the humanities and to attempt to reinforce certain neglected subjects by making available postdoctoral fellowships for young men and women to work with well-established scholars in these fields.

RESEARCH

In research we wish to increase the funds available for large grants by $300,000, thereby permitting us to fund a few more large collaborative projects, such as encyclopaedic works in various fields, reference works like the "Dictionary of American Biography," for example, and collaborative studies of large subjects, such as American dialect differences and the computer application to various fields of study.

The funds available for small grants are entirely inadequate. We had there an excess of applications over awards of 3-to-1 and in funds of 8-to-1. We ask for $600,000 more. The number of turndowns is very large and the quality of many of the unsuccessful applicants is very high. It is important here that we provide the information that is to be used in teaching and sound learning.

GIFTS AND MATCHING FUNDS

Finally, I would like to say a word about matching funds. Experience has shown a constantly increasing amount of gifts to the endowment because of the availability of matching funds. We do not expect that this year's appropriation of $1 million for each endowment will be adequate, and therefore we have asked for a supplemental appropriation of a second $1 million. Last year the funds available in the original appropriation and the supplemental appropriation were nearly all used despite the late date at which the supplemental was passed. I confidently expect that the establishment of the grants for institutional improvement in education, based in part upon matching funds, will increase the demand for matching funds, as will the large grants for research, which are generally made on a similar basis in cooperation with a private donor or a private foundation. It seems most important to encourage private participation in this Government program, in the first place because it is fundamentally necessary that the private sector take over a considerable part of the funding, and in the second place because it diminishes the ever-present danger of Federal control of ideas through Federal programs of support.

These then are times when the humanities are not only important for themselves but essential to society, and we must develop them not to increase our elegance or to decorate our lives, but to work toward a solution of the major problems facing humans here and everywhere. These are times when humans are crying for human knowledge and understanding, from the student trying to understand the society in which he will live, and which in many ways appalls him, to the obscure man overwhelmed by the conditions of his life or goaded into rebellion by them, looking for his place in the world and the meaning of his life, to the beneficiaries of affluence wondering what to do with their abundance. The great questions with which the humanities can help must be solved before we can proceed with certainty or even continue. Where are our values? What does our life and our condition mean? And what shall we do?

These are times when we are blessed with the greatest knowledge in history and cursed, perhaps, with the least understanding of ourselves and what to do with our knowledge. It is ironical that in 1969 man's greatest triumphs in exploration were achieved, and in the same year it became clearly apparent and openly recognized that man's very technological progress, his partial conquest or perhaps rape of a reluctant nature, has so outraged nature that human civilization, and indeed human life, may be severely reduced and perhaps obliterated in our own times.

These are times when we must use not only the knowledge which is readily applied to physical things, but to use all of the knowledge we have of human values and intangible things and to seek more. As chairman of the National Endowment for the Humanities, I should speak, of course, for the most neglected part of all human knowledge in our times, neglect from which the humanities have begun to be saved in large part through the wisdom of Congress in establishing this small and still inadequate institution.

JUNIOR COLLEGE FACULTIES

Now I will proceed to highlight, particularly emphasizing the enlargements of programs and the new programs. The only new program is a modification of our fellowship program which has been running for 4 years. We have found it very difficult to award these fellowships to members of junior college faculties, where about half the freshmen will be enrolled by next year. Many of these institutions are very new. Most of them are staffed with upgraded high school teachers or retired senior college teachers. Some are superannuated.

On the other hand, there are some very young people who are in the process of finishing their preparation. This program is aimed at the younger members of junior college faculties because I think there is more profit in improving younger people, and I say that from a certain perspective.

Mrs. HANSEN. Off the record.

(Discussion off the record.)

Mr. KEENEY. Their needs differ from the needs of people in senior colleges because research is not emphasized and our present programs don't match the junior college needs. These people do need further study, not so much for degrees but to enlarge their qualifications and broaden them and to make them a better set of teachers for perhaps the most difficult group of college students to teach.

This request is for $250,000, which will include a $1,000 allowance to the institution which hosts them, that is, up to $9,500 for a stipend and $1,000 for the host institution, which will supply 25 or more fellowships.

Now I will speak of the expanded programs. We have been planning, and in a very small way, making institutional grants designed to improve the whole program of instruction in the humanities in colleges and universities. We have made quite a number of planning grants but no real institutional grants as yet. These grants have been at a rather low level——

Mrs. HANSEN. Such as?

Mr. KEENEY. Oh, $50,000, $60,000, $75,000, $100,000 for the whole institution. What we would like to do is make grants of 5 years' duration. That is $200,000 a year for a university, perhaps $100,000 a year for a college, and we would obligate that out of the first year's funds. The instruction in the humanities is urgently required to remedy the traditional teaching which is oriented toward the past and which is a very good preparation for living in the past. The contemporary cry for relevance leads to present-oriented teaching, but the present is going to be gone by the time the students graduate and probably isn't much better preparation than teaching for the past.

What we would like to see is focused on first-rate human problems which are of permanent—and that means future—importance.

INSTITUTIONAL GRANTS

There are various ways of doing this—by strengthening the faculty, by revising the teaching program, by revising the curriculum, and developing new courses. Physical means can be improved. We don't intend to make bricks-and-mortar grants, but we do intend to encour-

age the use of teaching devices that aren't in general use now, such as computers, audiovisual material, and so forth.

We would hope that out of these institutional grants there would come some exemplary programs at the undergraduate level that could be repeated in other institutions and that at the graduate level there would be great improvement in the teaching of the humanities in graduate school, which is now pretty much concentrated on research and certainly isn't a good preparation for the lower level college teaching, particularly junior colleges.

We would establish these grants with outright funds and gift and matching funds so that the college would be led to raise more and more money until by the fifth year it would be feasible to wean them from Federal support and put them onto State and private funds.

This program should be started for a long period of time and it should be contemplated that four to eight institutions a year would be helped, just as the National Science Foundation has done, which has a very successful program.

Mrs. HANSEN. How do you select these institutions?

Mr. KEENEY. We would invite applications, visit the institutions, look at what they have, and see if what they want to do is realistic in terms of what they have, and then submit the results to panels and then to the Council.

PROBLEMS IN UNIVERSITIES

Mrs. HANSEN. Dr. Keeney, the problem has arisen in some of our great universities, particularly in the West and the Midwest, where the size of the university itself has become so large that in some graduate schools a research professor has very little contact with his own students. The young people are doing their own graduate work. This is supposed to be a time when the professors have conferences with the graduate students to lead them supposedly on to a greater interest and greater depth.

Mr. KEENEY. It is not a very attractive place to be.

Mrs. HANSEN. No. I just happened to visit very recently and had some familiarity with one of the large graduate schools in the West, and I think this situation is appalling.

Mr. KEENEY. Graduate school has never been a very nice place.

Mrs. HANSEN. This depends upon the particular part of the university. For example, I was very familiar with a graduate school in home economics, and this was a small group of people working rather intimately with the faculty. But today there is no close association with anything but the library and it seems a very frustrating kind of thing.

Mr. KEENEY. It is. I went through it 30 years ago.

Mrs. HANSEN. You are not going to correct the situation that prevails in some of these modern universities until some positive action is taken.

Mr. KEENEY. There has to be a relationship between the number of students admitted for graduate work and the capacity of the institution to give them real personal attention. Since there is now evidently

an oversupply in some kinds of Ph. D.'s, I think that is likely to come about. Quite a few institutions are limiting new admissions to graduate school. But the real trouble is the distraction of the faculty from their teaching.

Mrs. HANSEN. They are distracted by research work.

Mr. KEENEY. By research work, and I think that either they have to be required to involve their students more and more with them, working together with them on their research, which is very good training, or they have to reduce the amount of time they spend on subsidized research. Since the funds for subsidized research are shrinking, I suspect that will happen automatically, too, to some extent.

Mrs. HANSEN. I think part of your university problems today is due to the masses of people.

Mr. KEENEY. I do, too.

Mrs. HANSEN. The faculty becomes separated from their students. Many people feel that youngsters of 18 and 19 are adults, but this is not true, as you know.

Mr. KEENEY. Of course, in graduate school they are usually about 22 and they are still not grown up. I don't think most graduate students have grown up at all. They are more grown-up than undergraduates, but they still have personal problems, and there has to be more attention given to that. Shall I go on?

Mrs. HANSEN. Please do.

Mr. KEENEY. The next major expansion is in grants for educational projects. A total of $1,500,000, which is $839,000 more than is available for this year, is requested. This is intended to permit us to help originate or test particular instructional programs to improve particular departments or groups in a college or university. This is a tested program which is of proven value and needs to be expanded at this time. We have quite a few grants out now for various purposes and we are rather pleased with most of them.

PUBLIC PROGRAMS

In the public program we are asking for an increase of $600,000, from approximately $410,000 to $1 million, for public dissemination. One use of these funds would be in the National Humanities Series, which is an experimental program started this year with very strong preliminary signs of success. This program brings academic humanists and other humanists, performers and others, to small towns to put on literary, historical and philosophical discussions in their various forms.

Another possibility would be a film series——

Mrs. HANSEN. How many of those programs are underway?

Mr. KEENEY. Louis, how many?

Mr. HAUSMAN. Thirty.

Mrs. HANSEN. Insert a list of those programs in the record.

Mr. HAUSMAN. Yes, we can. We have such a list here.

Mr. KEENEY. We have had enthusiastic reactions to that. Here is a list here. Let me just run down the sort of places they are:

NATIONAL HUMANITIES SERIES COMMUNITIES INVOLVED AS OF MARCH 15, 1970

Walsenburg, Colo.
Seaford, Del.
Toccoa, Ga.
Cherokee, Iowa
Liberal, Kans.
Newton, Kans.
Whitesburg, Ky.
Princess Anne, Md.
Park Rapids, Minn.
Luverne, Minn.
Norfolk, Nebr.
Clayton, N. Mex.
Raton, N. Mex.
Springer, N. Mex.
Toms River, N.J.
Waldwick, N.J.
Riverhead, Long Island, N.Y.
Stamford, N.Y.
Xenia, Ohio
Bartlesville, Okla.
Broken Arrow, Okla.
Suburban Acres, Okla.
Mt. Pleasant, Pa.
Smethport, Pa.
Sioux Falls, S. Dak.
Webster, S. Dak.
Dalhart, Tex.

These are towns of 10 to 20 thousand, and we have a fairly large attendance, and it seems to grow at the second visit. They come four times, I think it is, a year.

We might also sponsor a film series dedicated to issues of the revolution and the constitutional period and today's issues or to such a subject as the opening of the West. It has been proposed by the authorizing committee that we try to set up State and regional programs similar to those of the arts endowment to put under local control Federal money with locally raised or appropriated money to encourage local initiative. We will try that next year, given the funds.

Mrs. HANSEN. Have you had any indication that the States are interested in these programs?

Mr. KEENEY. No. I think they are mildly interested and some of them are more interested than others, but since we have not opened up to the State councils before, we really can't make a judgment on that. This, of course, would make it easier for us to reach the three-quarters of the population not in school or college. It would have some political advantages. It would have some disadvantages, too, because there aren't any well-established State or regional institutions to hang it on. There is a lack of leadership and a good deal of the money might be used for programs of rather low quality.

We do intend to take the urging of the authorizing committee seriously and try it to see how it works, and we will report back after we have tried it.

An alternative to this, not necessarily an exclusive alternative but another way of going at it, is to establish humanities agents in communities, in States, regions, to work with the local agencies. For example, there are about 3,300 historical societies in the country. Some of them are very well established. Some of them are struggling and inadequate institutions that don't know what they ought to do, which is to bring the past to bear on the present. What the humanities agents would do in this case is to travel around spreading the good ideas of the better operations to the more inadequate ones to see if it is possible to raise the level thereby.

Another possible use would be to contact the public libraries——

HISTORICAL SOCIETIES

Mrs. HANSEN. Do many of the States have historical societies or councils?

Mr. KEENEY. There are 11 States that have what they call arts and humanities councils. The other States have just arts councils. They do more arts than humanities. Some States have councils of historical societies, some regions do. Regions are more likely to than States. I think regions are a better basis for this than States.

Another thing we might do with humanities agents is to try to tie together the public libraries with the college equivalency examinations plan. You can take an exam now to demonstrate that you have an education equivalent to 2 years of college and the people who are trying to prepare themselves for that exam need help in the libraries. The libraries aren't experienced in helping them, and they don't have the staffs to do it. We will try to work out something on that.

As you know, we are charged by the Congress to cooperate with the American Revolution Bicentennial Commission, and we are asking for an increase of $100,000 to do this. The film series would fall into that, the possible circulation of documents for the period would be another use. The effort to spread the bicentennial throughout the country beyond the eastern seaboard to me is the most important part of this. I have a letter from the Commission endorsing what we want to do. Would you like a copy of that for the record?

Mrs. HANSEN. Please insert the letter in the record.

(The information follows:)

AMERICAN REVOLUTION BICENTENNIAL COMMISSION,
Washington, D.C., March 11, 1970.

Dr. BARNABY C. KEENEY,
Chairman, National Endowment for the Humanities,
Washington, D.C.

DEAR DR. KEENEY: Dr. Sterling has asked me to respond to your recent letter. I am pleased to advise you that the programs which you propose to fund in fiscal year 1971, in accordance with section 4(c) of Public Law 89–491, support and complement the goals and plans of the Bicentennial Commission as developed to date.

As you know, it is not within the expertise of this commission and its staff to evaluate the specific financial allocation. However, we can and do commend the direction and content of your program as being consonant with the aims of the bicentennial and we strongly support your continuing efforts to enhance and enliven the Nation's understanding of its heritage and accomplishments.

With best wishes,

Sincerely,

M. L. SPECTOR,
Executive Director.

FELLOWSHIPS PROGRAM

Mr. KEENEY. The fellowship programs are well established. We propose to increase them, increasing the younger scholars' fellowships by $600,000. We had five applications to one award this year. We gave 80 awards. We would like to increase the senior fellowship program by $400,000. In that program the disparity between applications and awards is even more extreme. There are at present 3,000 fellowships available to people in the sciences, only 600 available in the humanities.

We would like to increase our program for faculty development in Negro colleges. This is a small program where we give grants of about $10,000 apiece to Negro colleges to find various ways of making their faculty more resourceful.

In research we would like to increase the funds available for large grants by $300,000, permitting collaborative projects, like studies of the American dialect differences, computer applications to various fields of study, works like the Dictionary of American Biography. That is not under consideration because it exists.

The funds available for small grants are entirely inadequate. We had an excess of applications over awards of 4 to 1, and in funds of 8 to 1. We are asking for $600,000 more. The quality of many of the unsuccessful applicants is high, and they should be helped.

MATCHING FUNDS

Now, about matching funds. I would substantially endorse what Miss Hanks says. We are asking for $2.5 million there, half of $5 million, and I am quite sure that we can raise that money, particularly with the increasing amount of funds that will be matchable under the educational development grants.

After I saw you at the supplemental hearing, I got a call from one of the foundations offering $200,000 or $300,000 to match support for one of our programs, which is an example of one of the ways this money comes in. Other moneys come in in very small sums. Would you like a list of gifts last year?

Mrs. HANSEN. Yes.

Mr. KEENEY. Would you like an analysis of the sources?

Mrs. HANSEN. I think that would be excellent.

Mr. KEENEY. Let me have that breakdown table. Last year we had two gifts of over $100,000. Those two brought in $450,000. We had three of over $50,000. They brought in $152,000. At the other end we had 23 under $1,000, and they brought in only $7,000. We had a total of 111 gifts, for $1,200,000.

(The information follows:)

NATIONAL ENDOWMENT FOR THE HUMANITIES

FISCAL YEAR 1969

UNRESTRICTED GIFTS RECEIVED - MATCHED BY FY 1969 APPROPRIATION OF $2,000,000.00

Douglass House Foundation		$23,859.25
Grant No. 68-0-88, $23,809.25		
The Adolph's Foundation	$21,859.25	
Kaye C. Eberhard	250.00	
George Ames Plimpton (69-15)	1,000.00	
Peter Viertel (69-15)	200.00	
Tiber Productions, Inc. (69-15)	300.00	
Rolling Hills High School (69-15)	200.00	
To Be Granted, $50.00		
Morley J. Kert, M.D. (69-79)	50.00	
Dumas Malone, University of Virginia (Jefferson and His Time)- Grant No. 69-0-22		$ 7,000.00
Thomas Jefferson Memorial Foundation (69-21)	$ 5,000.00	
C. Waller Barrett (69-21)	2,000.00	
TOTAL UNRESTRICTED GIFTS RECEIVED - MATCHED BY FY 1969 APPROPRIATION OF $2,000,000.00		$30,859.25

NATIONAL ENDOWMENT FOR THE HUMANITIES

FISCAL YEAR 1969

RESTRICTED GIFTS RECEIVED - MATCHED BY FY 1969 APPROPRIATION OF $2,000,000.00

Frederick Douglass Institute of Negro Arts & History (Afro-American Heritage)			$ 18,000.00
Grant No. 69-0-61		$16,250.00	
Lawrence Richmond (69-1)	$ 1,000.00		
Carl M. Freeman Foundation, Inc.(69-1)	250.00		
J. M. Kaplan Fund (69-1)	1,000.00		
I. L. Scharfmand (69-1)	1,500.00		
Albert A. List Foundation, Inc.(69-3)	5,000.00		
Sidney Rydell (69-5)	500.00		
Leon S. Newton Foundation (69-5)	1,000.00		
Stone Charitable Foundation (69-5)	2,500.00		
David Lloyd Kreeger Charitable Foundation (69-8)	2,500.00		
Norman and Ethel Sharfman Charitable Trust (69-11)	1,000.00		
Grant No. 69-0-61-A1		1,250.00	
Louis H. and Selma Weinstein Charitable Trust (69-14)	250.00		
Pastorale Fund (69-14)	1,000.00		
Grant No. 69-0-61-A2		500.00	
Joseph M. Bernstein (69-17)	100.00		
Carl M. Freeman Foundation, Inc. (69-17)	400.00		
Douglass House Foundation			40,687.52
To be Granted			
John & Rella Factor Foundation (69-54)	2,500.00		
The Winters Family Foundation (69-54)	1,000.00		
R. W. Hellworth (69-60)	30.00		
Artists Foundation, Inc. (69-60)	1,000.00		
Sol Price (69-60)	1,907.52		
The Adolph's Foundation (69-64)	2,500.00		
James K. and Susan M. Webb (69-65)	300.00		
Nathan Kates (69-73)	100.00		
National General Corp. (69-73)	5,000.00		
Robert E. Wise (69-74)	2,000.00		
20th Century Fox Film Corp. (69-74)	750.00		
Edward M. Meyers Associates, Inc. (69-74)	100.00		

NATIONAL ENDOWMENT FOR THE HUMANITIES

FISCAL YEAR 1969

RESTRICTED GIFTS - cont.

Douglass House Foundation - cont.

To be Granted

The Sheinbaum Foundation (69-75)	$ 3,000.00
Wyman, Balitzer, Finell, Rothman & Kuchel (69-75)	2,500.00
Ben Bisgeier (69-76)	100.00
Richard L. Bloch (69-76)	50.00
Oscar Van Leer (69-77)	12,500.00
Jennings Lang (69-81)	50.00
Writers Guild Foundation (69-85)	500.00
Graham Gifts, Inc. (69-86)	50.00
Warner Bros.-Seven Arts, Inc.(69-87)	2,500.00
Gerwin, Ostrow & Jammer, C.P.A.'s (69-96)	1,000.00
Taylor Freezers of Southern California, Inc. (69-97)	250.00
Tyre & Kamins (69-98)	1,000.00

American Council of Learned Societies - 50th Anniversary Fund - Operating Expenses

Corning Glass Works (69-2) - Grant No. 69-0-47	$ 25,000.00
Samuel H. Kress Foundation (69-34)	100,000.00

University of North Carolina and Duke University (Cooperative Program in the Humanities) - Grant No. 68-0-31

Mary Reynolds Babcock Foundation, Inc. (69-4)	25,000.00

Harvard University (Archaeological Exploration of Sardis) - Grant No. 69-0-23

The Corning Museum of Glass (69-6)	5,000.00

NATIONAL ENDOWMENT FOR THE HUMANITIES

FISCAL YEAR 1969

RESTRICTED GIFTS - cont.

Eastern High School Freedom Corp. (Freedom School Program) - Grant No. 69-0-42		$ 30,000.00
Taconic Foundation, Inc. (69-7)	$10,000.00	
Stern Family Fund (69-13)	20,000.00	
Modern Language Association (Completion of Editorial Work on Authoritative Editions of Major American Writers) - Grant No. 69-0-18		14,607.48
American Philosophical Society (69-10)	2,310.00	
*Modern Language Association (69-16)	11,147.48	
*Modern Language Association (69-41)	1,150.00	
University of Wyoming (Archaeology on Easter Island) - Grant No. 69-0-71		
James A. Gray (69-12)		6,209.00
Amherst College, Robert A. Ward (Amherst Summer Action Program) - Grant No. 69-0-198		13,026.39
Phi Delta Sigma Fraternity (69-18)	150.00	
Valley Charitable Trust Fund (69-23)	10,000.00	
Dr. and Mrs. Martin Peretz (Stock) (69-25)	2,876.39	
Bernard Barrow, Brooklyn College (Researches in American Ethnic and Immigrant Theatre) - Grant No. 69-0-157		
Brooklyn Arts and Culture Assn./Brooklyn Institute of Arts & Sciences (69-19)		10,000.00
15 Institutes & Workshops on Negro History and Culture - Grants No. 69-0-103 thru 69-0-117		
The Ford Foundation (69-20)		200,000.00

*These amounts represent contributions to the National Foundation for Editions of American Authors received in response to solicitation by M.L.A.

NATIONAL ENDOWMENT FOR THE HUMANITIES

FISCAL YEAR 1969

RESTRICTED GIFTS - cont.

University of Virginia (Editing the George Washington Papers) - Grant No. 69-0-17A3

Mt. Vernon Ladies Association of the Union (69-22)	$ 15,000.00

National Educational Television (Documentary, "The Cherokee: Trail of Tears") - Grant No. 69-0-172

The Arca Foundation (69-24)	40,000.00

The Seven Clans Society - Andrew Dreadfulwater (Cherokee Traditional History Project) - Grant No. 69-0-184

William H. Donner Foundation (69-27)	5,000.00

University of Hawaii, Winfield E. Nagley (Travel Grants for 10 Members, Institut International de Philosophie) - Grant No. 69-0-53

Juliette M. Atherton Trust (69-28)	$ 1,250.00	
Samuel N. and Mary Castle Foundation (69-28)	1,250.00	
		2,500.00

Francois Bucher (Medieval Architectural Design)

Samuel H. Kress Foundation (69-29)	3,000.00	
New York Graphic Society, Ltd. (69-43)	1,500.00	
		4,500.00

Brandeis University (Student Tutor Project, Prison Education)

The Marcus Foundation (69-31) - Grant No. 69-0-194	5,000.00
The Charles E. Merrill Trust (69-44)	15,000.00
The Marcus Foundation (69-56)	10,250.00

NATIONAL ENDOWMENT FOR THE HUMANITIES

FISCAL YEAR 1969

RESTRICTED GIFTS - cont.

University of California, Arthur Sherry (Earl Warren Oral History Project) - Grant No. 69-0-49		$ 10,000.00
*The Friends of the Bancroft Library (69-30)	$ 3,095.63	
*The Friends of the Bancroft Library (69-36)	266.66	
*The Friends of the Bancroft Library (69-38)	6,637.71	
James R. Wiseman, University of Texas (Excavation in Corinth) - Grant No. 69-0-154		
The Arts & Sciences Foundation (69-32)		8,500.00
Dr. E. P. Panagopoulos, San Jose State College (Checks and Balances)		
Roland (Offsetmaschinenfabrik Faber & Schleicher AG) (69-33)		4,320.50
Richard Stillwell, Princeton University Press (Dictionary of Classical Archaeology)		
Samuel H. Kress Foundation (69-35)		10,000.00
Old Dominion Foundation (69-9) - Grant No. 69-0-45		25,000.00
The Andrew W. Mellon Foundation (69-84)		10,000.00
Dartmouth College - The Papers of Daniel Webster		
Henry J. McCarthy (69-37)		9,522.11
Hampshire College, Francis D. Smith (Development of an Experimental Curriculum in Humanities and Arts for Undergraduate Students)		
Mary Reynolds Babcock Foundation (69-39)		25,000.00
University of Illinois, Greenberg (Computer Application to Classical Studies		
The Ford Foundation (69-40)		20,000.00

*Acted as receivers for donations being raised, and forwarded these amounts.

NATIONAL ENDOWMENT FOR THE HUMANITIES

FISCAL YEAR 1969

RESTRICTED GIFTS - cont.

Walter E. Houghton, Wellesley College (The Wellesley Index to Victorian Periodicals)		
Council on Library Resources, Inc. (69-26)		$ 2,349.00
University of Virginia, Center for Textual and Editorial Studies in Humanistic Sources - Grant No. 69-0-177		
The William Stamps Farish Fund (69-42)		8,200.00
Dr. Julian Plante, St. John's University (Monastic Manuscript Microfilm Library)		15,000.00
Louis W. and Maud Hill Family Foundation (69-45)	$10,000.00	
Alice M. O'Brien Foundation (69-92)	5,000.00	
Richard H. Shoemaker, Rutgers (A Checklist of American Imprints)		
The Scarecrow Press, Inc. (69-46)		6,500.00
Bonnie R. Crown, The Asia Society (Asian Literature Program)		10,000.00
James Laughlin (69-47)	1,000.00	
The JDR 3rd Fund (69-51)	7,000.00	
William C. Whitney Foundation (69-78)	2,000.00	
Dr. Ernest Nash, American Academy in Rome (Photo Reference Collection Project)		
Old Dominion Foundation (69-48)		4,500.00
Associated Colleges of the Midwest (The Newberry Library Seminar of the Humanities)		
Avalon Foundation (69-49)		70,000.00

NATIONAL ENDOWMENT FOR THE HUMANITIES

FISCAL YEAR 1969

RESTRICTED GIFTS - cont.

Dr. Mary Mix (A Study of Innovative American Colleges)		
Leonard A. Schine (69-50)		$ 500.00
College Library Program		
Council on Library Resources, Inc. (69-52)		250,000.00
Robert F. Sasseen, San Jose State College ("What is Party", an inquiry concerning political science and party theory)		
Francis Drown Foundation (69-53)		3,670.00
Cyril Stanley Smith, M.I.T. (Metallurgy in the Old & New Worlds)		13,790.67
Mrs. Dominique de Menil (69-55)	$ 9,046.71	
Mrs. Dominique de Menil (69-63)	4,743.96	
Professor Frank Brown, American Academy in Rome (Tuscan Port Survey)		1,300.00
The Abraham Foundation, Inc. (69-57)	800.00	
Paul E. Geier (69-69)	500.00	
Dumas Malone, University of Virginia (Jefferson and His Time)		7,000.00
The Thomas Jefferson Memorial Foundation, Inc. (69-58)	5,000.00	
C. Waller Barrett (69-59)	2,000.00	

NATIONAL ENDOWMENT FOR THE HUMANITIES

FISCAL YEAR 1969

RESTRICTED GIFTS - cont.

Charles A. Ferguson, Center for Applied Linguistics (Conference on Languages of the World).....		$ 5,000.00
American Hungarian Studies Foundation (69-61).....	$ 1,000.00	
Institute of International Education (69-70).....	2,000.00	
American Speech & Hearing Assn. (69-80).....	500.00	
NEW CENTURY, Educational Division, Meredith Corp.(69-90)	1,000.00	
Speech Association of America (69-93).....	500.00	
Dr. Nathan Susskind, The City College of New York (Yiddish Dictionary)		
The Lucius N. Littauer Foundation (69-62).....		10,000.00
Ed Kahn, John Edwards Memorial Foundation, UCLA (Compilation of a Discography of Hillbilly Recordings).....		2,725.00
The Friends of The John Edwards Memorial Foundation, Inc. (69-66).....	2,500.00	
The Friends of The John Edwards Memorial Foundation, Inc. (69-66).....	225.00	
Walter B. Crawford, California State College (Coleridge in the 20th Century)		
Donor to remain anonymous per his specific request (69-67).....		3,500.00
Greene, John Hopkins (Annapolis 1782-86)		
The Maryland Historical Trust (69-68).....		10,000.00
David P. Billington, Princeton University (Humanistic Studies in Engineering)		
The Ford Foundation (69-71)		50,000.00

NATIONAL ENDOWMENT FOR THE HUMANITIES

FISCAL YEAR 1969

RESTRICTED GIFTS - cont.

Pitzer College, Claremont, California, George K. Park (Workshops Instead of Courses)		
Russell K. Pitzer (69-72)		$ 10,000.00
State University of New York, College at Brockport, Howard E. Kiefer		5,000.00
Xerox (69-82)	$ 1,000.00	
Faculty Student Association (69-91)	4,000.00	
National Humanities Faculty		
The S & H Foundation, Inc. (69-83)		28,000.00
Denver-Area Consortium for the Improvement of the Teaching of the Histories of Minorities, Denver, Colorado (Robert E. Roeder)		
Great Western United Foundation (69-88)		500.00
Mary Holmes College, Jimmie McLean		
Curber Associates, Inc. (69-89)		4,956.00
Jerome R. Mintz, Indiana University - Casas Viejas		
The Lucius N. Littauer Foundation (69-94)		2,000.00
TOTAL RESTRICTED GIFTS RECEIVED - MATCHED BY FY 1969 APPROPRIATION OF $2,000,000.00 .		$1,231,613.67

DISTRIBUTION OF GIFTS
Received in
Fiscal 1969

Amount of Gift	Number	Total Donation	Average in Group	Percent of Total	Cumulative
$100,000 and up	2	$450,000.00	$225,000	36%	
$ 50,000 - 99,999	3	152,500.00	50,833	12%	48%
$ 25,000 - 49,999	7	205,500.00	29,357	16%	64%
$ 10,000 - 24,999	19	250,756.73	13,198	20%	84%
$ 5,000 - 9,999	15	100,365.53	6,691	8%	92%
$ 1,000 - 4,999	42	96,329.00	2,293	7½%	99½%
Under $ 1,000	23	7,021.66	305	½%	100%
TOTAL	111	$1,262,472.92			

Average of all gifts: $11,382.64

Mr. KEENEY. Of this money last year we had 55 gifts from private foundations, 16 from business corporations, six from civic organizations, 13 from institutions, and 29 from individuals, so you see we get quite a wide spread of sources here.

(The information follows:)

Donations and Pledges by Source

	FY 67		FY 68		FY 69		TOTAL	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Private Foundations	10	50,156	17	279,150	55	819,179	82	1,148,485
Corporations	2	40,000	17	4,434	16	305,575	35	350,009
Civic Organizations			5	31,585	6	22,925	11	54,510
Other Institutions	5	730	3	355	13	41,257	21	42,342
Individuals	6	15,392	16	9,733	29	73,536	51	98,661
TOTAL	23	106,278	58	325,257	119	1,262,472	200	1,694,007

PURPOSE OF GIFTS

Mr. MARSH. Would the chairman yield?

Are the gifts earmarked for a particular purpose?

Mr. KEENEY. Yes, almost always, for a purpose that has been approved by the Council. The law provides that the Chairman may not accept a gift without the approval of the Council. That is he may accept it but he may not match it, so there is a safeguard there. No one has tried to dominate our program by giving an excessively large gift.

Mr. MARSH. Or giving a general gift, where you could spend it any way you want to in any program that you want?

Mr. KEENEY. We had a few gifts that were legally unrestricted, but in most of them there was a clear preference stated. I think it was quite beneficial to take the requirement off that they had to be unrestricted, and to put the requirement on that they had to be approved by the Council before they were matched.

IMPORTANCE OF HUMANITIES

These are times then when the humanities are not only important for themselves but are essential to society, and we must develop them not to increase our elegance or decorate our lives, but to work toward a solution of the major problems facing humans here and everywhere. These are times when humans are crying for human knowledge and understanding, from the student trying to understand the society in which he lives, and which in many ways appalls him, to the obscure man overwhelmed by the conditions of his life or guided into rebellion by them, looking for his place in the world, the meaning of his life, to the beneficiaries of affluence, wondering what to do with their abundance. The great questions with which the humanities can help must be solved before we can proceed with certainty or even continue. What are our values? What does our life and condition mean? What shall we do next?

Madam Chairman, I am ready to answer any questions.

JUSTIFICATION MATERIAL

Mrs. HANSEN. Insert pages 1 through 35 of the justifications in the record at this point.

(The pages follow:)

NATIONAL ENDOWMENT FOR THE HUMANITIES

SUMMARY OF FUNDS AVAILABLE

	1969 Actual	1970 Estimate	1971 Request	Increase
Appropriation, Definite Direct Program	$3,700,000	$6,050,000	$13,800,000	$7,750,000
Appropriation, Indefinite Matching Funds	1,262,472	1,000,000 1/	2,500,000	1,500,000
Total Appropriation	$4,962,472	$7,050,000	$16,300,000	9,250,000
Gifts and Donations	1,262,472	1,000,000	2,500,000	
Transferred from Other Agencies	119,800	--	--	
Transferred from Arts	900	--	--	
Recovery of Prior Years' Obligations	108,560	--	--	
Unobligated Balance Prior Year	924,355	1,924,858	--	
Total Available for Obligation	7,378,559	9,974,858	18,800,000	8,825,142
Obligations	5,453,701	9,974,858	18,800,000 2/	
Unobligated Balance	1,924,858	--	--	

1/ Does not reflect FY 1970 supplemental indefinite appropriation proposed for separate transmittal.

2/ The Administration's budget lists total obligations of $19,800,000. This figure includes the Endowment's request for a supplemental appropriation of $1,000,000 in Federal matching funds for Fiscal 1970. This sum is shown as an obligation in Fiscal 1971 since it is expected that the supplemental would be passed too late to be obligated in Fiscal 1970.

NATIONAL ENDOWMENT FOR THE HUMANITIES

ANALYSIS BY PROGRAM ELEMENT

PROGRAM AND ELEMENT	FY 1969 ACTUAL	FY 1970 ESTIMATED	FISCAL YEAR 1971 UNOBLIGATED BALANCE PRIOR YEAR	FISCAL YEAR 1971 REQUESTED	FISCAL YEAR 1971 ESTIMATED TOTAL AVAILABLE	INCREASE OR DECREASE(-)
DEFINITE APPROPRIATIONS						
Education Program						
Institutional Grants for Educational Planning & Development	$1,252,188	$ 960,000	--	$4,100,000	$4,100,000	$3,140,000
Project Grants		660,212	--	1,500,000	1,500,000	839,788
Elementary & Secondary Demonstration Grants		190,000	--	350,000	350,000	160,000
Subtotal	1,252,188	1,810,212	--	5,950,000	5,950,000	4,139,788
Public Program						
Public Dissemination	211,370	410,050	--	1,000,000	1,000,000	589,950
Regional Grants	462,350	407,650	--	450,000	450,000	42,350
Museums & Historical Societies	164,750	331,021	--	250,000	250,000	-81,021
Bicentennial	--	200,000	--	300,000	300,000	100,000
Subtotal	838,470	1,348,721	--	2,000,000	2,000,000	651,279
Fellowship Program						
Younger Scholar Fellowships & Summer Stipends	903,775	859,527	--	1,500,000	1,500,000	640,473
Senior Fellowships	--	600,000	--	1,000,000	1,000,000	400,000
Negro College Faculty Development	110,110	100,000	--	200,000	200,000	100,000
Fellowships in Selected Fields	--	100,000	--	300,000	300,000	200,000
Junior College Faculty Fellowships	--	--	--	250,000	250,000	250,000
Subtotal	1,013,885	1,659,527	--	3,250,000	3,250,000	1,590,473

NATIONAL ENDOWMENT FOR THE HUMANITIES

ANALYSIS BY PROGRAM ELEMENT (Continued)

PROGRAM AND ELEMENT	FY 1969 ACTUAL	FY 1970 ESTIMATED	FISCAL YEAR 1971 UNOBLIGATED BALANCE PRIOR YEAR	FISCAL YEAR 1971 REQUESTED	FISCAL YEAR 1971 ESTIMATED TOTAL AVAILABLE	INCREASE OR DECREASE(-)
Research Program						
Large Grants.....	$ 78,730	$ 445,000	--	$ 750,000	$ 750,000	$ 305,000
Small Grants.....	442,964	302,999	--	900,000	900,000	597,001
Editing & Publication.	160,000	300,000	--	300,000	300,000	--
Bicentennial.....	63,621	200,000	--	200,000	200,000	--
Subtotal.....	745,315	1,247,999	--	2,150,000	2,150,000	902,001
Planning, Development & Evaluation.....	205,570	359,056	--	450,000	450,000	90,944
Subtotal.....	205,570	359,056	--	450,000	450,000	90,944
Total Obligations from Definite Appropriations..	4,055,428	6,425,515	--	13,800,000	13,800,000	7,374,485
Unobligated Balance.....	375,515	--	--	--	--	--
Total Definite Appropriation...	4,430,943	6,425,515	--	13,800,000	13,800,000	7,374,485
INDEFINITE APPROPRIATIONS						
Obligations from Gifts, Donations, & Matching Funds.....	1,398,273	3,549,343[1/]	--	5,000,000	5,000,000	1,450,657
Unobligated Balance..	1,549,343	--	--	--	--	--
Total Indefinite Appropriations	2,947,616	3,549,343		5,000,000	5,000,000	1,450,657
GRAND TOTAL	7,378,559	9,974,858	--	18,800,000	18,800,000[2/]	8,825,142

1/ Does not reflect FY 1970 supplemental indefinite appropriation proposed for separate transmittal.

2/ The Administration's budget lists total obligations of $19,800,000. This figure includes the Endowment's request for a supplemental appropriation of $1,000,000 in Federal matching funds for Fiscal 1970. This sum is shown as an obligation in Fiscal 1971 since it is expected that the supplemental would be passed too late to be obligated in Fiscal 1970.

NATIONAL ENDOWMENT FOR THE HUMANITIES

HIGHLIGHT STATEMENT

This budget proposes definite appropriations of $13.8 million and indefinite appropriations of $2.5 million for matching gifts generated from private sources. The proposed increase in definite funds is $7.75 million over the Fiscal Year 1970 appropriations.

The combination of Federal and private funds envisioned in this budget would give the Endowment a total of $18.8 million. Although $100 million or more would be needed to achieve the goals set by the Congress in support of the humanities, the budget proposed here would enable the Endowment to advance significantly toward those goals.

The Congress made clear the national importance of such progress by declaring, in the Act creating the Endowment, "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 servants."

President Nixon strongly supported this view when on December 10 he said that Federal funds for the humanities "represent a vital part of our commitment to enhancing the quality of life for all Americans." He pointed out that the increased appropriation requested was needed "to redress the imbalance between the sciences and the humanities in colleges and universities, to provide more opportunity for students to become discerning as well as knowledgeable" and "to broaden and deepen humanistic research into the basic causes of the divisions between races and generations, learning ways to improve communication within American society and bringing the lessons of our history to bear on the problems of our future."

In its formative years, the Endowment has used relatively small appropriations primarily to experiment -- to seek effective means of helping humanists, in education, research, and public programs, to improve their contributions to the quality of American life. The results achieved and the experience gained have since justified more substantial investing.

The need for improved financing is particularly visible in our educational institutions. There, even though it is generally recognized that the human problems of our time are only partially amenable to scientific solutions, Federal support for the sciences dwarfs the Government's investment in the humanities. For example, in 1967 the 100 universities and colleges attracting the most Federal aid for academic science <u>each</u> received more than $5.5 million -- almost as much as the Endowment would spend in this

budget for its entire program of educational assistance to colleges, universities, and the schools.

Since 1964, the National Science Foundation has offered development grants to help universities create "outstanding programs of scientific research and education." The recipients of the first thirty grants received $2.4 to $5.1 million each for three years, with the prospect of more for two additional years. The new development grants proposed for programs in the humanities in universities would approximate only one-half to one million each, spread over three to five years, an obviously modest contribution to restoration of the needed balance.

The need for even such relatively small assistance as the Endowment is providing is clearly felt by educators in the humanities and other humanists: During the period Fiscal 1966-1969 the Endowment received 4,658 applications, totaling $128 million in requested assistance. The Endowment was able to respond with fewer than 1,200 awards, totaling $13.4 million in actual obligations. Numerous projects went unfunded despite high ratings from reviewing panels and consultants. During this period, for example, in the Research Division alone, if all proposals rated "good" by the panels of experienced scholars who reviewed them were funded, and if full (instead of only partial) grants were made to all those who received grants, the amount would have been $20.7 million instead of the actual $3.7 million.

Priorities in the Budget

This budget has been developed in light of the decision, reached by the Chairman and the National Council on the Humanities in 1968, to place priority on activities that relate the humanities to contemporary concerns. These concerns include personal judgments as well as community and national problems. The Endowment's object is to increase the usefulness of the humanities to citizens of a democracy in making for themselves the value judgments required for our society.

This objective will not be attained only through scholarship. Teachers can be helped to apply the experience of the past to today's problems more effectively; and wider exposure to elements of the humanities can be offered the public, of all ages and social levels, through films, museums, libraries, extension services, and educational television.

The budget reflects particular concern for quality in humanistic education.

In Fiscal 1969, only approximately 15 percent of Federal outlays for higher education (excluding loans) went specifically for educational program development and instructional costs.

In this budget almost 50 percent of total funds will go for the improvement of humanistic education through universities, colleges, and elementary and secondary schools; one-third of the total will be used for the advancement of knowledge and understanding through the support of research, publications, and fellowships; and the remainder is designated for the extension of access to the uses and pleasures of the humanities through a variety of public programs.

It is evident, of course, that in effect these divisions of effort sustain each other. What the teacher or the designer of a public program imparts depends heavily on the quality of the education he has received. More specifically, the funds allocated within the Endowment's program for research and publication for studies of the era of the American Revolution will provide material of value in the nation's public and educational observance of the Bicentennial of the Revolution. Or to take one particular project, students, scholars, and the public alike will profit from an educational planning grant made to George Washington University to strengthen its attention to the District of Columbia, its immediate neighborhood. (It is interesting to note in this connection that an initial $20,000 grant by the Endowment was followed by a $1 million commitment by a foundation to implement this George Washington University program.)

New or Expanded Program Elements

1. Institutional Grants for Education Development
(FY 1970 $800,000; FY 1971 $3,900,000; increase $3,100,000)

The single largest increase in the educational program is for development grants to help colleges and universities improve dramatically the quality, and the relevance to contemporary concerns, of their instruction in the humanities. These grants, to be obligated in full at the outset but for use over three to five years, will approximate $1 million each for a university and $.5 million for a college. The $3.9 million budget in this category will permit up to six or seven such awards.

The strategy, however, will be to keep the improvements from ending with the termination of Federal funds. In the first year of each grant, the institution will be required to augment Federal support with minor additions from its own institutional or gift funds. The size of the Federal outlay in each subsequent year will decrease while the institution's own contribution will grow. At the end of the grant period, the institution will have had both time and the stimulus of Federal aid for building other sources of support to the point of complete assumption of financial responsibility for the project's continuation.

In the past years the Ford Foundation has offered large grants to be matched by universities, as has the National Science Foundation. Experience indicates that such grants lead swiftly to

accomplishments that might otherwise take years or decades. Universities have accelerated fund-raising drives out of sheer necessity to maintain their new achievements. And the grants have created opportunities for universities to mount fund-raising campaigns with greater frequency, and success, than previously deemed possible.

2. Fellowships for Junior College Faculty
(FY 1970 --; FY 1971 $250,000; increase $250,000)

It is estimated that more than 50 percent of all undergraduate freshmen will enroll in two-year junior or community colleges in 1970-71. There is need for special efforts to make the teaching of the humanities effective in these colleges. The two-year college student, usually looking toward vocational training, is probably the least initially oriented toward the humanities of all college students; yet meaningful exposure to the humanities is as important to him as to anyone else who will exercise the responsibilities of citizenship in our society.

The importance of two-year colleges -- increasing at the rate of 100 a year -- has been noted by this Administration at the highest levels. Speaking at the National Press Club, Secretary Finch stated that the junior college "serves . . . not just one special age group; rather, it may serve any one individual at many different times in his life-work cycle. And it should serve the whole community as a focus for its common efforts -- efforts to build a better community, the better to enhance the lives of its people."

In response to the need and this Administration's concern with it, in Fiscal 1971 the Endowment would provide 24 fellowships specifically for faculty members of junior and community colleges. The grants would give each recipient a period of study to improve himself as a teacher of the humanities.

3. Increase for Research Grants
(FY 1970 $747,999; FY 1971 $1,650,000; increase $902,001)

The amount devoted by the Endowment to research grants (exclusive of grants for editing and publication and for Bicentennial studies) will rise in Fiscal 1970 to about the level existing before a reduction in Fiscal 1969.

The budget for Fiscal 1971 proposes a genuine increase for this basic element in the development of the humanities. The funds will help scholars fill existing gaps in human knowledge, test the accuracy of present and possibly misleading assumptions, and restudy the past with an eye to the changing needs of the present. Just since World War II, scholars' beliefs about medieval history, for example, have undergone thorough revision, and the health of the humanities depends upon rethinking old conceptions and advancing,

through basic research, to new ones.

An increase from a ceiling of $10,000 each to $15,000 is proposed for research projects in the small-grants category; past experience and the projected economic needs of scholars indicate that the previous limit is not realistic. Approximately 60 small grants at the increased rate could be offered under this budget.

The Endowment in the past has given larger grants, usually for collaborative, major research projects involving cooperation between institutions. But projects belonging in that category often received support at the small-grant level because of the Endowment's financial limitations. Yet these larger endeavors are the ones that often increase research capabilities as well as advance knowledge. For example, the development of ways to use computers in humanistic research is a major endeavor that could ultimately save scholars thousands of hours of routine labor. And major editing projects can provide dependable materials for the use of scholars of many kinds. Too often in the humanities research procedures remain little different from those of fifty years ago. The increased budget for research will enable the Endowment to offer at least a few large grants for projects whose success depends upon sustained support over a period of years.

* * * * * *

The items described in this summary of the budget account for most of the increased expenditure proposed. The rest is primarily for increases in the fellowship programs, educational project grants, and expansion of two national programs: the National Humanities Series and the National Humanities Faculty.

I. EDUCATION PROGRAM

(Definite Appropriation)

Activities	1969 Actual	1970 Estimate	1971 Request	Increase or Decrease(-)
1. Institutional Grants				
a. Educational planning grants		$ 160,000	$ 200,000	$ 40,000
b. Educational development grants	$1,252,188	800,000	3,900,000	3,100,000
2. Educational project grants		660,212	1,500,000	839,788
3. Elementary and secondary grants		190,000	350,000	160,000
Total	1,252,188	1,810,212	5,950,000	4,139,788

*Plus $649,801 from gifts and matching

$5,950,000 . . . . EDUCATION PROGRAM
FY 1970 $1,810,212; FY 1971 $5,950,000; increase $4,139,788

Through its education program the Endowment attempts to foster the most important element for progress in the humanities: good teaching. The materials for teaching originate in scholarship, which the Endowment supports by fellowship and research grants. The ultimate beneficiary is the general public, which has demonstrated again and again its disposition to listen to and profit from the insights of the humanities when these are expressed for all to understand. The vital link between is education, at all levels and for all people. The goal of the educational program is to assist those educators in the humanities who are eager to make humanistic scholarship and insights useful in the lives of their students, the coming generations of American citizens. The classroom and what goes on there is the focus of the Endowment's efforts in education.

The Endowment is interested also in extending instructional excellence outward from the traditional centers of humanistic learning to the expanding circumference of education -- to the junior colleges, which in the academic year 1970-71 will be enrolling about half of all entering freshmen; to struggling but potentially excellent four-year colleges; to universities and graduate schools developing programs oriented to the needs of the future; and to the elementary and secondary schools, where early exposure to the humanities can establish meaningful, long-term interest.

1. Institutional Grants

This element of the Education Program for Fiscal 1971 reflects the continued growth of a number of interlocking responsibilities. The primary responsibility is to higher education: the junior colleges, the four-year colleges, the universities, and the graduate schools which educate those Americans whose vocational choices are most likely to lead them to positions of public trust and professional obligation.

Those who are responsible for technical training are the first to insist that technical training alone will not do. Whether he is to be an electrical engineer or a city administrator, the college student of today will be called upon to exercise judgment on matters involving historical, philosophic, and esthetic consideration. Most important, from the colleges will come the teachers whose example is often preeminent in the vital years of the student's development.

Legislation such as the Education Professions Development Act (U. S. Office of Education) provides for the improvement of teaching; help for teachers in the humanities is not excluded. However, EPDA does not provide for any particular emphasis on the humanities, though educational improvement in humanistic fields has been lagging behind the sciences.

The most important specific objective for the Education Program in the area of higher education will be to offer institutional assistance to a number of colleges and universities able to demonstrate that their own efforts have brought them to the point of significant breakthrough in the teaching of the humanities. This assistance will be in the form of grants for (a) planning and (b) development.

a. Educational Planning Grants ($200,000)
FY 1970 $160,000; FY 1971 $200,000; increase $ 40,000

There are a number of institutions whose faculties have recognized the need in these troubled times to take the first and perhaps most important step in institutional renewal by asking themselves the question, "Is what we are doing good enough?" They need the encouragement and support that planning grants can provide, and experience tells us such grants can be effective at the level of approximately $30,000.

Funds are requested in this budget for some ten planning grants. Primarily, they will enable faculty members and administrators to take time for program coordination, for meetings with consultants, and for planning sessions leading to specific programs of improvement.

Examples of Planning Grants:

(1) In 1969, an education planning grant at George Washington University enabled faculty members there to search for ways to strengthen the university's educational involvement in the city of which it is a part. On the basis of the work supported by the NEH grant, a private foundation is giving the University $200,000 a year over a five-year period for support of its urban studies program.

(2) A Fiscal 1970 grant is in process of being awarded to Converse College in Spartanburg, South Carolina, to help plan the expansion of the college's humanities program into a Center for the Study of Contemporary Humanities. The Center will include upgraded undergraduate course offerings, a public lecture series, and interdisciplinary symposia.

(3) Another 1970 grant, in process of being made to Moorpark Community College in California, will be used to investigate and disseminate information about new approaches to humanities instruction in two-year colleges.

b. Educational Development Grants ($3,900,000)
FY 1970 $800,000; FY 1971 $3,900,000; increase $3,100,000

It is vital that educational planning take place within the context of real needs and real possibilities. One of the more important reasons why humanists have not always planned realistically is that often no genuine possibility of financial support was available for implementing good ideas. Development grants, therefore, are also an essential part of the Endowment's educational program for 1971.

Although the Endowment proposed to offer development grants in 1969, and did to some extent in Fiscal 1970, the program contained in this budget is virtually new. Grants made under the present program have not been sufficiently different from project grants to gain the desired attention, and impact. The new grants will involve a broader segment of the institution, encourage bolder thinking, and lead to a greater institutional commitment to significant curricular reform.

Development grants are intended to improve instruction in the humanities from junior colleges to graduate schools, to make such instruction relevant to the present through curricular change, and to demonstrate to institutions not receiving grants that such improvement is possible and valuable.

As part of improving instruction, the grants may be used to develop modern curricula, to strengthen faculties, to cover costs of consultants and travel, or to make needed library acquisitions not adequately provided for by other funds during the development period. These are among major needs reported to the Endowment in response to a recent survey of universities, colleges, and two-year community colleges.

A typical grant would average $200,000 a year for a period of three to five years, just about the minimum needed to assure a significant change in the quality of humanistic instruction in the typical university. Significant cost-sharing would be required on an expanding base, and matching grants would be offered, contingent upon the receipt of private gifts. The ability of such grants to stimulate institutions to expand their own support for such programs has been demonstrated in the NSF institutional development program. In the Fiscal 1970 NSF authorization hearings, agency officials reported that in some of the programs supported, institutions were putting up $35 million or more of their own funds to add to the NSF contributions of $5 million.

The strategy is to arrange the balance between Federal and institutional fiscal support so that at the end of the grant period the entire program would be supported by the institution and continued without further Federal support. The Endowment's contribution would be obligated in full at the start of the first year, but would decrease annually relative to the university's share of the total budget. Such a strategy would insure that developments and improvements made possible by Federal seed money will continue after Federal funding expires.

Examples of Development Grants:

Without being full-fledged development grants as planned in the appropriation request for 1971, the examples given below have -- on a more modest scale -- most of the elements of development grants.

(1) A Fiscal 1969 grant made jointly to Atlanta and Emory Universities is enabling them to develop a cooperative American Studies Program, focusing on social changes and Negro-white relations. The Endowment is providing less than one-third of the total costs of this program which will run to $770,000 over a five-year period.

(2) Another NEH grant, to the University of Nevada, is enabling that institution to conduct a program of interdisciplinary seminars designed to build bridges between and among academic disciplines which are threatening to become more and more specialized. Participating in the seminars, which have as their unifying theme "Philosophy of Inquiry," are undergraduates, graduate students, and faculty members from 15 departments of the university. During the year-long program they will examine the interrelatedness of

humanistic elements in the arts and sciences and their application to contemporary problems in such diverse areas as politics, natural resource development, environmental policy, and technological change. A renewal grant out of Fiscal 1970 funds is presently in process.

(3) A Fiscal 1970 grant, also in process, will help the University of Vermont extend its experimental freshman seminar program (initiated with NEH aid in 1969) into the sophomore year. One of the program's objectives is to demonstrate the value of humanistically oriented higher education to students from disadvantaged backgrounds.

2. Educational Project Grants ($1,500,000)
FY 1970 $660,212; FY 1971 $1,500,000; increase $839,788

In the past, the major impact of the Education Program has come through project grants to institutions. Though relatively small, these grants have helped to draw the attention of humanists to the educational needs and the culture and history of minority groups, and have helped faculties create education programs concerned with war and peace, with problems of urban living, and with ethical problems in a technological culture. The grants have led to development of innovative curricula at all levels and to interdisciplinary and cooperative educational achievements. They have supported research into the ways the humanities are taught. They have helped learned societies strengthen their leadership in relating education experience to today's world.

Examples of Educational Projects Grants:

(a) In response to medical educators' concern that concentration on the technical aspects of medicine leaves students unprepared to deal with ethical and moral situations they will encounter as practitioners, a Fiscal 1969 NEH grant helped the Association of American Medical Colleges survey the current status of humanities studies of medical school curricula in order to identify their strengths and weaknesses. Following up on that survey, a Fiscal 1970 Endowment grant would enable a group of medical educators, administrators, and humanists to hold institutes on specific ways of instilling a more humanistic approach into the study and practice of medicine.

(b) A Fiscal 1970 grant is in process of being made to Navajo Community College in Arizona, the only college on an Indian reservation and the only one controlled by Indian people. The grant will support a five-week institute on Indian art and culture for teachers of both Indian and non-Indian children. During the course of the institute participants will have first-hand contact with Indian people in their homes, schools, and communities.

3. Grants in Elementary and Secondary Education ($350,000)
FY 1970 $190,000; FY 1971 $350,000; increase $160,000

The U. S. Office of Education's authorizations and appropriations for the support of elementary and secondary education center chiefly on compensatory education; Title I of the Act is completely devoted to the problem of disadvantaged students. The recent titles on bilingual education and dropout prevention are almost wholly concerned with the disadvantaged. Even the projects developed under Title III of ESEA have concentrated largely on compensating for educational disadvantages.

The overwhelming problem of the Nation's schools has been one of assuring educational achievement in the face of exploding enrollments and growing demands for services in metropolitan areas. (The demand for funds for police and fire protection, for garbage disposal, mass transportation, welfare -- set against declining tax bases -- has created a nationwide, big-city educational crisis.)

Federal efforts have been concentrated on pumping more money into central city schools, on developing new methods of teaching to replace the rote methods of the past, and on supplying books and materials to school systems which are underfinanced.

With the increasing concern about the low levels of pupil achievement in the "basic"subjects, the great potential of the humanities for enriching the lives of children remains unrealized. To reduce the gap between the potential and the actual the Endowment supports on a highly selective basis a few demonstration projects which promise significant improvement in the teaching of the humanities in elementary and secondary schools.

Examples of Elementary and Secondary Education Grants:

(a) National Humanities Faculty

This "Faculty" is representative of the Endowment's interest in fostering cooperative humanistic endeavors between the schools and institutions of higher education. The National Humanities Faculty arranges for interested and qualified college teachers, professional scholars, and other creative people to work directly with school systems and their teachers on improving instruction in the humanities.

During the academic year 1968-69, the National Humanities Faculty was active in five pilot projects, located in Gainesville, Georgia; Grosse Point, Michigan; Minneapolis, Minnesota; San Francisco, California; and Utica, New York. The excitement and interest generated among schools and teachers by the availability of such assistance has led the National Humanities Faculty Board to expand its program in 1969-70 to 15 school districts in twelve states and

the District of Columbia.

Location of this year's projects, distributed equally among urban, suburban and rural areas, include the following: Lakewood, Colorado; Berea, Kentucky; Towson, Maryland; Concord, Massachusetts; Pleasant Hill, California; Dartmouth, New Hampshire--Lake Sunapee Center for Regional Innovation, Vermont (joint project); Fairfax, Virginia; Los Alamos, New Mexico; McAllen, Texas; Pineville, West Virginia; Council Bluffs, Iowa; Tacoma, Washington; Washington, D. C.; San Francisco, California (continuation); and Gainesville, Georgia (continuation).

The Fiscal 1971 request would help increase the school districts served to 30. To date, this program has been financed through both outright NEH grants and private gifts matched with Federal funds.

(b) Curriculum Development

In Fiscal 1969 the Endowment made two grants for the first-phase development of new humanities curriculum units. One, contrasting the cultures and ideals of Athens and Sparta, promises to make seventh grade social studies both exciting and relevant to the conflicts of today's world. The other project concerns the design of a unit on Mexican-American history and culture. Fiscal 1970 and 1971 funds will be used to complete development and testing of the two units and to support the teacher training needed to implement the new curriculum in regular school settings. These NEH efforts are similar to those supported by the National Science Foundation in the fields of science and mathematics.

II. PUBLIC PROGRAM
(Definite Appropriation)

Activities	1969 Actual	1970 Estimate	1971 Request	Increase or Decrease(-)
1. Public dissemination	$211,370	$ 410,050	$1,000,000	$589,950
2. Regional grants	462,350	407,650	450,000	42,350
3. Museums & historical societies	164,750	331,021	250,000	-81,021**
4. Bicentennial grants	--	200,000	300,000	100,000
Total	838,470*	1,348,721	2,000,000	651,279

* plus $420,839 from gifts and matching.

**This apparent decrease reflects a deferral in the actual obligation of several grants from Fiscal 1969 to Fiscal 1970. The figures for 1969 and 1970 together average just under $250,000 per year.

$2,000,000 . . . . PUBLIC PROGRAM
FY 1970 $1,348,721; FY 1971 $2,000,000; increase $651,279

There is a gap in American society--as fundamental, intractable, and increasingly wide as the generation gap.

The gap is in attitude toward knowledge, toward education. In any society in which a few people place an extremely high value on the uses of knowledge, and most people do not (outside of their businesses), it is no surprise to find a breach in communications.

It is not an educational gap. It is rather an "education-orientation" or "knowledge-orientation" cleavage. It is based not on educational disparity, in the number of years particular people spent in schools; additional formal education would not change these attitudes. It is caused by what happens to the big majority of people during "school," whether they ended their formal education after eight or ten years, or put in time at junior colleges or four-year colleges.

Much of our population considers formal education as a chore and a bore, borne as a necessary evil prescribed by law, or as a way to get a job or stay out of the army. Many people, if they look back at all, regard with incredulity the little introductory talks on "Why we study literature" (or history) and the forced essay on "Why I enrolled in this course."

However, there is also a small minority, scholars and laymen, who have been inspired by their formal education. They have seen the relevance of the past to the present; they have been motivated to apply their understanding of the humanities to the solution of the problems of their communities, their nation, and their personal lives.

One mission of the Endowment is to help this minority become a significant segment of our population. Toward this, the Education, Research, and Fellowship Programs contribute by increasing knowledge and improving teaching. Over the years, success in these efforts will diminish the gap.

But the task of helping large numbers of the general public to use the humanities, and also to find in the humanities an alternate way to enjoy themselves, is centered in the Public Program.

Public Dissemination ($1,000,000)
FY 1970 $410,050; FY 1971 $1,000,000; increase $589,950

There exists a multi-million audience interested in extending its knowledge beyond what it learned in school or college. It seeks knowledge for the pleasure such knowledge brings and for the uses

to which it can be put. Its interests are diverse: art and history, literature and design and social planning, government and archaeology, to name a few.

The composition of this audience is as diverse as its interests. It is found in a large proportion of the 11-million membership of the General Federation of Women's Clubs; in Y classes; in Rotary and in P-TA's; in the educational programs of the AFL-CIO; in the viewers of documentary programs of commercial television and of the schedule of educational television. It is not confined to any segment of our society or to any one geographic or demographic section of our country.

Reaching this audience effectively is the most rewarding goal toward which the Endowment can strive. Potentially--because of its size and diversity--it represents the greatest opportunity for the Endowment.

At the same time, it is the most difficult to attain. The problem of how to make the humanities available to these adult audiences in meaningful ways calls for constant experimentation and venturesome probes.

For example, there is the National Humanities Series which, after almost a year in planning, gets underway in February 1970. The thesis underlying this project is that there exist in many communities in this country culturally inactive but latently interested people who do not have ready access to universities, museums, or other cultural centers.

The proposition is that--if experienced, exciting speakers can be brought to these communities to work with these people--a great deal can be accomplished. The Series will make teams of humanists available to such groups as men's service organizations, churches, community colleges, and industrial organizations. Such topics as "America's Frontiers," "The Meaning of Revolution," and "The Generation Gap" will be presented in a manner that will enable citizens of a democracy to utilize the humanities.

Thirty communities have been selected for the first year. The number of people who will come into direct contact with these speakers can only be estimated. It may be as few as 30,000 to 40,000 or as many as 100,000-125,000. Depending on the results, this project could be usefully doubled or tripled in Fiscal 1971 provided it develops as successfully as anticipated.

Another possibility is to help the National Gallery of Art purchase and disseminate the "Civilisation" film series of Sir Kenneth Clark which has been attracting turn-away audiences in Washington. This could be made available to ETV, to schools, to museums throughout

the country.

Still another possibility exists in a film series being explored for broadcast over nationwide Educational Television stations. This series would consist of six 3-hour films, to be broadcast in prime time (8:00 - 11:00 p.m.), one in 1971, another in 1972 and one each year through 1976. Each program would celebrate an event in our nation's history, would bring to life the people who made our history, and expose to large mature audiences the ideas and conflicts which are a part of our lives today. With the same planning and expertise which has made Sesame Street such a success--a production to which the Endowment contributed in Fiscal 1968--such a series could attain large viewing and increased understanding. Funds are included in the Fiscal 1971 request to develop a number of pilot films to test the feasibility of this project.

Regional Grants ($500,000)
FY 1970 $407,650; FY 1971 $450,000; increase $42,350

The purpose of projects undertaken through this element of the Public Program is to create opportunities for specific, local audiences drawn from the general public to continue their education in the humanities.

The pattern of these projects does not limit the audiences to any single sector of the public. It can attract those who were forced to cut their education short of their aspirations. Some projects will draw primarily college graduates. The horizons of professional people in particular, whose post-graduate search for knowledge often has been confined to their specialties, will be broadened through participation in such projects.

Non-profit organizations and combinations of them are eligible for grants: libraries, community colleges, museums, university extension services, historical societies. Ir addition to having their own resources to draw on, the institutions creating these forums will be supported -- where applicable -- with material created in the Endowment's mass-media undertakings.

Example: In the summer of 1969, South Dakota State University brought in 150 adults from throughout the State for a week's immersion in the pioneer and Indian history and culture of the area, and its influence on strengths and stresses in contemporary society in the State. Through lectures, films, tours, and discussions, there was opportunity to grasp or reconsider insights from the history, art, literature, and cultural contrasts of the area.

Another example: In conjunction with grants from four other institutions, an Endowment grant helped the Field Museum of Chicago present this past year an exceptional exhibition on Mexican-American

history, art, and culture. This was done in such a way as to permit better cross-cultural understanding among the thousands of Americans of all cultural and ethnic heritages, including many of the 200,000 Mexican-Americans in the Chicago area.

Another example is a 1970 grant which is being made to the Hampton Association of Arts and Humanities for a community-involvement archaeological project which will reveal through historical research and site excavation the progressive development of the city of Hampton, Virginia, the oldest continuous English-speaking settlement in America. Many local agencies and organizations, including the Hampton Redevelopment and Housing Authority, community action agency, city schools, and historical society, will participate in the project. During the summer, the project will train and employ high school and college students. As information about Hampton's past is uncovered during the course of the excavations, it will be disseminated to the community and local media through photographs, slides, tapes, and special exhibits.

The Fiscal 1971 request will support a minimum of 10 regional projects. This number can -- and most probably will -- be increased by gifts matched with Federal funds. These projects are in a very real sense "demonstration" projects. Clearly, no project can be funded in perpetuity -- no matter how successful. The challenge to the Endowment is to stimulate replication of outstanding undertakings. As plans for dissemination are developed through the Office of Planning and Analysis, and as funds are made available, the impact of these regional projects will be widened.

A note on State Councils:

To encourage greater local initiative in developing and conducting humanities programs for the public, the Endowment will explore in Fiscal 1971 ways of setting aside funds for organizations operating at a State or regional level. Assuming adequate funds, the question is can such set-asides create activities which would not be developed through the existing method of direct grants to institutions of higher learning, to consortia of such institutions, to museums or libraries, to non-profit organizations.

To test the feasibility and value of adding such a grant-in-aid element to the Endowment's program, three kinds of probes are currently visualized: one is to work through a regional consortium of several States; another is to work on a state-wide basis in a State where an Arts and Humanities Council currently exists; a third is to investigate the establishment of a Humanities Council in a State where none currently exists.

Through consultation with appropriate authorities and individuals concerned with the development and dissemination of humanistic knowledge, proposals might be entertained against an allocation of funds which could be realistically practical in terms of a nation-wide program. Another approach might include plans for the region or State to review and make recommendations on proposals falling within a to-be-determined category -- with or without a set dollar figure.

Museums and Historical Associations ($250,000)
FY 1970 $331,021, FY 1971 $250,000; decrease $81,021*

The nation's museums and historical societies are rich repositories of human history. NEH, through its regional grants described above, helps these organizations develop new or improve existing displays in order to make them more attractive and accessible to the general public.

The full exploitation of museum and historical society resources is presently inhibited, however, by a shortage of trained professionals. The Endowment, therefore, began three years ago to support university-based programs preparing persons for professional careers in museums. The need for this support, which is not available under other Federal programs, has not lessened.

Fellowships are needed for graduate education of students who can later assume imaginative and productive roles in carrying forward the museum mission. Fellowships supported by the Endowment put students in programs that combine sound academic education in history, archaeology, and other fields, with meaningful and practical experience in the phases of actual museum operation.

The Fiscal 1971 budget request will continue the museum and historical society personnel training program at the 1970 level. The $250,000 requested will support 26 fellowships for training at the graduate level and two seminar programs providing in-service training on improved management and program techniques.

Bicentennial Projects ($300,000)
FY 1970 $200,000; FY 1971 $300,000; increase $100,000

On July 4, 1966, the Congress passed Public Law 89-491 establishing the American Revolution Bicentennial Commission. Three year later in 1969, this was extended by the Congress. Under Section 4(C) the

* This apparent decrease reflects a deferral in the actual obligation of several grants from Fiscal 1969 to Fiscal 1970. The figures for 1969 and 1970 together average just under $250,000 per year.

Chairman of the National Endowment for the Humanities was "authorized and requested to cooperate with the Commission especially in the encouragement and coordination of scholarly works and presentations focusing on the history, culture, and political thought of the Revolutionary War period." In keeping with this mandate, the Endowment will support programs which contribute to the public observance of the Bicentennial.

For example, in Fiscal 1970, a grant was made to the National Council for Social Studies for the design of a special course providing 25 hours of instruction on the American Revolution. The course would incorporate a variety of exciting learning aids, such as films and recordings. Its use would be primarily at the junior-high level, but the quality and degree of sophistication sought would make the course potentially attractive for many kinds of groups and institutions with educational programs. Also, its components could be combined in smaller and differing packages in order to be used at different levels and with different groups.

If the design proves successful, the Endowment would be able to support with Fiscal 1971 funds the actual production and dissemination of prototype materials for the course and to undertake similar ventures dealing with other aspects of the Revolutionary period.

III. FELLOWSHIP PROGRAM
(Definite Appropriation)

Activities	1969 Actual	1970 Estimate	1971 Request	Increase or Decrease(-)
1. Fellowships & summer stipends for younger scholars	$ 903,775	$ 859,527	$1,500,000	$ 640,473
2. Senior fellowships	--	600,000	1,000,000	400,000
3. Negro college faculty development	110,110	100,000	200,000	100,000
4. Fellowships for studies in selected fields	--	100,000	300,000	200,000
5. Junior college faculty fellowships	--	--	250,000	250,000
Total	1,013,885	1,659,527	3,250,000	1,590,473

$3,259,000 . . . .FELLOWSHIP PROGRAM
FY 1970 $1,659,527; FY 1971 $3,250,000; increase $1,590,473

A fellowship purchases time for its recipient -- time to catch up with what is happening in his field; time to investigate, to reflect, to develop and frequently to record new insights, for his benefit and for the benefit of others.

Although the fellowship device for developing the individual skills and capabilities of teachers and scholars is a tried and established one, humanists have had few sources of support for their development. Many universities and colleges, realizing the value of free time, do offer sabbaticals, but generally only to a small number of teachers annually and then for only half a year, or for a full year at just half-pay.

When the Endowment first was established, there were fewer than 500 post-doctoral fellowships annually available in the humanities. More than six times as many were awarded in the sciences, spread over a constituency about the same size as that in the humanities. The Endowment's fellowship awards (157 in 1967, 104 in 1968, 85 in 1969, and an estimated 130 in 1970) have been small in number but, because the number of other post-doctoral fellowships available in the humanities has not increased, these awards have been significant to humanists.

In Fiscal 1971 the Fellowship Program will continue to offer fellowships and summer stipends for "younger scholars" and development grants for Negro college faculties. Fellowships for senior scholars, eliminated for lack of funds in Fiscal 1969, were reinstated in Fiscal 1970 and are being continued. Funds for Fellowships for Studies in Selected Fields, first offered in Fiscal 1970, would quadruple. And attention will be directed to junior college needs through fellowships for junior college faculty members.

1. Fellowships and Summer Stipends ($1,500,000)
   FY 1970 $859,527; FY 1971 $1,500,000; increase $640,473

   a. Younger Scholars' Fellowships

This program is intended to serve the needs of the whole universe of young humanists in all types of institutions as well as those outside the academic community. In 1969-70 there are an estimated 54,000 full-time faculty members in the humanities in the nation's colleges and universities who are less than 40 years old. We consider that at least 10 percent of this number could make effective use of an Endowment fellowship. To support this many fellows (5,400) over a six-year period would require 900 awards annually. These NEH fellowships would be in addition to the 450 awards available from other sources for this

group of humanists. The 1970 appropriation is supporting 80 awards.

In Fiscal 1971, awards to "younger scholars" will continue to be limited to persons under 40; many in this group are not yet eligible for sabbaticals.

The experience of the last three years indicates that by limiting applications to one nomination per institution, the Endowment may expect to receive approximately 400 applications per year in this program. Even at the proposed level, every applicant must be nominated by his institution; thus, he is already screened in a competition on his own campus. In the immediate future, the Endowment will be offering slightly more than one award for each four applications from this pre-screened group of professional scholar-teachers. The Fiscal 1971 request would enable the Endowment to make 143 younger scholar awards.

b. Summer Stipend Program

Eligibility for these awards is the same, but they offer support only for a summer rather than for portions of the academic year. These awards have brought attention in the universities to the need for summer support for scholar-teachers, for administrators have found themselves with many worthy candidates besides the one each university could nominate. Approximately 100 awards are being made in Fiscal 1970. In Fiscal 1971, 140 summer stipends may be granted.

2. Senior Fellowships ($1,000,000)
FY 1970 $600,000; FY 1971 $1,000,000; increase $400,000

The design of the Senior Fellowship program is to serve the mature, established humanist, in and out of academic life, who has done significant work and can be expected to do more. The optimum level for this program would be 200 awards, which would permit a highly selective program, but one which would reach, over a ten-year period, five percent of the approximately 40,000 humanists in the senior professorial ranks in the nation's four-year colleges and universities.

With the reinstatement of the Senior Fellowship program in Fiscal 1970, 327 applications were received; however, available funding permitted only 40 awards.

From previous experience, the Endowment anticipates no fewer than 600 applications for these awards this coming year. To meet the need in full would require several hundred Senior Fellowship awards; however, the number planned -- 62 at the proposed level of funding in Fiscal 1971 -- will have substantial impact. As has been true with awards to younger scholars, emphasis will be put on projects that contribute to better understanding of matters of current national concern; and awards will be made to established scholars who have indicated interests not only in specific scholarship but in the problems of higher education and effective teaching.

3. Negro College Faculty Development ($200,000)
FY 1970 $100,000; FY 1971 $200,000; increase $100,000

A major segment of American higher education did not receive any benefit from the fellowship programs until 1969. For a variety of reasons, the more than 100 colleges with predominantly Negro enrollments generally did not receive, nor nominate faculty members for, these awards. In small departments at these schools highly qualified teachers could not be freed of teaching obligations for even a summer. In other instances, because of a lack of scholarly training, large numbers of faculty members could not compete with nominees from other institutions in the country.

In Fiscal 1969, grants for development of faculties specifically at Negro colleges were first instituted. Sixteen awards were made at a total cost of $110,000. In Fiscal 1970, 15 or 16 awards will be made.

Projects include study programs in linguistics, Negro history and literature, and other subjects, conducted on campus with the assistance of visiting experts. Other projects involve cross-disciplinary curricular development, in which representatives from all humanities departments participate, often with the assistance of experts from major institutions in the region. Other projects are providing faculty members with short periods of advanced training at nearby universities.

Curricular changes can be developed with such support. Faculty members can gain skills to meet special needs of students who often come from poorly financed high schools. Courses in Afro-American studies can be offered in response to the just requests of students. Because these projects are in most part conducted on campus, many faculty members not participating directly benefit from contact with participating colleagues.

In helping faculty members at these institutions develop their capabilities, the Endowment also helps compensate for the shortages caused by the faculty raiding of other colleges and universities seeking to integrate their own faculties or to add teachers of Afro-American studies.

It is anticipated that no fewer than 60 institutions will apply for these awards in Fiscal 1971, and two-thirds of these will submit programs worthy of support. It is estimated that awards will average $10,000 each, and 20 grants are expected to be made.

4. Fellowships for Studies in Selected Fields ($300,000)
FY 1970 $100,000; FY 1971 $300,000; increase $200,000

Ten awards were offered in Fiscal 1970 to younger scholars interested in Afro-American studies. These awards were established to make up for the shortage of well-prepared scholars and teachers in this

increasingly important field. There is need to increase the number of awards to teachers in Afro-American studies, and also to provide block fellowships in Mexican-American studies, American Indian studies, and other subfields for which there is demand, but at present not enough expertise. For example: Fellowships would be offered for study of the ethical implications of the new discoveries in biology and medicine; political and social science studies, tending toward the quantitative, have to a large degree neglected the moral and philosophic dimensions of such discoveries. These fellowships would be awarded to counterbalance the present trend.

These fellowship awards are for $9,500, including a "cost of education allowance" of $2,000 for the host institution. The Fiscal 1971 request will support 31 such awards.

5. Junior College Faculty Fellowships ($250,000)
FY 1970 ---; FY 1971 $250,000; increase $250,000

This program will be conducted for the first time in Fiscal 1971. The fellowships will enable faculty members at junior and community colleges to spend an academic year in study for the purpose of improving their teaching.

The average cost per fellowship would be $10,500, of which $1,000 would be a "cost of education" payment to compensate the participating institution for its expenses. In Fiscal 1971, 24 such fellowships will be awarded.

It should be noted that in the academic year 1971-72, the junior colleges of this country will enroll approximately 2.5 million students, more than half of all students enrolled as freshmen or sophomores in colleges in the country. A large number of these students will terminate their education at the junior college level. The quality of education they receive in the junior colleges will affect the roles they play in their communities and their professions, and this will be influenced to a great degree by the quality of teachers in these institutions. The Endowment's regular fellowship programs have been open to faculty members of junior colleges, but few have applied for awards that appear aimed at a more scholarly population, and few junior college teachers have in fact competed successfully.

It is appropriate, therefore, given the somewhat different kind of education in which junior college faculty members are involved, that a separate program be established to allow them to increase their knowledge and teaching ability in the humanistic disciplines, and enrich their own offerings to students.

IV. RESEARCH AND PUBLICATION

(Definite Appropriation)

Activities	1969 Actual	1970 Estimate	1971 Request	Increase or Decrease(-)
1. Support of research				
a. Large grants	$ 78,730	$ 445,000	$ 750,000	$ 305,000
b. Small grants	442,964	302,999	900,000	597,001
2. Editing and publication grants	160,000	300,000	300,000	--
3. Bicentennial grants	63,621	200,000	200,000	--
Total	745,315*	1,247,999	2,150,000	902,001

*Plus $277,633 in gifts and matching.

$2,150,000 . . . . RESEARCH AND PUBLICATION
FY 1970 $1,247,999; FY 2,150,000; increase $902,001

A prime purpose of the Endowment's Research Program is to fill the gaps -- some small, some large -- in our knowledge of the past. Humanistic knowledge is not something set in concrete, complete when finished once and for all. The discovery of new knowledge invariably throws new light on established knowledge and received opinion, which must be revised and adjusted to take account of the new. This process of renewal is necessary even without the impetus of new discoveries. If the past is to live and give guidance, as it can and must, to our conduct in the present, each generation of humanists must consider it anew by the light of their own time, seeking in it perspective on the questions of the day and insights into the problems faced by their peers and students.

While research is the work of scholars, scholarship as supported by the Endowment has significance for a universe vastly larger than the one comprising only scholars. The truths uncovered and the understanding developed become in time the tools of teachers in schools, in colleges, and in universities. Research also helps create new methods for teaching and revise old ones. It makes available material for the mass media: for example, the discovery of the tomb of Tutankhamen and the Dead Sea Scrolls. It enlarges man's view of his world and helps him relate his life to it and to his fellows.

Grants awarded under the Endowment's Research Program go to individual scholars and other practitioners of the humanities, and to institutions of higher learning and to consortia among them. These

grants often include matching provisions to generate support from philanthropic foundations or private individuals.

Strict limitations on the Endowment's budget in recent years necessitated deep cuts in the research and publication budget. In fact, funds available for research grants in Fiscal 1970, although greater than last year, are still somewhat below the 1967 budget. In the past, this stringency has forced the Research Division to limit most grants to $10,000 and to turn aside many valuable humanistic projects which needed funding on a large scale and for a period of years. The increase requested for research and publication in Fiscal 1971 will permit raising the $10,000 ceiling for small grants to a more realistic one of $15,000. And more grants will be offered. Such an increase will bring the Endowment's support nearer to fulfilling the needs foreseen when it was established four years ago.

1. Support of research

The request for $1.6 million for research grants more than doubles the Endowment's support in this area in Fiscal 1970. However, in comparison with the $2.4 billion which the Federal Government spent on all basic research in Fiscal 1969 -- $60 million last year for research in the social sciences alone -- $2 million in Federal support spread across the whole range of humanistic research, from archaeology to linguistics, is barely noticeable. In Fiscal 1969, the Division of Research and Publication was able to fund only one of every six applications for research grants. Even the fortunate few received outright grants amounting to only about half of the original funding requests. And only four grants were in excess of $10,000. Such sums are far below the clear needs of humanistic research.

a. Large Grants ($750,000)
FY 1970 $445,000; FY 1971 $750,000; increase $305,000

Action by the Endowment in this area is urgent. For three years now, budgetary stringencies have forced discouragement of applications for large-scale projects, such as vital and promising computer applications in humanistic research. In many respects, humanistic research remains in a "horse-and-buggy" stage because of humanists' lack of success in competition with natural and social scientists for the funds needed for such projects. No other area of humanistic research needs to be pushed and supported more vigorously than the development of far-reaching and beneficial changes in methods both of acquiring new humanistic knowledge and of providing for its easy and efficient dissemination.

For example: The Endowment is currently reviewing a proposal from a learned society for a six-figure grant in support of a pilot project to feed into computers both bibliographic and substantive information from such humanistic fields as literature, medieval

studies, and Asian studies. These fields have been chosen not only for their intrinsic importance, but also because each of them presents scholarly and technical problems which, once solved, will make possible computer projects covering all humanistic knowledge. At present, unless gifts are received to help support this project, it will in all likelihood not be funded. Should the proposed appropriation for Fiscal 1971 be granted, however, this valuable project could be undertaken.

Projects such as this are designed to make possible nationwide use of their facilities through remote terminal installation. They promise immense savings in scholarly and professional time and effort, and will have technical application in the humanities far outside the immediate fields of focus.

b. Small Grants ($900,000)
FY 1970 $302,999; FY 1971 $900,000; increase $597,001

Increased support is also necessary for "Small Grants" -- outright research grants in the neighborhood of $15,000. In the last fiscal year, the Division reviewed 329 applications for such grants; it was able to support (at reduced amounts) only 59. In the current fiscal year, we anticipate receiving more than 400 such applications, and the pace at which they have been received during the summer of 1969--twice as fast as in the previous year--suggests that the figure could in fact be much higher.

The Small Grants program is administered in such a way as to submit all applications to intensive and searching scrutiny by scholars and, in the case of many applications, by other qualified persons. Every application is reviewed by at least three qualified reviewers and, in certain cases, more. Following this review, applications are considered by a panel of outside consultants, who recommend funding or not funding each proposal after reviewing a group of applications in its entirety. As a final step, each application is acted upon by the National Council on the Humanities.

Budgetary stringencies previously have forced us to limit outright grants only to projects rated "superior" and recommended for funding with first priority. Panelists have consistently recommended funding for "good" projects when money was available, and numbers of "good" projects have been funded on a matching basis. The requested increase for Small Grants would permit us to make outright grants to all projects deemed "superior" and to about half of those judged "good," up to an estimated total of 60.

Projects funded with Small Grants have ranged from the traditional in research to the venturesome, from archaeological digs to research into race relations in urban ghettoes and studies of town growth and cultural vitality.

Examples: The Endowment began supporting two years ago a project to translate and prepare for publication certain Egyptian Coptic manuscripts of the period 200-400 A.D. These manuscripts throw an entirely new light on the early history of Christianity and have been described by one scholar as "more important to learning than the Dead Sea Scrolls."

An Endowment grant in Fiscal 1969 contributed, along with funds from several other organizations, to Dumas Malone's multi-volume work on the life of Thomas Jefferson. The latest in the series, Jefferson The President, appeared this past year and has been praised as a model of both solid scholarship and high readability.

With Fiscal 1970 funds, the Endowment is helping scholars continue or undertake a variety of efforts, such as those to prepare a much-needed bibliography on modern Chinese society, to prepare the first comprehensive historical atlas of South Asia, to develop State programs for historic preservation, to study the development of an early urban political machine, to conduct an oral history project on the career of the former Chief Justice Earl Warren, and to study the use of open space in urban housing abroad.

The establishment of the Endowment raised hope and expectation in the humanistic community that its needs ultimately would be met as substantially as the needs of scholarship in the natural and the social sciences were already being met. It is important that fiscal stringency not frustrate these hopes. The recommended increase in the budget for Small Grants will help satisfy those long-deferred expectations.

2. Editing and Publications ($300,000)
FY 1970 $300,000; FY 1971 $300,000; no increase

This appropriation helps implement the Endowment's legislative mandate to support the publication of scholarly works in the humanities. Funds for these purposes in Fiscal 1971 are requested on the same level as in the present fiscal year.

Currently, the Endowment is supporting only one project of this kind -- a large-scale project to produce accurate, definitive, and readily available texts of the writings of great American authors of the 19th Century. The project is sponsored by the Modern Language Association of America.

Ultimately, this effort will produce 162 volumes, some containing writings rarely or never before published, of the works of Stephen Crane, Ralph Waldo Emerson, Nathaniel Hawthorne, William Dean Howells, Washington Irving, Herman Melville, and Henry David Thoreau, as well as Mark Twain and Walt Whitman. The Center, relying on the collective knowledge and judgment of highly qualified specialists, has set high standards of editorial excellence. When the task is completed,

Americans -- as well as the growing number of foreigners interested in our literature -- will for the first time have available accurate and annotated texts of these celebrated authors.

Other editing and publication projects of a smaller though important variety would qualify for Endowment support were funds available. In recent years, we have had to turn away, or fund inadequately, requests for important publications in philosophy, in the history of higher education and of education generally, in literature, and in art. At the moment, we have before us recommendations, made in a study commissioned by the Endowment, about the financial needs of university presses publishing scholarly works. Additionally, we are considering the advisability of small grants to support publication of scholarly monographs in humanistic fields, the financial burden for which now rests on the university presses and on young scholars in their journeyman phase, neither of whom are well prepared to bear those burdens. Few other Endowment projects are so much needed and would be so warmly welcomed by the humanistic community.

3. Bicentennial Grants ($200,000)
FY 1970 $200,000; FY 1971 $200,000; no increase

In creating the Bicentennial Commission, the Congress specifically instructed this Endowment to contribute to the celebration of our national bicentennial in 1976. Last year (Fiscal 1969), we committed $63,600 outright and $114,000 matching to eight Bicentennial projects; the year before, $37,000 outright to three projects. For Fiscal 1970 $200,000 is budgeted for Bicentennial projects; a similar amount is requested for Fiscal 1971.

With these funds the Endowment, in consultation with established authorities in the field, is seeking to fill serious gaps in the history of the War of Independence.

Already, the Endowment is supporting the preparation by scholars at the University of Virginia of a complete and accurate edition of the papers of George Washington. Celebrated as "the father of our country" is, what scholars and the public know of him has remained limited by lack of ready access to his complete papers and correspondence. These papers will certainly be of value in the Bicentennial.

Other serious gaps exist on the foreign side of the picture and can be filled only by work in the French, Spanish, Wurttemberg, and Dutch archives. Additionally, publication of the papers of such individuals as General Sir William Howe, Admiral Lord Howe, General Sir Thomas Gage, and Baron von Steuben, among others, is of importance. A study of the leadership, organization, and administration of the Continental Army is greatly needed, for the last such study is fifty years old and thoroughly out of date. More important, perhaps, is the need to support serious research by qualified historians and

political scientists on the intellectual, philosophical, and institutional background from which flowed the ideas that first led the colonists to break with England and, ultimately, to create the political, legal, and social institutions of a new nation.

All of these projects are long-term ones and many of them require detailed work in archives and libraries both here and abroad. The six years remaining until 1976 is little enough time in which to complete this work; a start must be made in this fiscal year if we are to have available by then the new knowledge and the renewed understanding necessary to bring this great episode in our own history and in world history into clear perspective.

V. PLANNING, DEVELOPMENT AND EVALUATION

(Definite Appropriation)

Activities	1969 Actual	1970 Estimate	1971 Request	Increase or Decrease (-)
Planning, development, evaluation, dissemination	$205,570*	$359,056	$450,000	$90,944

* Plus $50,000 in gifts and matching.

$450,000 . . . . PLANNING, DEVELOPMENT, AND EVALUATION
FY 1970 $359,056; FY 1971 $450,000; increase $90,944

It is essential that the programs of the Endowment do not become frozen into set patterns. It is all too easy -- and bureaucratically tempting -- to say, "This is what we will do. These are the program areas through which we will do it." To keep the Endowment open to new ideas, the Office of Planning and Analysis (OPA) was created with the responsibility for three broad areas: the planning and development of new programs, the evaluation of these and other representative programs funded under the Endowment's four divisions, and the dissemination of information about exemplary programs in the humanities.

The first two activities are provided for by recent Appropriation Acts which state "not to exceed three percent of the funds appropriated to NEH for the purposes of Section 7(c) shall be available for program development and evaluation." The third activity is covered by Section 7(c)(4) of P.L. 209 (as amended by P.L. 348) which authorizes the Endowment to "foster the interchange of information in the humanities."

1. Program Development

To explore new avenues for the effective use of the Endowment's funds, OPA seeks promising proposals which may not seem to fall into any specific program category or which, initially, may overlap the

missions of the established programs.

The National Humanities Faculty is a project which began as an experimental undertaking in the Office of Planning and Analysis. Another experimental project organized by OPA in Fiscal 1970 is a probe in which a "humanities agent," concentrating his work on a limited universe, would seek to make the activities of historical societies and museums more relevant to their communities.

2. Evaluation

Sound programming depends on critical evaluation. It is not enough to have a grantee report enthusiastic approval of his efforts. Just as applications are reviewed by external panels of experts, so the results of grants require external, expert review. Sometimes organizations are given contracts or grants for systematic evaluation. Sometimes individual consultants are retained to visit the project and report on the development and/or effectiveness of a particular activity supported by the Endowment. The Office of Planning and Analysis arranges for such evaluations.

Two major activities planned for this coming year are (1) the design of an information retrieval system which will provide project data needed by the Endowment, the Bureau of the Budget, and the Congress and (2) the development of a general evaluation framework, including procedures and criteria, for assessing the impact of NEH programs.

3. Interchange of Information

By disseminating information about successful projects to potential users, the Endowment helps organizations with humanities programs learn from the experience of others. By this means the Endowment increases the impact of its efforts and maximizes the uses of its funds.

In Fiscal 1970, NEH, through the Office of Planning and Analysis, created a newsletter, Humanities, which will inform individuals and institutions engaged in educational and public humanities programs -- schools, colleges, libraries, museums, educational television stations, scholarly organizations -- about successful innovations in the humanities which they may wish to replicate. It is also anticipated that the newsletter will encourage the development of new and imaginative proposals.

VI. MATCHING FUNDS
(Indefinite Appropriation)

(FY 1970 $1,774,572[1/]; FY 1971 $2,500,000; increase $725,328)

One of the most attractive parts of the Endowment's budget is its provision of funds with which to match gifts. It is through that provision that private participation can be generated in meeting needs with which government is concerned.

Through matching grants, the Federal role is to provide "seed money." For instance, an outright grant of $15,000 in support of a publication of importance to archaeology was coupled with an offer of $45,000 more, three times the outright grant, if another $45,000 could be raised privately for the project. The matching offer was met, an advance in scholarship will result, and private support was generated to a degree not otherwise likely.

Matching funds have an additional virtue: When judiciously combined with outright grants and arranged in such a way that the matching funds increase year by year while the outright funds diminish, a matching grant often encourages institutions to exploit to the fullest their fund-raising capacity and puts them in a position where at the end of a grant they may conceivably carry things on by themselves.

The offer of gifts to the Endowment has increased steadily from $100,000 in Fiscal 1967 to approximately $1.3 million in Fiscal 1969. The matching appropriation for Fiscal 1969 was only $500,000, far less than enough to capitalize on the successful stimulation of private support. A request for supplemental appropriations went forward in the Fall of 1968, and an additional $1.5 million was finally appropriated -- after Fiscal 1969 had ended. Although the Endowment had only two months to raise additional money, it came in very rapidly with the result that gifts and matching amounted to an expansion of the program of the Endowment by $2,524,946.

The Fiscal 1970 indefinite appropriation was $1 million. As of February, 1970, with over four months yet to go before the end of the fiscal year, gifts either in hand or pending amount to nearly

1/ Includes $774,572 committed to match gifts received prior to August 31, 1969, authorized by FY 1969 supplemental appropriated in July 1969; excludes pending supplemental of $1 million.

$2 million. These are distributed as follows (in thousands):[2/]

Education	$1,174
Public Programs	72
Research and Publication	361
Planning & Development	325
TOTAL	$1,932

A request for a supplemental appropriation of $1 million is presently pending.

The indefinite appropriation requested for Fiscal 1971 will enable the Endowment to match up to $2.5 million in private gifts. If citizen participation in meeting the needs of the humanities is truly encouraged, as the President has indicated it ought to be in every possible area, the Endowment's matching-fund opportunities must be supported beyond the previous levels.

2/ Excludes $775 thousand in gifts or pledges received prior to August 31, 1969.

MEMBERSHIP OF NATIONAL COUNCIL FOR THE HUMANITIES

Mrs. HANSEN. Please insert in the record at this point a listing of the membership of the National Council for the Humanities.

Mr. KEENEY. We have got our new members by the way and they are good.

(The information follows:)

NATIONAL COUNCIL ON THE HUMANITIES

Dr. Barnaby C. Keeney, Chairman

TERMS EXPIRING IN 1972

Mr. Edmund F. Ball, Chairman of the Board, Ball Corp., Muncie, Ind. 47302
Mr. Robert T. Bower, director, Bureau of Social Science Research, Inc., 1200 17th Street, NW., Washington, D.C. 20036
Dr. Kenneth B. Clark, president, Metropolitan Applied Research Center, Inc., 330 West 58th Street, New York, N.Y. 10019
Dr. Gerald F. Else, Department of Classical Studies, the University of Michigan, Ann Arbor, Mich. 48104
Mr. Paul G. Horgan, Center for Advanced Studies, Wesleyan University, 75 Pearl Street, Middletown, Conn. 06457
Dr. Albert William Levi, professor of philosophy, Washington University, St. Louis, Mo. 63130
Miss Soia Mentschikoff, professor of law, University of Chicago, Chicago, Ill. 60637
Dr. Charles E. Odegaard, president, University of Washington, Seattle, Wash. 98105

TERMS EXPIRING IN 1974

Mr. Jacob Avshalomov, conductor, Portland Junior Symphony, 222 SW., Harrison Street, G–7, Portland, Oreg. 97201
Mr. Allan A. Glatthorn, 739 Crescent, Glenside, Pa. 19038
Mr. Henry Haskell, Summit House, Apartment 306, 750 West 47th Street, Kansas City, Mo. 64112
Dr. Mathilde Krim, Sloan-Kettering Institute for Cancer Research, 410 East 68th Street, New York, N.Y. 10021
Reverend James Wm. Morgan, First Methodist Church, P.O. Box 777, Denton, Tex. 76201
Reverend Walter J. Ong, S.J., professor of English, St. Louis University, St. Louis, Mo. 63103
Mr. Eugene B. Power, 300 North Zeeb Road, Ann Arbor, Mich. 48103
Professor Robert Ward, Department of Political Science, University of Michigan, Ann Arbor, Mich. 48104
Dr. Stephen J. Wright, College Entrance Examination Board, 475 Riverside Drive, New York, N.Y. 10025

TERMS EXPIRING IN 1976

Mr. Robert O. Anderson, chairman of the board, Atlantic Richfield Co., 717 Fifth Avenue, New York, N.Y. 10022
Mr. Lewis White Beck, Burbank professor of moral and intellectual philosophy, University of Rochester, Rochester, N.Y. 14627
Mr. Leslie H. Fishel, Jr., president, Heidelberg College, Tiffin, Ohio 44883
Mr. Leslie Koltai, chancellor, Junior College District of Metropolitan Kansas City, Mo., 560 Westport Road, Kansas City, Mo. 64111
Mr. Sherman E. Lee, director, Cleveland Museum of Art, 11150 East Boulevard, Cleveland, Ohio 44106
Mr. Herman H. Long, president, Talladega College, Talladega, Ala. 35160
Mr. Louis W. Norris, president, Albion College, Albion, Mich. 49224
Miss Rosemary Park, vice chancellor, University of California at Los Angeles, 407 Hilgard Avenue, Los Angeles, Calif. 90024
Mr. Arthur L. Peterson, Center for Advanced Studies in International Business, 900 Wilshire Boulevard, Los Angeles, Calif. 90017

MAJOR ACCOMPLISHMENTS

Mrs. HANSEN. Your program has been in operation now for about 5 years. What would you say have been your major specific accomplishments to date?

Mr. KEENEY. I think that there have been several. First of all we have with a very little bit of money been able to get an important group of people to raise their sights as to what they can plan for, what they can hope for, and what they can do. I think more important than that, we have been able to show humanists in general that society and particularly the Federal Government thinks that their work is important. Many of them thought before that it was vitally interesting to themselves and to other humanists. They are now beginning to realize that it has an application to some of the really difficult problems of our day, and that education in the humanities is essential to people who are going to have to make a good many very difficult judgments. I think that our program has probably, although I can't prove this, increased the flow of private money into humanities. We have made grants of as small as $20,000, which have been followed by gifts of $1 million for the same purpose. I can't prove a connection, but I think there is one. There are many examples of where small grants have brought large sums of money from private sources.

Mrs. HANSEN. At a time when we are operating under severe fiscal restraints, with many individuals contending additional funds should be appropriated to preserve our environment and alleviate the distress of our poor, what would be your answer to the question as to why we should appropriate $7.75 million more in 1971 for your activities than was available in fiscal year 1970?

MAJOR QUESTIONS FACING COUNTRY

Mr. KEENEY. I think the best answer that I can give is that almost all the major questions that the country faces involve human beings. They involve values, and the value scale is badly out of adjustment. Last weekend, for example, there was a march on Washington of a group of people led by Mr. McIntire who were convinced quite sincerely, I think, that their values were accepted by others. They aren't, and I think they had fairly little impact as a result. Now these were the values that were accepted a generation ago, and values have changed very quickly. Nobody understands them.

I think that education is quite inadequate in these important subjects, if people are going to make good judgments of them when they grow up. I think that about half of our educational program is undersupplied with support from private and Federal sources. I mean the humanities and social sciences, and I think that many of the most serious problems in front of us involve those very subjects.

Finally, if I may turn to the environment, it is quite obvious how the environment can be polluted by trash. It can also be polluted by trashy ideas. It can be polluted by filthy ideas. It can be polluted by ugliness, as Miss Hanks said, and I think a product of the intellect is an intrinsic part of the environment.

(Discussion off the record.)

Mrs. HANSEN. Did you see Barron's National Business & Financial Weekly of December 22, 1969?

Mr. KEENEY. I did.

Mrs. HANSEN. It contained an article which stated, "While humanities and arts are all very well in their place, they have no rightful place in the Federal budget. The time to say so is now." What is your comment?

ROLE OF HUMANITIES

Mr. KEENEY. This is a judgment that I have spoken against in everything I just said. The answer to your previous question would be an answer to that. The argument, however, which was made in December 1969, consists entirely of arguments and examples cited by some opposing Congressmen on the floor of the House 2 years ago. The facts are not correct. The foundation is described as an extravagant fiasco. It isn't extravagant, and they misrepresent the amount of money that has been available for the arts and humanities. They have confused the authorization with the appropriation, and as you know, there is a considerable difference.

Mrs. HANSEN. You mean the press hasn't been exactly accurate?

Mr. KEENEY. I wouldn't say that. It was misinformed. They charged that this is a program of lavish handouts to a relatively precious few rather than a program for the people in general. That simply isn't true. Both endowments have reached every State in the country. The program of which I spoke, the humanities series, reaches very small indigent communities, and the distribution of types of grants has been very good.

Museums, for example, reach millions of people every year. Five hundred million visitors, it is estimated.

GRANTS TO MUSEUMS

Mrs. HANSEN. How many grants did you make to museums?

Mr. KEENEY. We made, I think, six or seven.

Mrs. HANSEN. What was the total amount spent?

Mr. KEENEY. $225,000; is that correct? This is entirely for training. We made another grant to the Museum for African Arts here in Washington, which reaches quite a few people in Washington. That is the only museum that we give more general and program support to. If we had more money, I think we would be able to support more.

Mrs. HANSEN. Insert in the record a list of the museums you have assisted and the amount that you have spent.

Mr. KEENEY. Yes. This isn't the list we want. It shows the universities that are cooperating with the museums. We will make that list.

(The information follows:)

Grants to Museums, Fiscal Year 1969

[Previous years' grants noted in parentheses]

	Amount
University of California, Berkeley, Calif., museum internship (fiscal year 1968, $7,130)	$7,220
University Museum, University of Pennsylvania, Philadelphia, Pa., museum internship (fiscal year 1968, $8,140)	8,690
American Association for State and Local History, Nashville, Tenn., seminars for training of staff members of historical societies and historical museums (fiscal years 1967–68, $155,850)	52,680

Frederick Douglass Institute of Negro Arts and History, Washington, D.C., support of educational activities (fiscal years 1967–68, $59,100)	$50,000
University Museum, University of Pennsylvania, Philadelphia, Pa. Kyrenia wreck excavation	5,580
Smithsonian Institution, Washington, D.C., museum internships (fiscal years 1967–68, $41,830)	15,110
Total	139,280

Grants to Museums, Fiscal Year 1970

[Direct grant]

Field Museum, Chicago, Ill., to support exhibition on Mexican art, culture, and history	$7,500
American Museum of Negro History, Massachusetts, museum history management	15,500
Cleveland Institute of Art, Cleveland, Ohio, study of indigenous design	1,500
American Association for State and Local History, Nashville, Tenn., to support program planning and technical assistance for historical societies and museums for observance of the bicentennial	37,050
Total	61,550

NOTE.—In addition to the above grants made directly to museums and similar organizations, the endowment has made grants to universities for graduate training of museum personnel.

INTEREST IN ARTS AND HUMANITIES

Mr. KEENEY. That article estimates that there are only 5 million people who are interested in culture. Just set that against the 500 million attendance at museums, and I think you get an idea that maybe it is wrong. There are 5 million people who attend live professional performances in the arts. There are a great many more who watch them through other means than live performances, and a great many people who are interested in the humanities, some of whom do not attend live performances.

It is also estimated that the audiences for culture as stated is the most affluent segment of society. Well, the audience for culture includes most all students and almost all schools and colleges, which include every element of society. The attendance at museums and theaters is certainly not an affluent group, although many affluent people go. And so, I think that argument fails.

They say that the endowments have made grants that "leave the taxpayer no better off." That is undoubtedly true. Every granting program makes some grants that have no valuable result, and if we made only grants that we knew in advance would turn out well, I think we would be running a poor program, because we wouldn't be taking the important chance to improve something that very badly needs improvement.

The Humanities Endowment has tried very hard to make grants to things that are relevant to important questions. We have made quite a few grants for studies of Southeast Asia, quite a few for studies of city planning, urban development, cultures of American minority groups, matters that are quite important to the taxpayers' problems today.

STUDIES IN SOUTHEAST ASIA

Mrs. HANSEN. What type of studies are you conducting in Southeast Asia?

Mr. KEENEY. A historical atlas, a study on the liberation of the Middle East, bibliography on modern Chinese society, United States and India; the wartime experience, history of modern Southeast Asia. In 1970 we have made a grant for some documentary films on Indian classical music, a grant to study Mesopotamia, a grant to study the liberation of the Middle East, historical atlas of Southeast Asia, quite a few fellowships that fall into this area, some of these are Middle East, some of them are Southeast. I don't think any of these grants are going to solve the main problems there, but they are an effort to help in that area. We have made numerous grants to help improve education for minority groups, which I think is the most important domestic program we have. For example, 2 years ago we spent $400,000 for institutes on Negro history and culture, to train teachers, and half of that money was a foundation's money. Half of it was matching money.

It is charged, as the title indicates, that if the Federal Government makes grants to cultural programs it will control the policy of the groups. That simply isn't true. The law, of course, forbids it, and we have gone to the greatest extent to avoid interfering in programs that we support. Would you like a copy of this for your own use?

Mrs. HANSEN. Please insert the information in the record.

(The information follows:)

RESPONSE TO BARRON'S ARTICLE

The attack on the National Foundation on the Arts and the Humanities made in Barron's (December 22, 1969) consists simply of the arguments made and examples cited by some opposing congressmen on the floor of the House almost 2 full years ago (see the Congressional Record, February 27, 1968). The following is a point-by-point reply:

1. The Foundation is "an extravagant fiasco . . ."

This view makes no sense to those who have seen how little encouragement has been given the devolopment of the arts and the humanities relative to expenditures public and private for science and technology (educators in particular have been concerned about the imbalance), and who have recognized the national interest, not in abandoning our Nation's leadership in technological power, but in adding to it such leadership in the realm of ideas and the spirit as may enable us to exercise our technological powers more wisely and humanely.

Barron's misrepresents even the small amounts it considers "extravagant" when it talks of the legislation creating the Foundation's two Endowments (an Endowment for the Humanities, and an Endowment for the Arts) as "endowing them with $10 million apiece for each of the next 3 fiscal years." That amount was authorized in the legislation, but nothing like it was ever appropriated in those 3 years; in fact, the most the Arts Endowment spent in appropriated funds in any of those first 3 years was $7.96 million, and the Humanities Endowment, $3.82 million. Barron's misled also by the failing to note that half of the authorization itself, in the case of the Humanities Endowment, and one-quarter in the case of the Arts Endowment, was not in money for outright grants, but consisted of funds to be used in matching such private gifts for the arts and humanities as might be forthcoming. Neither Endowment had $10 million in Treasury funds to spend in each of the first 3 fiscal years, nor has either Endowment had $10 million to disperse for its programs in any subsequent fiscal year.

2. "Far from bringing a new appreciation of beauty into millions of American homes," the Foundation "makes lavish handouts to a relatively precious few. . . ."

This is simply untrue. Each of the endowments that comprise the Foundation has funded public programs for bringing the arts and the humanities to hundreds of thousands through educational television, museums, public libraries, university extension services, and special touring groups. Also, each endowment has funded education programs for students in the schools, colleges, and universities. The arts endowment recently announced support for new tours designed to bring the performing arts to some 250,000 people in 21 States. The humanities endowment is launching in 1970 the National Humanities Series. through which professionals in the humanities will bring special programs to smaller communities where access to museum or library or university resources is at best limited. The Endowment for the Humanities also has funded projects specifically for people in ghetto situations, and projects for the use of the humanities in educational programs even in prisons. Both endowments have made grants in every State in the Union, and the arts endowment annually dispenses a set sum of equal amount to each of the State arts councils that now exist in all 50 States, for programs that in fiscal 1968 reached an estimated 28 million people.

3. "The unhappy fact is that many Americans don't give a hang about either the humanities or the arts—the total audience for culture has been estimated in a scholarly work published by the Twentieth Century Fund (and just the other day by economics of the Chase Manhattan Bank) at roughly five million * * *."

Barron's simply misquotes its source. What Barron's refers to from the bank is not clear, but the "scholarly work" cited is "Performing Arts: The Economic Dilemma," a Twentieth Century Fund study by William J. Baumol and William G. Bowen, 1966, and the figure is from page 96, where the audience spoken of as not exceeding 5 million is "the audience of the live, professional performing arts" in the United States—those who actually attend live performances, which is quite a different thing from the "total audience for culture" that Barron's said it was. Persons who attend live performances of opera, dance, orchestras, and theaters, are but a fraction (often limited by simple lack of access to such events) of the "total audience for culture," which includes viewers of cultural programs on educational and commercial television; which includes students and teachers of the arts and the humanities; which includes all those who enjoy the arts and humanities through libraries, historical associations, and other organizations including museums. The American Association of Museums calculated that museums alone in 1969 received 560 million visits; even assuming that only one-tenth of those visits were by nonrepeating visitors, who went to art and historical museums exclusively, the number of such museum visitors alone would still exceed by 10 times the 5 million given in Barron's as the "total audience for culture."

4. The audience for culture "also happens to include far and away the most affluent segment of society * * *."

In the past at any rate, one could probably make a case for that view, which is one reason that the two endowments have launched public and educational programs to reach people whose access to the arts and humanities is severely limited. One example, as a matter of fact, is the Theater Development Fund that Barron's criticizes as "subsidized stage productions"; tickets to plays receiving critical acclaim but inadequate box-office support have been distributed by the arts endowment to students at reduced prices to give them an opportunity to see professional theater. Certainly without the two endowments "culture" would be more limited to "the most affluent segment of society."

5. The endowments have made grants that leave "the taxpayer no better off."

It is perfectly true that not every grant benefits every taxpayer directly, or is likely to make sense to every taxpayer. It is naive to suppose, however, that what knowledge and insight the taxpayer has or needs or wants can come to him other than as the compendium of hundreds of individual works and research studies. Textbooks of use to taxpayers' children are such compendiums, as are the general studies of his society's history and culture that he reads as part of being an informed citizen in a democracy. And of course, the projects that Barron's cited are some that on the surface seem to have least connection with taxpayers' immediate interests. Barron's did not mention numerous studies having to do with such subjects as the history of Southeast Asia, man's experience with city planning and urban development, and the cultures of American minority groups—matters that are hardly irrelevant to the taxpayers' problems today.

The grant for research into "medieval Spanish satire and invective" was actually a fellowship to allow a distinguished professor of Spanish to add to a series of such special studies through which he had developed expertise on Spanish life and culture, an expertise of value to his students as well as to others who believe this Nation needs people who have some understanding of foreign countries.

The grant for "an annotated list of French prose fiction" in an historically important literary era is not of great value in itself; it is one of the grants made in keeping with the legislative mandate to "strengthen the research potential of the United States in the humanities." Such bibliographic lists do this by giving scholars a means of identifying quickly works of pertinence to their studies without each spending hundreds of hours himself in libraries and research collections. The list of some 2,000 French works is an important tool for scholars, students, and librarians.

The grant for the International Congress of Orientalists (the grant recipient was actually the Association for Asian Studies) enabled the United States to be host to the Congress for the first time in the history of that organization, which has met since 1873. Previous meetings had been in London, New Delhi, Munich, and even Moscow. In August of 1967, some 2,600 persons from 50 countries met at the University of Michigan, making the meeting in America the largest ever. Nearly 800 papers were presented, describing new discoveries in scholarship about the countries of the East, which are hardly of small concern to the United States today. Diplomatic officials took part as well as scholars and students.

The grant for a writer to "travel the Buffalo River in Arkansas" was actually to help a creative writer and photographer do a documentary on the damage done by technological developments to the cultural traditions and the physical beauty of the Ozarks region.

The grant to have an "official 'rethink' public road signs," as Barron's put it, was actually in support of an effort by a person at the Institute for Research and Design in Providence, R.I., to see if, through improved design, the bewildering complexity of signs on highways could be reduced and the safety of the roads correspondingly increased—perhaps of some direct interest to the average taxpayer.

All of these grants were made at least 2 years ago, and Barron's did not look any deeper into them than the descriptive phrases used by two or three unsympathetic congressmen.

6. "In painting and sculpture the Foundation has openly avowed the abstract and avant-garde over the traditional * * *."

The Foundation has avowed no such thing. Support has been given to help artists of various kinds, and for the study of artistic work of various kinds, including the study of art work done under Government assistance programs during the Depression—work which was by no means "abstract and avant-garde." The issue is a false one, as Charles Cunningham said in congressional testimony as director of the Art Institute of Chicago in 1967: "In regard to representational versus nonrepresentational art, there exists in the minds of many a misapprehension. Artists are either good, mediocre, or bad. . . ." The Arts Endowment invited those who favored representational work as well as those favoring other styles to take part in the deliberations and received compliments from writers for such periodicals as Art News, the Saturday Review, and the New York Times for the excellence and breadth of representation of the selections of its reviewing panels. The selection panels themselves, Mr. Cunningham testified, "have had an excellent and broad representation of the artistic talent of the country." (See hearings before the Special Subcommittee on Arts and Humanities of the Committee on Labor and Public Welfare, U.S. Senate, pt. 2, August 15 and 16, 1967.)

7. Subsidy "poses an ugly threat to freedom of expression and ideas" . . . 'eat my bread,' as the saying goes, 'sing my song' . . . 'no government agency can possibly be set up which has the wisdom to determine what is proper and what not'. . . ."

Nor does any Government agency wish to, which is why the Endowments for the Arts and the Humanities go to great lengths to avoid having decisions on applications made by the administering bureaucrats themselves. Section 4(c) of the National Foundation on the Arts and the Humanities Act of 1965 (Public Law 209) specifically states: "In the administration of this act no department, agency, officer, or employee of the United States shall exercise any direction, supervision, or control over the policy determination, personnel, or curriculum, or the administration or operation of any school or other non-Federal agency, institution, organization, or association."

Applications for support are referred to panels of experts from outside the Government, and are often given individual review by other outside experts in addition to panel review; applications also are reviewed by the National Council on the Arts or the National Council on the Humanities, each of which is composed of 26 distinguished, private citizens appointed by the President of the United States. Except in extremely limited, special circumstances, the Endowments cannot act on applications without recommendations from these Councils, which have purview over policy matters as well as over specific grants. The Congress wrote such provisions into the law specifically to keep Government influence to the lowest possible level, and the system has worked.

The authority cited by Barron's itself (albeit incorrectly on the matter of the size of the "cultural audience") is of interest in this connection. Baumol and Bowen in "Performing Arts: The Economic Dilemma" take note of arguments about influence, and note actual dangers, but declare (on page 374): "This objection, that public support implies public control, though one of the most persuasive, has turned out to be one of the least valid in practice."

PROCEDURES IN MAKING GRANTS

Mrs. HANSEN. Will you review in general terms for the committee the procedure you follow in making grants. What percentage of your grants are to institutions, and what percentage are to individuals? Also how you go about assigning priorities for the allocation of your grants?

Mr. KEENEY. Let me start with the priorities. The programs are developed by the staff and the Council, discussed in the Council usually more than once, and then set up and announced. When they are announced, the announcement is an invitation to apply for support under these programs. The applications come in. They are inspected by the staff. If they fit the program, they are submitted to outside reviewers, experts in the field, who study them, and make recommendations if they are inside the program. If they are outside the program, the applicant is notified, and if we can, we help him to seek funds somewhere else, if we know of another source.

Then the evaluated applications are submitted to panels. The panels are people of general competence in the areas involved rather than the specific competence of the reviewers, and the panels make the recommendations to the chairman for funding. I submit these recommendations to the Council. They inspect them and study them and discuss them in committee meetings which they have prior to the meeting of the full Council. They recommend to the Council what shall be done, and the law is rather strange here. It requires the Council to recommend to me what shall be done, and I decide on that. I almost invariably decide to do what the Council recommends.

Mrs. HANSEN. How many meetings per year does your Council hold?

Mr. KEENEY. It will have three this year. It should have four.

Mrs. HANSEN. Why are you decreasing the number of meetings?

Mr. KEENEY. Lack of funds.

MATCHING GRANTS

Mrs. HANSEN. Other than that portion of your appropriation which is to be matched by a private contribution, to what extent are any of your grants made to individuals or institutions on a matching basis?

Mr. KEENEY. Quite a few are on a matching basis; most require cost sharing.

Mrs. HANSEN. Such as?

Mr. KEENEY. Almost all the educational grants are on a matching basis. Quite a few of the research grants are. Would you like me to run down how these grants are distributed among institutions and individuals?

Mrs. HANSEN. Yes.

Mr. KEENEY. $3.7 million is to universities, $1.5 million to colleges; to other organizations concerned with elementary and secondary education, $323,000; concerned with higher education and research, $1,400,000; concerned with the public, $1,088,000; fellowships to persons affiliated with universities, $1,117,000; to persons affiliated with colleges, $578,000; and $107,000 to unaffiliated individuals. That includes outright and matching money. Would you like this for the record?

Mrs. HANSEN. Please do.

(The information follows:)

PROGRAM BY TYPE OF INSTITUTION

	FY 1968 ACTUAL	FY 1969* ACTUAL	FY 1970** ESTIMATE
Universities	$1,130,525	$1,921,309	$3,740,150
Colleges	405,060	810,785	1,588,086
Other organizations and institutions			
-- concerned with elementary and secondary education	73,600	302,578	323,499
-- concerned with higher education and research	557,520	644,045	1,431,238
-- concerned with the public	355,354	806,049	1,088,133
Fellowships to persons affiliated with universities	974,120	589,025	1,117,542
Fellowships to persons affiliated with colleges	298,720	305,250	578,377
Fellowships to persons affiliated with museums and historical societies	15,980	--	--
Awards to unaffiliated individuals	25,210	74,660	107,833
Adjustment	5,655	--	--
Total	$3,841,744	$5,453,701	$9,974,858

* Includes $119,800 transferred to the Endowment from other Federal agencies.

** Estimate based on straight-line extrapolation including $1 million appropriation for matching funds, making a total of $2 million gifts and matching, and carry-over from previous year.

EDUCATION PROGRAM

Mrs. HANSEN. You are requesting $200,000 for educational planning grants. Justify this request.

Mr. KEENEY. The educational planning grants are grants to colleges and universities which want to improve their curriculum, improve their methods of teaching, or anything else that is appropriate. They run around $30,000. They are used to buy time of people who are on the faculty, put them entirely or half time on planning, or to bring in outside people, or to pay travel expenses to visit other good educational programs.

I think this is the best way you can use a rather small amount of money; that is, to give institutions the opportunity to sit down and work out what they really want to do. Even if they don't get any more money from us, they are probably better off for knowing what they want to do, and having a yardstick that they can compare what they are doing with what they ought to be doing.

MOORPARK COLLEGE

Mrs. HANSEN. Justify your request for the Moorpark Community College in California.

Mr. KEENEY. This is a college in California, a junior college. There are 90 community colleges in California, and there are 40 or more lower division humanities programs in California senior colleges. This is not simply for Moorpark College. It is for all the colleges in California. They will try to develop new techniques, methods, materials for use in the classrooms of colleges that really don't have any admission standards. They will put $36,000 of their own money into this which is more than we are putting into it.

Mrs. HANSEN. What amount of funds do you anticipate spending?

Mr. KEENEY. We are putting in $29,000.

EDUCATION DEVELOPMENT

Mrs. HANSEN. You are requesting $3.9 million for education development grants. Justify this request.

Mr. KENNEY. This, of course, is a large program we have been trying to implement for several years. It is designed to let a college or a university have the resources to improve its overall program in the humanities, history, literature, philosophy, and the like, to plan, if necessary, new courses, new curricula, to bring new faculty in.

Mrs. HANSEN. Will this grant help to solve the problem, in many universities today, where some of the courses are not relevant?

Mr. KEENEY. Yes. I personally think that almost any kind of knowledge is relevant, but I also think that many times the way it is taught is not relevant, and we are trying to strike at that problem, to set up some examples of good procedure. This will never hit every college in the country obviously, but if we run it for 3 or 4 years, every college in the country will have something to look at when it is trying to improve its own program.

Mrs. HANSEN. Will the universities have the benefit of the work that has been completed?

Mr. KENNEY. Yes.

NUMBER OF UNIVERSITIES PARTICIPATING

Mrs. HANSEN. How many universities will participate in this program?

Mr. KEENEY. Perhaps eight a year; colleges and universities. I ought to make it clear, Madam Chairman, that we hope to obligate in 3- to 5-year grants the whole amount of money in the first year. That means that somewhere in the neighborhood of one-fifth of it will be spent in the first year. The rest will be obligated. We don't think we can crank up enough good programs to fund it year by year, and I wouldn't like to fund anything that has long-range implications without long-range funding.

I also want to make it clear that we intend to make an outright grant the first year, and in future years to introduce more and more matching money, so that the colleges will be weaned from this particular trough, and get out and raise their money privately or from the State.

Mrs. HANSEN. In about 5 to 6 years you anticipate the universities will be raising their own funds?

Mr. KEENEY. Yes.

EDUCATIONAL PROJECT GRANTS

Mrs. HANSEN. You are requesting $1.5 million for educational project grants. Justify this request.

Mr. KEENEY. These are for less global programs. For example, the program to put in a new course with a new emphasis in history, rather than in the humanities as a whole. We have made a number of these grants already. Some of them are to help with the use of the humanities in educating Negro students, Indian students, Puerto Rican students. Some of them are to construct curricula for instruction in various subjects. One is to construct a curriculum for the high schools in history. One is to help the Navajo community college in Arizona to develop instruction on Indian art and culture, for teachers of both Indian and non-Indian.

Mrs. HANSEN. What is the largest grant that you have made to the Navajo college?

Mr. KEENEY. This is $53,000, and it is outright.

Mrs. HANSEN. Insert a list of the other grants in the record.

Mr. KEENEY. Why don't we give you the list of education projects, including both project and institutional grants.

(The information follows:)

EDUCATION PLANNING GRANTS, FISCAL YEAR 1970
(Obligated or Committed)

	Direct	Gifts and Matching
Boston University (Massachusetts): Planning for a Boston Colloquium for the philosophy of education	$ 4,992	
Brooklyn College (New York): Planning for a graduate program in Afro-American studies	30,000	
Centre College (Kentucky): Planning for a program of integrative humanistic studies	20,000	
Center for the Study of Value and the Sciences of Man (New York): Planning for development of a program of studies in humanistic and scientific values		$ 30,000
Converse College (South Carolina): Planning a center for study of humanities	26,000	
Fort Lewis College (Colorado): Pilot program to develop resource materials for courses on Indian history and culture	17,584	
George Washington University (District of Columbia): Institutional planning project	20,000	
Hampshire College (Massachusetts): Planning an Experimental Curriculum in Environment Studies and Design		50,000
Moorpark College (California): Planning humanities programs for junior colleges	29,340	
New Mexico State University (New Mexico): Planning of a course in Mexican-American history	9,688	
New York, State College at Cortland (New York): Planning of an interdisciplinary approach to the study of cinema	8,520	

Education Planning Grants, Fiscal Year 1970

	Direct	Gifts and Matching
Peralta Junior College District (California): Planning Afro-American Studies Curriculum development, grades K-14	28,875	
PMC Colleges (Pennsylvania): Planning for curriculum development in the humanities	15,000	
Salk Institute (California): Consultative conferences for planning a humanities program	8,940	
Women's Talent Corps (New York): Planning for a two-year humanities curriculum	37,389	
TOTAL	$256,328	$ 80,000

EDUCATION DEVELOPMENT GRANTS, FISCAL YEAR 1970

	Direct	Gifts and Matching
American Council of Learned Societies (New York): Development of a program of national summer institutes for humanistic computation	$ 36,725	$ 30,000
City University of New York (New York): Faculty development through an Afro-American and Puerto-Rican Studies institute	30,997	
Duke University/University of North Carolina (North Carolina): Continued development of the Cooperative Program in the Humanities		112,600
Duquesne University (Pennsylvania): Development of a graduate program in sociology using the humanistic approach of phenomenological philosophy	25,000	
Emory University/Atlanta University (Georgia): Continued development of a joint program in American studies focused on social change with an urban context	63,100	
Great Lakes Colleges Association (Ohio): Continuation of a collaborative program of graduate teaching associates	44,840	
Hiram College (Ohio): Continuation of Development of an experimental humanities curriculum	60,375	50,000
Institute for Service to Education (District of Columbia): Development of innovative humanities courses at the freshman and sophomore levels for fourteen Negro colleges	20,000	
Iowa, University of (Iowa): Development of a graduate program in Afro-American studies	37,975	
Michigan, University of (Michigan): Establishment of a Center for Comparative Ancient and Modern Studies	9,878	

Education Development Grants, Fiscal Year 1970 2.

	Direct	Gifts and Matching
Mississippi, University of (Mississippi): Development of faculty and student seminars on vital issues	$ 30,685	$ 15,000
Nevada, University of (Nevada): Continuation of inquiry interdisciplinary seminars in the philosophy of inquiry		55,273
New York, State University at Albany (New York): Development of an interdisciplinary humanities program	81,822	
New York, State University at Stony Brook (New York): Faculty-student development teams in history	15,000	15,000
Northwestern University (Illinois): Development of the Center for the Interdisciplinary study of Science and Technology		100,000
St. John's College (New Mexico): Continuation and expansion of a graduate program in liberal education for secondary school teachers		50,000
St. Mary's College (Indiana): Development of a program in urban studies	25,346	
St. Olaf College (Minnesota): Development of a curriculum in minorities studies	30,000	
Salk Institute (California): Appointments in the humanities at the Salk Institute		400,000
Scripps College (California): Institute for developing a revised interdisciplinary humanities core curriculum	30,000	
Southern California, University of (California): Development of an integrated humanities/social science semester	21,045	15,000

Education Development Grants, Fiscal Year 1970

	Direct	Gifts and Matching
Stanford University (California): Institute to develop curricula on Mexican-American culture	40,000	
Temple University (Pennsylvania): Development of a graduate program in aesthetics	50,000	
Vermont, University of (Vermont): Development of an experimental humanities college	63,740	100,000
Virginia State University (Virginia): Development of materials on Black Man in American Music	26,338	
Virginia, University of (Virginia): Development of Center for Textual and Editorial Studies in Humanities Sources	24,000	22,100
West Chester State College (Pennsylvania): Development of a program of instruction for teachers of English to speakers of other languages or nonstandard dialects of English	18,755	
Wisconsin, University of (Wisconsin): Development of a graduate program in the social sciences and humanities for practising journalists		78,293
TOTAL	$785,621	$1,043,266

EDUCATION PROJECT GRANTS, FISCAL YEAR 1970

	Direct	Gifts and Matching
Alice Lloyd College/Lees Junior College (Kentucky): Oral History of Appalachia Program		$ 30,000
American University (District of Columbia): Content Courses in Foreign Languages	$ 26,920	
Associated Colleges of Midwest (Illinois): Newberry Library Seminar in the Humanities Project.		35,000
Atlanta University: Conference on African and African-American Studies	10,676	
Brown University: Council on Library Resources Program to Increase role of Library in Undergraduate Education		100,000
Chicago City College: Color TV Programs on Art Appreciation	32,243	40,000
Claremont University Center (California): A Colloquium, "The Idea of Woman"	5,000	
Claremont University Center (California): Evaluation of Colloquium, "The Idea of Woman"	6,998	
University of Connecticut: Institute for College Teachers in Greek Philosophy and Science		26,875
University of Denver, College of Law: Law Librarianship Institute	25,865	
Dillard University (Louisiana): Council on Library Resources Program to Increase Role of Library in Undergraduate Education		50,000
Eisenhower College (New York): "Operation Gadfly": a dramatic presentation of the Socratic dialogues	20,000	
The Institute for Creative Studies (District of Columbia): A Review and Assessment of Black Studies Curricula	9,928	

Education Project Grants, Fiscal Year 1970 2.

	Direct	Gifts and Matching
University of Iowa: Summer Workshop in Negro History, Literature, and Culture	$ 14,633	$ 15,000
Jackson State College (Mississippi): Council on Library Resources Program to Increase Role of Library in Undergraduate Education		50,000
National Council of the Arts in Education (Ohio): Preparation of Definitive Statement on the Place of the Arts in American General Education	8,000	
Navajo Community College (Arizona): Institute on American Indian Culture	52,937	
New York State University Education Center(New York): Documentary Films on Indian Classical Music	28,270	
New York, State University at Brockport (New York): Center for Philosophic Exchange		10,000
Northeastern University (Massachusetts): Program for Teaching the Progressive Relationship of the Arts	10,000	
University of Notre Dame: 1970 Sophomore Literary Festival	3,000	
Oregon State University: Man in the Marine Environment	8,068	
Princeton University: First National Conference on Civil Engineering: History, Heritage, and the Humanities	23,110	10,000
Regional Education Laboratory for the Carolinas and Virginia (North Carolina): The Role of the Humanist in Higher Education		40,000

Education Project Grants, Fiscal Year 1970 3

	Direct	Gifts and Matching
Rockhurst College (Missouri): Institute on Literacy in the Language of Film	$ 15,214	
Smithsonian Institution/Reading is Fundamental: A survey to Identify Reading Materials for Hispanic-American Children and to Assess their Relevancy in Book Programs for the Disadvantaged	20,000	
Society for Health and Human Values (Pennsylvania): An Institute on Human Values in Medicine	33,976	30,000
Southern University and A & M College (Louisiana): Workshop in Negro Literature, Art, and Music	13,723	20,000
Spring Hill College (Alabama): "Project Eye and Ear": Creative film course for undergraduates		4,753
Stanford University: Seminars on the Mexican-American	33,079	
Wabash College (Indiana): Council on Library Resources Program to Increase Role of Library in Undergraduate Education		50,000
Westminster College (Missouri): Afro-American Experiences and the African Heritage	28,920	
T O T A L	$430,560	$511,628

EDUCATION ELEMENTARY AND SECONDARY GRANTS, FISCAL YEAR 1970

	Direct	Gifts and Matching
Columbia University, College of Pharmaceutical Sciences: Teaching Reasoning Processes to Elementary School Students	$ 5,516	
Cultural Council Foundation of the City of New York: Teachers and Writers Collaborative: Writers-in-the-Schools Program	30,000	30,000
Eastern High School Freedom Corporation (District of Columbia): Freedom School Annex		40,000
Education Development Center (Massachusetts): Athens and Sparta unit for seventh grade	88,974	
Educational Systems Corporation (District of Columbia): Development of Social Science Curriculum Units on the Mexican-American Culture	35,460	
Freehold Regional High School District (New Jersey): Development of an Advanced Spanish Course on the role of Social Institutions in Social Change in Latin America	8,586	
Ohio State University: Latin Institute to prepare The Columbus Latin Reader for publication and implementation in the schools	15,483	
University of Pittsburgh (Pennsylvania): Conference of Latin teachers and school administrators involved in new Latin programs in inner-city schools	3,060	
Scripps College (California): A Training Program in Interdisciplinary Study in Classical Humanities and the Latin Language	39,411	
Southern Highland Literary Fund: Foxfire Folklife Training and Research Program	10,000	
Temple University (Pennsylvania): Institute for Training of Teachers of Puerto Ricans	20,000	
University of Washington: Training of Grade School and High School Teachers in Urban Studies	7,000	
TOTAL	$263,490	$70,000

ELEMENTARY AND SECONDARY SCHOOL GRANTS

Mrs. HANSEN. You are requesting $350,000 for elementary and secondary education grants.

Justify this request.

Mr. KEENEY. Yes. Some of these are to develop curriculum in terms of elementary and secondary schools as a course, with the materials that go with it. We have several of those going now, one on the revolutionary period, one on ancient history. The largest grant is for the National Humanities Faculty. This is an organization that we set up through Phi Beta Kappa, which has this year funding of about $100,000 outright, and $79,000 gifts and matching. I expect that before the fiscal year is out, the gifts and matching portion will increase. The outright will diminish.

Teams of excellent college and university teachers go around to high school systems, and work with the teachers in that whole system on a particular subject to improve instruction. They don't do this by pedagogy but by materials and by knowledge. It has been very successful, so successful that the demand for the second year rose from five to 15, and we would expect it to rise more in the following year. I think there will be more and more local money put into this for matching purposes.

Mrs. HANSEN. Does the District of Columbia participate in this program?

Mr. KEENEY. Washington, D.C., is in this year, and so is Tacoma, Wash., which is nearer to home.

Mrs. HANSEN. I was wondering what you were doing in the State of Washington.

Mr. KEENEY. There is one in Washington at Western High School.

Mrs. HANSEN. What kinds of material do they use to update their curriculum?

Mr. KEENEY. For the most part I think they use what is in their heads, which is quite a lot more than is in the heads of an inadequately trained secondary school teacher, but they also take examples of books that can be used with them, show them to the teachers and work over them with the teachers. They work out new approaches to teaching, and to what ought to be taught, with the teachers.

Mrs. HANSEN. How are the arrangements made with the local schools?

Mr. KEENEY. They apply for visits, and they are selected by the Board of this organization.

PUBLIC DISSEMINATION

Mrs. HANSEN. You are requesting $1 million for public dissemination. Justify this request.

Mr. KEENEY. Here our most successful program at present is the National Humanities Series of which I spoke. That is doing better than I thought it would, better than anybody thought it would. There

has been a real enthusiasm for it. In some of these towns the local newspapers have been simply full of accounts of what went on at the meetings. There have been editorials about how successful it has been in getting people to think.

Mrs. HANSEN. Insert in the record some copies of the editorials and the news stories.

Mr. KEENEY. As a matter of fact, I have sent Mr. McDade and Mr. Reifel copies of some of those only yesterday, I believe, but we will provide them for the committee.

(The information follows:)

EDITORIAL AND NEWS STORIES ON SUCCESSFUL VISITS OF NATIONAL HUMANITIES SERIES TEAMS

LETTERS FROM COMMUNITY PARTICIPANTS

[From the Star-Herald, Luverne, Minn., Feb. 26, 1970]

ARTISTS GIVE HUMANITIES SERIES BRILLIANT START

The first in the series of three programs comprising the National Humanities Series was hailed as a success by those who participated. Both local residents who attended, and the four participants in the programs produced for the Woodrow Wilson National Fellowship Foundation were agreed that the experience was both interesting and educational.

When a select group of artists, college professors and entertainers comes from the metropolitan centers to hobnob with folks in an upper Midwest rural community such as Luverne, there can be misgivings on both sides.

But the humanities series proved to be different. The out-of-town visitors appeared to feel at home, and those who saw and heard them were impressed with what they were trying to achieve and how they did it.

RELATES THROUGH FILMS

Dr. Maurice Brown, professor of art at the State University of New York, at New Paltz, headed the group of four. A film maker and painter, he used motion pictures to depict the effect that the senses of seeing, hearing, and speaking have on mankind. He discussed making of films, the uses of films, and then related the audio-visual medium to daily living.

Connie Simmons, a former singer with Fred Waring's Pennsylvanians, appeared in a dual role of singer and actress. Rod Arrants, an actor, singer and poet, appeared on stage, singing with Miss Simmons, and reading not only his own poetry, but that of others as well. Rudolph Torrini, whose works of sculpture have won numerous awards, came here from St. Louis where he is chairman of the Department of Art at Fontbonne College to spend the day demonstrating how to make men's likenesses out of clay, and relating this to man's relationship to society.

The group spent all day Saturday appearing before small audiences that came and went at will.

Dr. Brown spent most of the day at the Luverne Federal Friendship room, discussing films and art, and then using a projector to demonstrate the sights and sounds which man uses in communicating with others. A film on auto racing which he himself had made proved both interesting and thought-provoking to the afternoon crowd.

STUDENTS ENJOY MUSIC

Miss Simmons and Mr. Arrants spent the day at the city hall, where both students and adults came not only to listen, but to take part in both the music and poetry sessions.

Mr. Torrini's task was most difficult. He worked in the youth center, where persons coming and going may have been a distraction, but he took it in stride. Torrini did not stay for the evening program.

At the evening program at the high school Little Theatre, Dr. Brown spoke on the relationship of humans, and noted changes down through the years in some areas, and how little change there has been in other areas. Assisting him in portraying the ideas which he was developing were Miss Simmons and Mr. Arrants.

When the occasion demanded it, they sang. On other occasions, they were actors on stage, depicting persons and situations to bring out how man relates with society through conflict and cooperation, and the pursuit of common goals. Effect of technology on man's social life was given consideration.

The program lasted for 2 hours. When it was over, the three performers came off the stage, and sat with a group who remained just to visit about the day's events, and to share opinions and ideas.

TWO MORE PROGRAMS

The programs last weekend were the first in the three-part series. Two other similar programs are scheduled for this spring. Although dates have not yet been set, it will likely be during April. At that time, themes will be "The Private Sphere" which will be a discussion of man's relationship with other individuals close to him, such as his family and his friends, and "The Good Life", which will cover man's relationship with his environment, his reaction to technology and his response to nature.

MANY HELP MAKE HUMANITIES SERIES SUCCESS

[From the Luverne Star-Herald (Minn.), Feb. 26, 1970]

TO THE EDITOR: I want to thank the people in and around Luverne for cooperating so beautifully in making the first visit of the national humanities series an exciting event. There were too many people working behind the scenes to name them all. Your local advisory council for the series was not turned down once when we asked for favors. In fact, more people volunteered help than we could put to work. There will be two other engagements, probably in April, when we hope to call on more of you for help.

There are other ways of supporting the national humanities series, too. One is to continue your encouraging attendance at the events, and another is to send a check, no matter how small, made out to the National Humanities Series and sent to George Sliby at A. R. Wood Co.

RUTH H. OKARSKI.

READER FOUND "HUMANITIES" REWARDING

TO THE EDITOR: Those of us in the community who took "Time Out for Man" last Saturday were greatly rewarded. Our lives were enhanced in much the same way individuals are enhanced when they make "time out for man" the habit of a lifetime. The good will experienced at every turning was so infectious that old friends seemed dearer, casual acquaintances old friends, and the four artists, strangers until Saturday, strangers no longer.

The Woodrow Wilson Fellowship Foundation should be contratulated for many reasons—not the least being they have chosen well the artists who represent them. Professional, gifted, sensitive men and women who have also mastered the art of communication, have mastered if not only literally, but in the countless other ways man speaks to man. In the tilt of the head while being introduced, in an eagerness to relate to one and all, and in a very evident desire to give of themselves—a giving that could hardly go unnoticed as they willingly remained before the public from 10 o'clock Saturday morning until 12 o'clock Saturday night. If they became tired it didn't show, if they had wished for, but didn't find, every seat filled in the Little Theatre it didn't show, if the guitarist, Rod Arrant's finger tips were tender after many hours of playing—and they certainly should have been—it did not show, if Connie Simmons after many renditions and Maurice Brown after hours of speaking felt the need to relax it didn't show, and if the continual banging of the youth club's door (it's a very old door) plagued Sculptor Rudolph Torrini,' as he worked well, that didn't show either. As I said, they are professionals. We were lucky to have them here in Luverne—Ernie and I were so proud of them.

MRS. ERNEST DAHLBERG.

NEWTON, KANS., *March 11, 1970.*

BILL FEGAN,
National Humanities Series,
Princeton, New Jersey.

DEAR MR. FEGAN: On behalf of the Prairie View staff and patients I want to thank Warren Kliewer and Ray Dryden for the delightful performance Monday afternoon. It was an hour many of us will long remember. We appreciate the op-

portunity for this performance made possible by the Woodrow Wilson National Fellowship Foundation.

Sincerely,

MRS. NANCY HEDRICK,
Assistant Administrator.

DELAWARE TECHNICAL AND COMMUNITY COLLEGE,
Georgetown, Del., February 25, 1970.

MRS. JOSEPH S. C. MACH,
Seaford, Del.

DEAR MRS. MACH: Delaware Technical and Community College was indeed grateful to be included in your planning for the national humanities series. Thank you!

Our sessions with Mr. and Mrs. Zeller and Dr. Schroeder here were very successful and received by the student body with great enthusiasm. Many students have already been in to inquire about the next team visit and even about plans for next year.

If we can be of service at any time with future projects, please let me know.

Cordially,

SUSAN G. ASTARITA,
Director of Community Relations.

AMERICAN ASSOCIATION OF UNIVERSITY WOMEN
Seaford, Del., February 26, 1970.

DEAR MR. BROWN: The Seaford Branch of the American Association of University Women wishes to thank you for your wonderful presentation on Monday evening. It was most interesting and informative to both those with and without some background in the arts.

Those who watched you work feel they have a much greater appreciation of and know better what to look for in art forms. We thank you again.

Sincerely yours,

MRS. ANDREW GANDEK,
Corresponding Secretary.

HUMANITIES SERIES FOOD FOR THE SOUL

We think the National Humanities Series is good for Cherokee.

It has stirred people to think.

And though such an observation might seem to some to be innocuous, it is important in these changing times for more people to think more deeply and to seek answers to questions about themselves and the society around them.

Most of us live in a contained, familiar world made as comfortable as possible.

On the average, we work 8 hours, sleep 8 hours and use the remaining time for all other activities: Eating, entertainment, relaxation, hobbies, participating in organizational functions.

Many of us are insulated from changes going on around us—and therefore it is difficult for new ideas to penetrate our patterns.

We do not consciously attempt to stretch our minds, to increase our understanding, to expose ourselves to new concepts.

And, therefore, we miss much of life that is important.

To many of us, poetry is something we studied many years ago during our educational period. So, to us, it's for kids.

Modern art is given short shrift because some of it is not photographic in appearance and time is not taken to appreciate that artistic moods are perhaps more important in their symbolism and inclusion of multiple aspects and broad panorama than instant recognition.

Books are thought to be for people with time on their hands—and not for the busy, involved persons who can pause only for the short plots—even though such plots, to be short, must deal with surface subjects in a quick, superficial manner.

Concerts and plays, similarly, draw smaller crowds than, for instance, athletic contests because to understand and enjoy, you must go beyond the role of spectator and become a mood participant.

Change in our way of thinking and way of life is not coming. It is here.

There are people in the streets demanding change—some rational, some irrational.

How the ideas and concepts being promoted are to be handled by an intelligent society will depend on that society's ability to think—and think deeply.

We do not mean here to link the National Humanities Series to street revolution. We simply make the observation that material presented through the series is basically soul food which, if partaken of by us, can give us broader perspective and understanding toward those around us.

And the end result might well be a more responsive society which cares not for individuals singly but for individuals collectively.

ONE OF 30 TOWNS HOLDING SERIES ON HUMANITIES

(By Maxine Burnett)

CHEROKEE, IOWA.—Cherokee area residents took "time out for man" recently and they'll concentrate again on man, his society, and his environment during programs at the end of March and the first of May.

The Cherokee community is one of 30 throughout the Nation that are benefiting from a series of three presentations attempting to make the humanities—literature, philosophy, art, music, film—relevant to the everyday life of "rural" residents.

The national humanities series was developed by the Woodrow Wilson Fellowship Foundation and was funded by the National Endowment for the Humanities, a Federal program. During the series, three three-member teams, each consisting of professor and two performing artists, visit each community for a 2-day period.

Most of the communities taking part in the series are relatively small. Other Midwestern towns participating—Park Rapids and Luverne, Miss., Norfolk, Nebr., and Webster, S. Dak.—all have populations of less than 14,000. Sioux Falls is the largest Midwest city participating.

Cherokee is a logical choice for a program such as the series. It's a town of 8,000 that has already demonstrated its interest in the humanities. Since 1951, it has had a planetarium and museum, with a professionally done display on the natural history of northwest Iowa.

There's a new community center where such performances as the humanities series are presented. The city has its own symphony orchestra and an active theater group which presents both plays and musicals. There are small, but active artists, and archeologists' groups.

Annually, there is a Cherokee arts festival, which officially opens this spring on March 30 and 31 with the second presentation of the humanities series.

THE PRIVATE SPHERE

The second program will focus on "The Private Sphere—Man's Personal Relationships, Exploring Loneliness, Loyality and Love." The first, presented in Cherokee on March 2 and 3, was titled "The Human Community—Everyman and his Fellowman, Cooperation, Conflict, Rights, and Responsibilities."

The developer of the first Cherokee performance was Dr. Maurice Brown, a professor of art and film making at the State University of New York at New Paltz. Performers with Dr. Brown were Rod Arrants, an actor, director, singer, and guitarist, and Constance Simmons, an actress, singer, and musician.

The first day and a half of their stay in Cherokee was spent in individual sessions with various high school and civic groups. The first evening's individual performances were open to the public.

Arrants spent much of his time with the high school audiences in folk singing performances. He also discussed poetry with the students, answering such questions as why the students should be required to read such literature as Greek tragedies and pointing out why they would be useful to them.

EVERYONE "VIBRATES"

Dr. Brown's meetings at the high school included one with an art class. Through the use of slides shown out-of-focus, Dr. Brown conducted a practice session in perception. He told the students to just react to the forms they saw, not to attempt to copy exactly or go for details.

Brown told the students that a football player thinks nothing of spending hours just practicing throwing or kicking a football, yet an artist will often not practice at all, thinking he must always work for a finished piece.

Mrs. Lyle Midland, chairman of the Cherokee committee that arranged the series of meetings with the three performers, said that their sessions were very unstructured and fluid. The three interacted with their audiences all of the time, rather than performed, she said.

Commenting on Brown's first evening session, which was held at the Sanford Museum and was open to anyone interested, Mrs. Midland said, "Everyone was vibrating—listening to every word."

She said Dr. Brown told his audience to not only look at the content of art, but also at the form it is in.

Mrs. Midland said that the sponsoring Woodrow Wilson Fellowship Foundation decided to spend most of the available funds on getting the artists to the communities. Little was spent on administrating the program, she said.

It was therefore left up to the towns to receive the artists and organize their programs there.

One aspect of the series is common to each community visited. The three artists give a final performance to the public on the second day. Dr. Brown said the performance is fairly standard at each town, but the group attempts to emphasize the parts of the program which it feels might be most relevant to the particular community.

The final performance is described as a "dramatic and entertaining multimedia production featuring literature, art, theater, and music."

Dr. Brown introduced the performers to the audience and said that their materials were being used to get the audience to think of the human community. He described the humanities as studies that keep the problems and joys of human life in view.

The multimedia presentation began with slides compiled by Dr. Brown, illustrating the words of 19th century Danish philosopher, Kierkegaard in "The Christian Heritage."

Dr. Brown's program also drew from works by Joseph Heller (Catch 22), Aldous Huxley, Carl Sandburg, Jimmy Breslin, Edward Dahlberg, and Maxwell Anderson.

Musical selections performed by Arrants and Simmons included selections from songs made famous by the Beetles, Simon and Garfunkel, Peter, Paul, and Mary, the cast of "Hair" and Blood, Sweat and Tears.

A new feature of the program at Cherokee was selections from poetry written by Arrants, illustrated by slides by Dr. Brown.

WEBSTER, S. DAK., *March 12, 1970.*

Mr. BILL FEGAN,
Director, National Humanities Series,
Princeton, N.J.

DEAR MR. FEGAN: You will have in this letter my appraisal of the first session of the National Humanities Series.

First, the talent. One, Maurice, is a painter, teacher, and film maker. Rod is a musician, actor, and poet. Connie is a musician and actress. But they were all eloquent expositors of the humanities. I kept wondering which was their dominant interest, their art or their interest in the human community. Equally impressive was their ability to sense almost instantaneously the right thing to do or say with or to each of the audiences before whom they were appearing. The audiences were very diverse and large but because of their awareness, versatility, and informality they established a rapport which was truly remarkable. It is difficult for me to believe that another team as great as this can be sent to Webster again.

Second, the performances. Each of the sessions prior to the final one was a beguiling, intriguing, coaxing experience. Maybe they could best be described as being like the rabbit before the hounds in a dog race. The difference is that the rabbit is caught during the final session. And it was devoured. The final performance was magnificently produced, conveying the message eloquently and effectively.

Third, the audiences. The total number of people before whom they appeared must have numbered between 3,500 to 4,000. The population of the whole county, an area with a radius of about 25 miles around Webster, is only about 9,000. Of course, we had a considerable number of people from as far away as 50 miles. The two morning sessions were with the high school students. There were at least six high schools attending these sessions.

Fourth, the effect. The impact of the appearance of these people in this community will endure. The impact seems to grow. Even today, 10 days after their appearance, I overhear people talking about them during coffeebreaks and invariably at meetings I attend the conversation turns to some aspect of the 2 days exposure to this program and these people. I was happy to learn that three pastors of local churches made commendatory remarks about the programs during their services last Sunday. We have made no drive for funds to support the program but since this first team appeared most of the needed funds have come in voluntarily. Particularly happy am I over how the high school people reacted. I expected that when we assembled from a thousand to 1,200 kids that there would be some rowdies who would cause some disturbance or who would not be attention but as I watched them during both sessions they sat transfixed, almost immobile. At one time the telephone rang in a room on the floor above the gym and it was heard.

All of the above would be an exaggeration if I did not say that all people in all audiences were equally "turned on." There were diversities of reactions. A small number were entertained but nothing else. Some because of incapacities on their parts couldn't relate to the meaning. One person told me he thought it was good but he couldn't think abstractly. But the number who were not "turned on" is very small and even those welcome discussing the whole affair which in itself is good.

So we are anxiously awaiting the next session and are beginning to prepare for it. We have run into a little snag but we can overcome it. The Junior-Senior Prom is the Saturday following the dates for the next group and the committee for that big event insists that it has to have the gym each night for decorating. The gym, as we had it arranged made for a feeling of intimacy which we would have considerable difficulty in establishing were we to move the sessions to the armory. I would not have any hesitancy about holding the preliminary sessions there because we can construct a "theatre in the round" much like we had in the gym but the armory has no stage except a portable one. There is no curtain, no backdrop, no stage lighting, and so forth. This concerns me if the final program is structured anything like the one we witnessed on the 6th. The local committee is to meet tomorrow night and it may be that we will want to ask if we can change dates. I have told everyone that it is unlikely that this would be possible because many communities may have already sent their promotional materials to the printer and it probably would involve trying to shift dates for too many communities but if the committee insists I may have to try to reach you by phone.

It seems to me that nothing greater could happen to this country than for the National Humanities Series to be so expanded or extended until the spirit of it permeated the whole country. Merely exposing people throughout the country to personalities such as Maurice, Rod, and Connie was stimulating and exciting. Therapeutic. I refer to them as Maurice, Rod, and Connie because they asked that I do this. They were that friendly. They gave of themselves too generously, I am afraid. After each session I would have to shoo people away from them because they would stand around answering questions and visiting endlessly and I was conscious of your admonition that they should have free time, time for rest, et cetera. They never seemed conscious of this.

The intent of this letter is to thank you for sending us this group. I could have extolled the virtues of the people and the program at much greater length. I trust I have said enough to reflect the gratitude and enthusiasm of the community.

It was a pleasure to meet you in Sioux Falls. A slight misfortune kept me from other sessions. I would have liked an opportunity to visit with you longer. From what I saw I concluded that Sioux Falls had not done an adequate job of preparing for the sessions. I can understand why it may be more difficult to excite a larger community but I think it can be done. I know people in Sioux Falls who could have done it so I do not think that towns that size should be avoided but towns that size have to organize better than Sioux Falls was.

We, of course, are anxious to know who will make up the next team.

Thank you.

Cordially yours,

S. ROBERT PEARSON.

SMETHPORT AREA SCHOOL DISTRICT,
Smethport, Pa., March 17, 1970.

Mr. MARTY KRASNEY,
Assistant to the Director, National Humanities Series, Woodrow Wilson National Fellowship Foundation, Princeton, N.J.

DEAR MR. KRASNEY: The enthusiasm and response of the Smethport youths and adults to the first of the National Humanities Series exceeded all expectations. Pages could be written providing testimonial evidence relative to the educational impact on the community. I have attached the schedule of events spanning March 5–6, 1970, from which you will observe the intensity of the subgroup sessions and buildup to the culminating meeting. In each of the small group meetings the individual artist emerged in dramatic fashion, in a way that enhanced the combined performance under the direction of Dr. Schroeder.

Professor Brown added a fringe benefit that cannot be measured directly. I do not know how many citizens can name a living, accomplished sculptor, but in Smethport we not only can name but also can identify closely with a leader through his warm, informative talk. Spin-off questions we have discussed among teachers include "How do we educate a sculptor to be? How do we identify the talented and gifted?"

Mr. Nat Simmons introduced poetry and made it respectable again among the youth. His patience and understanding responses to general questions from an auditorium full of youths provided me with insights into his skills as a teacher. Perhaps 95 percent of our students had never chatted with a Negro before; many who came to shake his hand did so for the opportunity to touch a warm, fellow, human being. Learnings extended far beyond the outlined program.

The Zellers, too, shared their acting skills and sensitivity of expression that left adult groups buzzing with excitement. High school students learned about dramatics from experts who transferred our local limits in talent.

Professor Schroeder, the showman, coordinated the activities with the easy to accept conceptualization of the humanities.

Three of the elements missing in the preparation of our youth for life have been cultural opportunities, grappling with open-ended questions, and dialog with resource persons such as Dr. Schroeder and his team. I am grateful for the degree the gaps have been closed in these areas already.

A passing thought, Smethport has become more unified in this cooperative action than it has in some time. Please share my appreciation with the staff.

Cordially,

DIMITRO BOURANDAS,
Assistant Superintendent.

(In addition, publications in a third of the communities can advance announcements of the visits, of which the following are typical:)

[From The News Gazette, Champaign-Urbana, Ill., Mar. 5, 1970]

PROFESSOR WHISNANT TO DIRECT HUMANITIES SERIES TOUR

An English professor at the University of Illinois will lead one of six groups which will fan out across the Nation this spring to plant humanistic ideas in small cities and towns.

A new program—the National Humanities Series: Time Out for Man—is being financed by a $188,000 grant from the federally-funded National Endowment for the Humanities to the Woodrow Wilson Foundation at Princeton, N.J.

"As far as we know, nothing like this has been done before," Prof. David E. Whisnant of the University of Illinois English department said. "In a sense, we're a pilot program, but plans already are under way for a similar tour next year."

The groups will be composed of professional actors, singers, painters, filmmakers, and others, headed by specialists in such fields as philosophy and art. They will present informal programs for schools, clubs and community organizations in small cities and towns.

GOAL IS LISTED

Whisnant said the goal of the program is to give people a humanistic perspective on contemporary problems and issues such as the generation gap, the hippie phenomenon and minority group tensions.

"We want to set these problems in some sort of historical perspective, to use literature, drama, and poetry to show that people have always had to deal with similar problems.

"There will be three basic programs: On the individual, on the individual in society, and on 'the good life'—environment, ecology, et cetera. The programs are dramatic presentations, written for this specific purpose."

Pantominist Claude Kipnis, artist-in-residence at the University of Illinois, is typical of the caliber of professional talent Whisnant has engaged for the tour.

Kipnis will focus on the individual seen as a human being rather than as a scientific statistic. He plans to adapt some of his silent vignettes of everyday life specifically to the themes of the tour. His brief scenes of pantomime show the growth and evolution of a human being who is both universal and unique.

QUESTION-ANSWER

After the presentation, Kipnis and the other actors will step out of character and join the audience in informal question-and-answer sessions.

The programs have been tailored for the particular communities in which they will be given, according to Whisnant. "We're trying to relate the programs themselves to the individual characteristics of each community."

The group will visit Mineral Point, Wis., March 30–31; Whitesburg, Ky., April 2–3; Dalton, Ga., April 6–7; Toccoa, Ga., April 8–10, and three communities in the Tulsa, Okla., area—Bartlesville, Broken Arrow and Suburban Acres—April 13–18.

A native of Asheville, N.C., Whisnant earned a bachelor's degree in physics from Georgia Tech, and master's and doctor's degrees in English from Duke University. He has been teaching English at Illinois since 1965. His parents, Mr. and Mrs. John K. Whisnant, live near Shelby, N.C. His wife, the former Joyce Bennett, is the daughter of Mr. and Mrs. Charles A. Bennett, Asheville, N.C.

[From the Dalton (Ga.) Citizen-News, Mar. 12, 1970]

HUMANITIES SERIES SET HERE IN NATIONAL PROGRAM

Thirty communities in 22 States have been selected to participate in the First National Humanities Series, a new project of the National Endowment for the Humanities. One of the 30 communities is Dalton and the first program in the series will appear here April 7.

Mrs. Elizabeth Raisin, Creative Arts Guild director chairman for the series, has announced here the theme for the series of three programs, "Time Out For Man."

Each program will deal with a phase of the theme including presentations on "The Private Sphere," man's relationships with other individuals, April 7; "The Human Community," man's relationship to society, April 16; and "The Good Life," man's relationship to his environment, May 19.

At the time of each presentation, a team of instructors and performers will come to Dalton for a 2-day stay visiting with various club and school groups in the area.

The pilot program of the National Humanities Series is being presented by the Woodrow Wilson National Fellowship Kaleidoscope Players, the State Foundation of Princeton, N.J., and has as its producer, Managing Director Bill Fegan, of the Theatre of New Mexico.

The Dalton Committee for the National Humanities Series is composed of Elizabeth Raisin, Director of Creative Arts Guild general chairman, Hugh Davis, executive vice-president, director Chamber of Commerce, publicity chairman; Bill Brooks, director of public services, Dalton Junior College, program preparation; and committee members: Mrs. Bernice Rosen, Mrs. Marti Walker, Mrs. Virginia Weaver, Miss Sara Singleton, Mrs. Sharon Frey, Mrs. Judy Jolly, Don Jones, George Sparks, Terry Christie, Dr. Ed Mobley, Mrs. Selma Rosenblum, Robert C. Gordon, Miss Carey Bowen, and Mrs. Bernice Spigal.

[From the Smethport (Pa.) Democrat, Feb. 26, 1970]

NOTED SCULPTOR TO APPEAR IN SMETHPORT MARCH 5

Joseph Brown, sculptor in residence at Princeton University, who can deliver a right cross or a masterpiece of creation with equal ease, will visit Smethport during the afternoon and evening of March 5, as part of the national humanities series to be presented here next Thursday and Friday in the high school auditorium.

Professor Brown will appear in the auditorium at 2 p.m. Thursday for a session with a selected audience of teachers and students from area schools. At 8 p.m. he will make another appearance for the general public and will sculpt in clay a portrait of a member of the audience while delivering an informal talk.

The sculptor won nine straight bouts as a light heavyweight boxer before hanging up his gloves to continue his education at Temple University.

His aptitude for sculpting came as a second thought while he was posing for Walter Hancock. For the fun of it, he picked up a ball of clay and produced a torso, a latent skill that so impressed Mr. Hancock that he sent Brown some materials and told him to go ahead on his own.

From that first attempt, Professor Brown created his own path to fame and had his first three pieces accepted for exhibit by the Pennsylvania Academy of Fine Arts.

For 7 years he labored under the guidance of the late R. Tait McKenzie and won the National Academy of Design's Barnett Prize for Sculpture, among other awards.

Although he was then well on the way as a sculptor, Professor Brown maintained his interest in sports, and in 1938 was named boxing instructor at Princeton and the following year was appointed resident fellow in sculpture. He is now sculptor in residence and lecturer in architecture with rank of professor at Princeton.

In 1967 he received the distinguished service citation of the American Association for Health, Physical Education and Recreation, a department of the National Education Association.

During World War II he was a consultant to the Secretary of War and his convictions and novel ideas about boxing led to the revamping of the Army's boxing instruction program during the war.

His professional writings in the field of architecture have appeared in American, French, Italian, and Danish design magazines.

Many sports trophies are inculded in his vast production including the AAU Swimming Monument and Ivy League soccer, fencing, wrestling, and squash trophies.

The 2-day program here on March 5 and 6, entitled "The Private Sphere," will relate itself with the fundamental human relationships among families and between friends and will examine the themes of loneliness, loyalty, and love.

Ben Zeller and Barbara DeKins, leading actor and actress of the State Theater of New Mexico, will also appear, as will Nat Simmons, former member of the APA acting company in New York, and creator of "Poetry in Black," a view of America's black man in his poetry, song and dance.

The entire production will be under the direction of Professor Fred Schroeder.

REGIONAL GRANTS

Mrs. HANSEN. You are requesting $500,000 for regional grants. Justify this request.

Mr. KEENEY. That is a misnomer really. These are grants through which we try to get to cultural institutions that serve a city or a region. Some examples of these are a grant to the Field Museum in Chicago for an exhibition on American history, art, and culture, which reached about 150,000 people.

Another grant that we just made this year is to the Hampton Association for Arts and Humanities in Virginia, which is an effort to support an already on-going interracial group, quite a large one, in uncovering the past of Hampton, which is the oldest English-speaking settlement on the Continent. I expect that that will be quite successful.

Mrs. HANSEN. Insert a list of the public programs in the record.

Mr. KEENEY. Yes. Here is a list of all the public programs that we have made.

(The information follows:)

PUBLIC PROGRAM -- PUBLIC DISSEMINATION GRANTS, FISCAL YEAR 1970
(Obligated or Committed)

	Direct	Gifts and Matching
University of California, Berkeley, California. To produce film on sculptor Peter Voulkos	$ 32,300	----------
National Educational Television, New York, N.Y. To produce TV documentary on Menominee Indian, the historical background of present circumstances	60,000	30,000
Indiana University/National Instructional TV Center, Bloomington, Ind. To produce pilot film on contemporary urban problems in historical perspective	----------	40,000
WNDT/Educational Broadcasting Corporation New York, N.Y. To produce pilot TV film on developments in American jurisprudence	60,000	20,200
Bay Area ETV Association, San Francisco, California. To produce two multi-media TV programs in American history	30,000	30,000
Texas State Historical Association, Austin Texas. To produce documentary film on Southwest culture	6,000	----------
Campbell Folk School, Brasstown, No. Carolina. To produce a film describing the folk school movement	9,980	----------
TOTAL	$ 198,280	$ 120,200

PUBLIC PROGRAM -- REGIONAL GRANTS, FISCAL YEAR 1970
(Obligated or Committed)

	Direct	Gifts and Matching
Brooklyn Public Library, Brooklyn, N.Y. To support presentations in branch library locations on cultural heritages of residents	$42,000	
Ohio State University Research Foundation. Columbus, Ohio. To provide high school students and other audiences with introduction to drama and theater	17,000	
University of New Mexico, Albuquerque, N.M. To support lectures and discussion on the works of D.H. Lawrence who lived for a period in Taos, N.M.	16,000	
Wichita Centennial, Inc., Wichita, Kansas. To support multi-cultural exhibit during centennial celebration	8,500	
Hampton Association for Arts and Humanities Hampton, Va. To support community-involvement archaeological project	50,000	
Washington University, St. Louis, Mo. To support a series of lectures and presentations on new uses of technology in the arts and humanities		$ 24,390
University of Alaska, College, Alaska. To gather and exhibit material on Alaskan culture	49,670	
Douglass House Foundation, Los Angeles, California. To support cultural workshops in inner-city areas		82,000
Field Museum, Chicago, Ill. To support exhibition on Mexican art, culture and history	7,500	
Wisconsin State Historical Society, Madison Wisconsin. To support county agent project	16,720	
TOTAL	207,390	106,390

PUBLIC PROGRAM — MUSEUMS AND HISTORICAL SOCIETIES, FISCAL YEAR 1970
(Obligated or Committed)

	Direct Grants
Fellowships	
The fellowships encourage and assist students to take advanced degrees as preparation for careers in museum and historical associations.	
Academic year 1969-70:	
State University College at Oneonta (N.Y. Historical Association, Cooperstown) 6 fellowships	$ 32,400
George Washington University (Smithsonian Institution) 3 fellowships	16,200
National Trust for Historic Preservation Washington, D.C. 4 fellowships	21,320
Academic year 1970-71:	
University of Delaware-(Winterthur Museum) 5 fellowships	27,000
University of Delaware (Hagley Museum) 5 fellowships	27,000
George Washington University (Smithsonian Institution) 4 fellowships	21,600
University of Connecticut (Old Sturbridge Village) 6 fellowships	31,200
State University College at Oneonta (N.Y. State Historical Association, Cooperstown), 6 fellowships	32,400
Seminars	
The purpose of the seminars is to help museum personnel keep abreast of improved techniques of museum operations and services.	
American Association for State and Local History, Nashville, Tennessee, 75 participants	61,000
Colonial Williamsburg, Inc., Williamsburg, Virginia, 8 participants	5,500
Internships	
Under a program sponsored in fiscal 1969, provision was made for ten leading museums to provide one internship for a staff member of a smaller museum. Of these, six internships were obligated from fiscal year 1970 funds	46,380
TOTAL	322,000

PUBLIC PROGRAM -- BICENTENNIAL GRANTS, FISCAL YEAR 1970

(Obligated or Committed)

	Direct
American Association for State and Local History, Nashville, Tennessee. To support program planning and technical assistance for historical societies and museums for observance of the Bicentennial----------	$ 37,050
National Council for the Social Studies, Washington, D.C. For development of multi-media materials for courses in the history of American Revolution for use in junior high schools and other purposes----------	65,000
TOTAL	$102,050

MUSEUMS AND HISTORICAL ASSOCIATIONS

Mrs. HANSEN. You are requesting $250,000 for museums and historical associations. Justify this request.

Mr. KEENEY. Museums and historical associations are one of the first things that the Humanities Council turned to. They felt that one of the real inadequacies in museums and historical associations is the personnel. These programs are entirely directed toward upgrading the personnel. Museum programs consist of fellowships that are given to universities to prepare people for museum work. We expect to supply 26 fellowships for that purpose next year. We have such programs ongoing now in six institutions.

Mrs. HANSEN. Insert a list of those programs in the record.

Mr. KEENEY. Yes. The historical society's seminar program is a program where historical society personnel are brought together to consider better ways of running historical societies. That has been going on for 4 years and it has been quite successful.

(The information follows:)

MUSEUM PERSONNEL DEVELOPMENT GRANTS

	1967–68	1968–69	1969–70	Total	1970–71
Museum fellowship programs:					
University of Delaware (Winterthur)	3 $16,200	4 $21,600	5 $27,000	12 $64,800	5 $27,000
University of Delaware (Hagley)	3 $16,200	4 $21,600	5 $27,000	12 $64,800	5 $27,000
George Washington University	2 $10,800	4 $21,600	3 $16,200	9 $48,600	4 $21,600
New York State University College-Oneonta	6 $32,400	6 $32,400	6 $32,400	18 $97,200	6 $32,400
University of Maryland	2 $10,800			2 $10,800	
University of Connecticut			4 $20,800	4 $20,800	6 $31,200
National Trust for Historic Preservation			[1] 4 $21,300	4 $21,300	
Total	16 $86,400	18 $97,200	27 $144,700	61 $328,300	26 $139,200
Museum and historical society seminar programs:					
American Association for State and Local History	121 $47,000	75 $44,000	75 $53,000	271 $144,000	75 $61,000
Colonial Williamsburg			8 $5,500	8 $5,500	8 $5,500
Total	121 $47,000	75 $44,000	83 $58,500	279 $149,500	83 $66,500
Grand total	137 $133,400	93 $141,200	110 $203,200	340 $477,800	109 $205,700

[1] Equivalent.

BICENTENNIAL PROJECTS

Mrs. HANSEN. You are requesting $300,000 for bicentennial projects. Justify this request.

Mr. KEENEY. This is an effort to supplement the work of the Bicentennial Commission which has only staffiing funds; it has no operational funds. We are asked to cooperate by Public Law 89–491. An example of a grant is a grant to the Association of State and Local Historical Societies to prepare materials to help local communities support the local celebration of the bicentennial, which could turn out

really to be very uninspiring, and one that wouldn't appeal to young people at all. They expect to produce some guidelines for them, and to hold seminars for people to learn how to run such programs. The Smithsonian is also working on that. I sent them over to the Smithsonian, and we have worked out together a program for this. The Smithsonian will support the preparation of a manual for local societies.

Then we have a number of research grants in the bicentennial period. One is the support of Dumas Malone's work on Jefferson, editing papers of Robert Morris and John Jay, Federalist essays, urban society at the end of the Revolution, the age of Washington and Jefferson, the George Washington papers, the preparation of some material for teachers on the heritage of the American Revolution, and a fellowship program under the auspices of Phi Beta Kappa.

Mr. MARSH. Could I ask a question? Are you doing something to see what can be done to make the American Revolution relative to youth, the bicentennial observance relative to youth?

Mr. KEENEY. Yes. We really haven't found a handle to that yet. We are looking for one, and I am very much concerned that it won't be appealing to youth.

(Discussion off the record.)

Mrs. HANSEN. Isn't it true that the American Revolution really was a revolution of youth itself?

Mr. KEENEY. They were very young people who made the Revolution, and I think their ideals and the things that they were revolting for and the things they wrote the Constitution for are quite similar to the things that young people want today, and I think that may be the best way to get at them, by pointing out the similarity of objectives. I think if you have serious discussions on the topic "every man is created free and equal," you may interest people quite a lot, particularly young people.

FELLOWSHIPS AND SUMMER STIPENDS

Mrs. HANSEN. You are requesting $1.5 million for fellowships and summer stipends.

Justify this request.

Mr. KEENEY. Yes. These programs are very successful, and as I said in my statement, the applications far exceed the number of fellowships available, and even more important, the qualified people exceed the number available.

Mrs. HANSEN. Insert in the record a list of the typical scholarships awarded.

Mr. KEENEY. Surely.

(The information follows:)

EXAMPLES OF YOUNGER SCHOLAR FELLOWSHIPS AWARDED IN FISCAL 1970

As stipulated in the act establishing the endowment, fellowships are supported in the following fields: language, both modern and classical; linguistics; literature; history; jurisprudence; philosophy; archeology; the history, criticism, theory, and practice of the arts; those aspects of the social sciences which have humanistic content and employ humanistic methods; and the study and application of the humanities to the human environment.

Some examples of the topics to be studied by fiscal 1970 fellows are as follows:

Latin American history and historians in the 19th century (Charles R. Berry, University of Louisville, Kentucky).

Social ethics and radical social change (Joseph D. Bettis, University of Alabama).

Labor in Texas since the beginning of the New Deal (George N. Green, University of Texas, Arlington).

Family patterns and religious experience in early America (Philip J. Greven, Jr., Rutgers University, New Jersey).

The classical humanities of China, India, and Japan (Robert A. Hawk, Santa Fe Junior College, Florida).

The city in Muscovite and early Imperial Russia (James M. Hittle, Lawrence University, Wisconsin).

The use of film sources for the study and teaching of American history (William C. Hughes, Essex Community College, Maryland).

Afro-American literature from 1850 to the present (Mary V. Jackson, University of Missouri, St. Louis).

The prose writings of Vladimir Nabokov (Stephen J. Parker, University of Kansas).

The Jeffersonians' conception of party; the development of the idea of a loyal opposition (James R. Sharp, Syracuse University, New York).

Character, development, and diffusion of neoclassical architecture in England (Damie Stillman, University of Wisconsin at Milwaukee).

A comparison of the abolition of slavery in the United States and Brazil (Robert B. Toplin, Denison University, Ohio).

AVERAGE SIZE OF FELLOWSHIPS

Mrs. HANSEN. What is the average size of the fellowships?

Mr. KEENEY. A fellowship for a younger scholar is around $8,900. A fellowship for a senior scholar is a maximum of $15,000. That includes the travel allowance. Junior colleges would be up to $9,500 and $1,000 for——

Mrs. HANSEN. How much travel is involved?

Mr. KEENEY. They can take one round trip to Europe by economy air and they can travel around in Europe until the maximum amount of $500 is used up.

Mrs. HANSEN. What particular subjects would they be studying?

FELLOWSHIP STUDIES

Mr. KEENEY. Some of them do archeology, some of them do history, some of them do history of art, some of them do literature, some of them do political theory.

Mrs. HANSEN. Do you have much overlap, or are you continually having new applications?

Mr. KEENEY. We have on the one hand applications to study things that no one has ever studied before. We have applications to study things that have been inadequately studied. Many of the books that I saw displayed on the floor 1 year are quite inadequate, and need to be restudied and rewritten. There is a saying that every generation has to write its own history, and there is some truth in that. The questions that people ask of history are different in every generation, and it needs to be done over and over again. The advance of knowledge in humanities is phenomenal. Most of what I knew when I stopped teaching isn't so any more, and a great deal of what has been discovered I don't know. I could not, after a lapse of 20 years,

go back to teach medieval history. Fifteen years, excuse me. That is, and do it adequately.

(Discussion off the record.)

Mr. KEENEY. In some cases these fellowships are for more general study, that is giving a man an opportunity to acquire competence in a second field, so he can broaden his instruction, and there is no question of originality.

SENIOR FELLOWSHIPS

Mrs. HANSEN. You are requesting $1 million for senior fellowsips. Justify this request.

Mr. KEENEY. Here is an increase of $400,000. There really ought to be 200 awards a year. This will not provide anywhere near that many.

Mrs. HANSEN. Insert in the record some examples of your senior fellowships.

Mr. KEENEY. Surely.

(The information follows:)

EXAMPLES OF SENIOR FELLOWSHIPS AWARDED IN FISCAL 1970

Senior fellowships are supported in the same fields as under the younger scholar fellowships program. (See earlier listing.) Some examples of the topics to be studied by fiscal 1970 senior fellows are:

Economics and the law of property (Thomas F. Bergin, University of Virginia, Charlottesville).

Historical research on the American Negro woman (Helen G. Edmonds, North Carolina Central Univresity).

America's 19th century cities in law, constitutionalism, and politics (Harold M. Hyman, Rice University, Texas).

The presidents and the press (George I. Juergens, Indiana University, Bloomington).

Urban form and structure in medieval and early modern Europe (John H. Mundy, Columbia University, New York).

American Indian Policy, 1860–1900 (Francis P. Prucha, Marquette University, Wisconsin).

A data-pool system for inventorying African arts and crafts in the field (Roy Sieber, Indiana University, Bloomington).

Yaqui culture as human type and as unique human expression (Edward H. Spicer, University of Arizona).

Greek humanism (Laszlo G. Versenyi, Williams College, Massachusetts).

Mr. KEENEY. Let me talk about one of them in particular, which I think will be interesting to you. A scholar at Stanford University named Potter had one last year to study alienation in American society. He came up with some very interesting results. He is a historian who has some competence in other subjects and a very inquiring mind. This is a study that will be of use when it is published.

Mrs. HANSEN. You are requesting $200,000 for Negro college faculty development. Justify this request.

NEGRO COLLEGES, OTHER MINORITIES

Mr. KEENEY. There is no part of American education that is less adequately funded today than the Negro colleges. The Federal Government is mounting an effort to increase the funding for them, and they are trying to raise money privately. For the generation to come a high percentage of the Negroes who will attend college will be going to predominantly Negro colleges. The faculties are of various compe-

tency. Some of them are awfully good, but the predominantly white colleges are tending to drain them off. These are grants to the college of a maximum of $10,000, which enables them to mount various programs to improve their faculties. Sometimes they use them to send people away to study further. Sometimes they use them to bring people in to work with their faculty. Sometimes they use them to bring people together to work out new and more applicable methods of instruction. It has been quite successful. It ought to be a larger program.

OTHER FELLOWSHIPS

Mrs. HANSEN. You are requesting $300,000 for fellowships for studies in selected fields. Justify this request.

Mr. KEENEY. Yes. We decided to try to work our fellowship program in reverse, rather than giving the grant to an individual to do what he wished. We decided to give it to a group of competent people to try to bring people in to improve their competence with them. These are supposed to go to people who go to institutions. These will go to four institutions this year which will bring people in who have done their doctoral work in the field of Afro-American studies, and they will work with recognized experts in the field while they are there. Next year we would like to make a similar opportunity available for people to study Indian studies and Mexican-American studies.

Mrs. HANSEN. What institutions will receive the grants?

Mr. KEENEY. Yes, Howard, Wisconsin, Hopkins, and Stanford.

JUNIOR COLLEGE FACULTY

Mrs. HANSEN. You are requesting $250,000 for junior college faculty fellowships. Justify this request.

Mr. KEENEY. The junior colleges, I think, are the most critical part of our educational system. The people who attend these are the least academic of all our students for the most part, unless they are going for financial reasons in which case they need as good an opportunity as they can get to prepare themselves for transfer to a senior college. The facilities are by their own admission not adequate yet. This is an effort to see if this is a way they can be helped to become better.

RESEARCH AND PUBLICATION GRANTS

Mrs. HANSEN. You are requesting $750,000 for large research and publication grants. Justify this request.

Mr. KEENEY. Most of our grants in the research program have been for small projects, in which we give perhaps half, perhaps a fifth of what is needed to carry on. Many of them have raised the remainder from other sources. This is an effort to bring together fairly large groups of scholars in the humanities. We have a proposal before us from a learned society for a grant of several hundred thousand dollars, of which the National Science Foundation would pick up a part and we would pick up a part, to use the computer to develop adequate bibliographies in several representative fields in the humanities. The fields are literature, medieval studies, and Asian studies. They present different problems. They are designed to make possible the nationwide

use of facilities which can be done through remote terminal installations. Another example would be a multivolumed history of the United States, which is not a proposal before us, for popular use. Another proposal might be preparation of scholarly tools in other fields.

I have a list somewhere from the Director of the American Council of Learned Societies which estimates there is now a backlog of about $1.5 million in need for this. I am sure the backlog has increased because he made it 4 years ago.

Mrs. HANSEN. You are requesting $900,000 for small research and publication grants.

Mr. KEENEY. We are asking here for an increase of not quite $600,000. We would like to increase the size of these grants to $15,000, and be able to support many more of the qualified people than we now can. We constantly get recommendations for funding of very good things, for which we don't have money. We would like to increase the number of those that we can help. These range from traditional humanistic research to rather venturesome projects in urban studies and the like. They include archeological studies, studies of town growth.

ARCHEOLOGICAL DIGGINGS

Mrs. HANSEN. Are these archeological diggings in the United States? Do you ever have an overlap with the Smithsonian on these studies?

Mr. KEENEY. No, they are usually not in the United States. We have never had an overlap with the Smithsonian excepting once, and we corrected that situation as soon as it was evident. We make archeological grants for the historical period, that is the postliterate period. The Science Foundation makes them available for the prehistoric period, and we have good working relationships with the Smithsonian.

Mrs. HANSEN. How many studies have been done on urban ghettos and town growth?

Mr. KEENEY. We can provide you with the answer to that.

(The information follows:)

In fiscal 1969 and 1970 the Endowment made or has committed six grants in the small-grants research program pertaining to race relations in urban ghettos and studies of town growth. These are as follows (fiscal year and amount of grant in parentheses):

RACE RELATIONS

1. Alwyn Barr, Purdue University: "An analysis of Negro housing patterns and social mobility in nineteenth century San Antonio." (1969: $2,350.)
2. E. A. Ziegenhagen, Wayne State University: "Administration of justice during the Detroit civil disturbance, 1967." (1969: $7,500.)

STUDIES OF TOWN GROWTH

1. Jack P. Greene, Johns Hopkins University: "Urban society on the eve of the Revolution—Annapolis, Maryland, 1782–1785." (1969: $10,000 plus $20,000 in gifts and matching funds.)
2. Gabriele Gutkind, University of Pennsylvania: "The international history of city development." (1968: $18,000; 1969: $10,000.)
3. Hanno Weber, Princeton University: "Open space in housing." (1970: $9,790.)
4. John W. Shively, Washington, D.C.: "A history of urban renewal." (1970 grant pending: $25,000 in gifts and matching funds.)

NOTE.—In addition to the above grants, over 50 fellowships and summer stipends have been awarded by the Endowment during fiscal 1969 and 1970 to scholars studying race and urban-related subjects.

EDITING AND PUBLICATION

Mrs. HANSEN. You are requesting $300,000 for editing and publications. Justify this request.

Mr. KEENEY. The principal work here is the Center for Editions of American Authors, which we will be about half way through at the end of this year. They have been raising a little bit more money from other sources than they had previously, and as you know, they are publishing the works of Crane, Emerson, Hawthorne, Howells, Irving, Melville, Thoreau, Twain, and Whitman. In 1971 we expect to do more of Crane, Emerson, Hawthorne, Howells, Irving, Whitman, and Thoreau. This is quite a successful proposal.

(The information follows:)

CEAA VOLUMES SUPPORTED BY NEH

Publications of the Center for Editions of American Authors which were supported by the Endowment through 1969 are listed in the fiscal 1970 House Appropriations Committee hearings, pages 608–609.

Works scheduled for publication in 1970 and 1971 are as follows:

1970

Stephen Crane: "Tales of War" and "Tales of Adventure."
Ralph Waldo Emerson: "Journals and Miscellaneous Notebooks," volume VIII.
Nathaniel Hawthorne: "Our Old Home."
William Dean Howells: "A Son of Royal Langbrith," "Shadow of a Dream," "The Rise of Silas Lapham," and "A Chance Acquaintance."
Washington Irving: "Journals," volume III.
Walt Whitman: Variorum edition, "Leaves of Grass," two volumes.
Henry David Thoreau: "Walden."

1971

Stephen Crane: "O'Ruddy" and "Red Badge of Courage."
Ralph Waldo Emerson: "Journals and Miscellaneous Notebooks," volume IX and X, and "Nature."
Nathaniel Hawthorne: "Wonder Book," "Tanglewood Tales," and "True Stories."
William Dean Howells: "A Leatherwood God" and "An Indian Summer."
Washington Irving: "Mahomet."
Walt Whitman: "Journalism" (at least one and possibly two volumes).
Henry David Thoreau: "Early Essays."

Mr. KEENEY. We expect to renew this grant next year. Then of the sum remaining, $100,000 will be used for smaller editorial projects.

Mrs. HANSEN. Has a publisher ever done this before?

Mr. KEENEY. There have been a number of editions of all these authors but very few of them are editions that can be called definitive texts.

Mrs. HANSEN. They weren't scholarly editions?

Mr. KEENEY. They weren't accurate editions. They would simply take the first edition and republish it. Now, there are errors in every first edition, differences between what was printed and what the author wrote, and most authors who lived made changes in their works in subsequent editions. This is an effort to bring together all the differences.

SELLING PRICE OF HARDBACKS

Mrs. HANSEN. How much do these sell for in hardback?

Mr. KEENEY. They are selling for probably around $10 per volume. Many of them are published in softback, too.

Mrs. HANSEN. Have you had any difficulties selling the volumes?
Mr. KEENEY. No.
Mrs. HANSEN. None whatsoever?
Mr. KEENEY. No. There is not a rush for them but they are intended to go to libraries, you know.
Mrs. HANSEN. I understand, but the libraries are purchasing the volumes?
Mr. KEENEY. Oh, yes; just about as expected.

BICENTENNIAL GRANTS

Mrs. HANSEN. You are requesting $200,000 for bicentennial grants. Justify this request.
Mr. KEENEY. These are research grants. I spoke about them when I spoke about the public grants, and they are studies of the achievements of individuals, of the characteristics of periods, of the George Washington papers, and the like.

GEORGE WASHINGTON PAPERS

Mrs. HANSEN. How much has already been spent on the George Washington papers?
Mr. KEENEY. I think we made one grant of $100,000 of gifts and matching, and we have just made a second grant of $60,000 in gifts and matching.
Mrs. HANSEN. When will these be completed?
Mr. KEENEY. Perhaps 10 years.
Mrs. HANSEN. How many will be ready for the Bicentennial celebration?
Mr. KEENEY. Perhaps half of them.

PLANNING, DEVELOPMENT, AND EVALUATION FUNDS

Mrs. HANSEN. You are requesting $450,000 for planning, development, and evaluation. Justify this request.
Mr. KEENEY. This is our control on ourselves. This is the money with which we plan, with which we test programs for making grants and with which we evaluate programs, and in a pinch we use it in a variety of ways. It is very important money. It is the money that nourishes the brain cells. I think any Federal agency, or any private agency for that matter, is likely to get set in its ways and we have people, Mr. Hausman and Mr. Tashdinian, who have sufficiently fertile minds to keep us from getting set in our ways. Mine is getting old. They are both quite young, except for Mr. Hausman.

EXAMPLES OF TEST GRANTS

Here are some of the examples of the kind of test grants we make there: A pilot project to stimulate local historical society activity in the humanities, a grant for the Center for Advanced Study in the Behavioral Sciences, to change it into a partly humanistic organization; a grant to support a study of postdoctoral fellows.
Mrs. HANSEN. Why are you conducting this study?

Mr. KEENEY. This is to find out what people are getting doctorates, where they are; it is a statistical study made by the National Research Council. It is supported by several Federal agencies.

Here is a preliminary or summary report of that study. It will be of some use to institutions and to granting organizations.

We funded the National Humanities Faculty through this program. We have made several grants to study student participation in academic decision-making, the history of the student movement. Here is another one to support planning for an international symposium on the communication of complex ideas, which isn't very easy.

WOODROW WILSON INTERNATIONAL CENTER

With your permission, we would like to make a grant to the Woodrow Wilson International Center to support humanistic scholars there. Do you want to talk about that?

Mrs. HANSEN. Please do.

Mr. KEENEY. Yes. This is, as you know, an organization that was set up by the Congress last year or the year before to establish in Washington an international center for scholars.

Mrs. HANSEN. That is right.

Mr. KEENEY. It is specifically authorized to receive Federal funding. I happen to be an ex-officio member of the Board, as are the heads of many other agencies, and they have asked for $200,000 in gifts and matching to provide fellowships. The Council has voted them a grant of $150,000 in gifts and matching to provide fellowships in these humanities.

The Senate committee—Senator Bible—has approved of that and I hope you will, too.

Mrs. HANSEN. He was reluctant to provide administrative funds because such action would involve many ramifications.

Mr. KEENEY. He specifically provided that no money could be used for administration. That is all right with me.

Mrs. HANSEN. What funds will you use for administration expenses?

Mr. KEENEY. Well, may I go off the record?

Mrs. HANSEN. Yes.

(Discussion off the record.)

Mr. KEENEY. I think the Center in a few years will be able to raise its own money but I think it is important during its early stages that it get public support.

Mrs. HANSEN. Don't you think, Mr. Keeney, it would be a reproach for the entire Woodrow Wilson idea not to have any funding?

Mr. KEENEY. Well, I should hate to see it. It would mean we have created something and barely got it started and then dropped it.

ADMINISTRATIVE EXPENSES

Mrs. HANSEN. What is your estimate of the amount of funds that will be needed for administrative expenses?

Mr. KEENEY. I would rather that came from them because I don't really know the details of the administrative budget. I think it would be a relatively small sum.

Mrs. HANSEN. If they are provided with the administrative funds do you anticipate making any further grants to them or do you anticipate that they will make an application to the Council?

Mr. KEENEY. We might, next year, want to give them a further fellowship grant. I think it is very important from our point of view that humanists be represented in that group, and for that reason and to serve the interests of the humanities of the country I think we might want to make them another fellowship grant on a matching basis.

Mrs. HANSEN. What funds do they use for matching funds?

Mr. KEENEY. They raise private money from foundations and individuals.

Mrs. HANSEN. Do you have any other comments to make?

Mr. KEENEY. No.

GIFTS AND MATCHING FUNDS

Mrs. HANSEN. You are requesting $2.5 million for matching funds. Justify this request.

Mr. KEENEY. In 1968 we took in a total of about $333,000, but actually about $300,000, because we didn't obligate it all. That was the year that the authorizing legislation took off the unrestricted requirement, so from $300,000 we went in 1969 to $1,200,000, despite the fact that the supplemental came after the end of the fiscal year. We have now offered almost $2 million in matching opportunities. $318,000 of that has been pledged or paid in writing; another $1,100,000 is highly probable; and about half a million dollars is possible, which makes up the $1,977,000. That does not include the $200,000 or $300,000 I told you about a few minutes ago, so I think we will probably equal this amount and, as Miss Hanks said, if we don't get the gifts the money stays in the Treasury.

I think for next year $2.5 million is a reasonable amount because I am quite sure that the development grants, which will be in large part matching, will increase the flow of money colleges and universities can raise, sums of money of the sort that I have in mind.

Mrs. HANSEN. Thank you, Dr. Keeney, for a very knowledgeable presentation.

Mr. Reifel?

Mr. REIFEL. Thank you, Madam Chairman. It is a little bit easier for some to understand the arts because they know about the orchestras and operas, but when it comes to the humanities, what is it that is common to the humanists? I notice you say:

> In 1969–70 there are an estimated 54,000 full-time faculty members in the humanities in the nation's colleges and universities who are less than 40 years old.

What is it that is common in this, I suppose, field or discipline that one humanist is the same as another? I mean, if you talk in the field of, say, musicians you have the person who plays the violin and one the organ and the piano, and there is something common in that field, but what about the humanist?

DEFINING A HUMANIST

Mr. KEENEY. It is a hard thing to define but I will try it.

Mr. REIFEL. I hope you will do this, and if you want to take some time and do it later in writing, maybe it would be better, so that we may be knowledgeable when we talk about it.

Mr. KEENEY. These are people who study the record of humanity, of people. They study their writings, they study their actions, they study their history, they study what they have left behind them. They study their thoughts in philosophy and their aspirations in religion. They are people who are learning to bring this past record to bear on the present and on the future. This is essentially what they have in common.

Now, in particular, they range from literary historians of one literature or another to straight historians, to art historians, to music historians, to philosophers, to philosophers of history, of art, of music, anthropologists concerned with human custom, some sociologists, some political theorists, all these things that are part of the human past and the human future.

I should say one more thing. They are also interested in judgments of value, what is better and what is worse, and that I think is a very important thing for us to keep in mind today.

Mr. REIFEL. In your educational development grants you say:

> It is vital that educational planning take place within the context of real needs and real possibilities. One of the more important reasons why humanists have not always planned realistically is that often no genuine possibility of financial support was available for implementing good ideas. Development grants, therefore, are also an essential part of the Endowment's educational program for 1971.

Why can't the university leadership, a great institution president, such as you were, and the faculty as a part of that leadership be able to do this, because it would seem to me this is the essence of a liberal arts institution's whole purpose in orienting ourselves to the future? Why couldn't they do that without this kind of additional impetus that would be provided by this thing you have in mind?

Mr. KEENEY. In the first place, the colleges and the universities are in a financial bind today because of the tapering off of Government support. Most of this support is in the sciences, but it has always had an effect on the availability of funds for other purposes, so that they cannot do it at the present time on their own money. Universities, whether they are public or private, are in very much the same fiscal position that artistic organizations are in. The more people you admit to a college, the bigger a deficit you run, because in no case that I know, except in one or two small colleges, is the cost of education equalled by the fees for education. They usually run somewhere between 45 and 55 percent in private institutions, a much lower fee in public institutions.

The State legislatures are drying up, too, as a source of new funds, and it costs money to do things in the humanities just as it does in the sciences. You need new libraries, you need new faculty, you need new books and you need other materials.

What we hope to be able to do through this program is to give them bait money, we might call it, money with which they can attract other

money. There is nothing that attracts money like money, as you know, and if you get a grant of this sort that requires you to raise other money you immediately raise the fundraising capacity of that institution and give it an opportunity fundamentally to improve itself.

Now, why do we need money for planning grants? Well, for a thoroughly adequate institution that is completely satisfied with everything it does, their tendency will be to use their own people and not to expect the introduction of any outside ideas. Usually this doesn't work out very well because there are usually good ideas scattered around in various places. There are people with competences outside of any university that don't exist in that university. They need to bring people in. Everybody in a university is fully occupied with teaching or research. You need to replace them in some of their normal activities to free their time to plan, and for planning grants, part of the money could be used for that. You need logistical support for a planning committee. You need secretarial support, statistical support, and the like, and that is what the money is used for.

Then sometimes you need to test something out and new money from whatever sources is required for that. Does that answer your question?

Mr. REIFEL. That answers my question. Thank you very much. I want to join Mrs. Hansen in commending you and your associates for an excellent presentation.

Mr. KEENEY. Thank you.

Mrs. HANSEN. Mr. McDade?

Mr. MCDADE. No questions, Madam Chairman.

Mrs. HANSEN. Thank you again.

Mr. KEENEY. Thank you.

ADMINISTRATIVE EXPENSES, NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

WITNESSES

BARNABY C. KEENEY, CHAIRMAN, NEH
NANCY HANKS, CHAIRMAN, NEA
WALLACE B. EDGERTON, DEPUTY CHAIRMAN, NEH
PAUL P. BERMAN, DIRECTOR OF ADMINISTRATION, NFAH

Mrs. HANSEN. Please insert justification pages 1 through 21 in the record.

(The pages follow:)

ADMINISTRATIVE EXPENSES

FY 1970 - $1,550,000; FY 1971 - $2,400,000; Increase - $850,000

The programs of the National Foundation on the Arts and the Humanities are administered by the two Endowments and by a shared administrative staff. Functions of the National Endowment for the Arts are conducted through eight Directorships: State and Community Operations; Theatre; Dance; Visual Arts; Music; Literature; Architecture; Education and Public Media. Functions of the National Endowment for the Humanities are conducted through two staff offices - those of the Chairman and Planning and Analysis - and by four operating divisions: Fellowships and Stipends; Research and Publication; Education; and Public Programs. In the interests of efficiency and economy, a shared staff consisting of an Administrative Office and an Office of General Counsel perform accounting, personnel, legal, grants administration, and other service functions common to both Endowments.

This Foundation's need for increased administrative capability cannot be over-emphasized.

During FY 1970 it will continue to operate with grossly inadequate administrative funds. The small increase of $90,000 in FY 1970 will be more than offset by the pay raise amounting to $120,000. As bad as it is, this eroded capacity becomes even worse upon consideration of the increase of 67% in program funds for FY 1970, and the resultant need for increased use of panels and consultants, and program oversight.

The increases contained in this budget reflect only the minimum necessary for prudent administration. This may be seen readily in the following comparison:

	Actual FY 69	Available FY 70	Requested FY 71
Program Funds	12.9	21,590	37,600
Administrative Funds	1.456	1.545	2.400
Positions	82	85	115
Administrative Costs as a Percentage of Total Funds	10.1	6.7	6.0

Although the increase in permanent positions requested for FY 71 is 30, only 10 result from an increase in program funds. The 20 remaining are simply a repetition of the request contained in the FY 70 budget, the lack of which is seriously handicapping the Foundation's day-to-day operation.

It must be strongly emphasized that without these positions the ability of this agency to comply with the various statutes and regulations concerned with the prudent management of funds will fall dangerously short of minimal compliance.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

SUMMARY OF FUNDS AVAILABLE

		1969 ACTUAL	1970 ESTIMATE	1971 REQUEST	INCREASE
Appropriation, Definite		$1,400,000	$1,490,000	$2,400,000	$910,000
Recovery of Prior Year Obligations		3,882	-0-	-0-	
Unobligated Balance Prior Year		56,502	54,984	-0-	
Total Available for Obligation		1,460,384	1,544,984	2,400,000	855,(16
Obligations	$1,341,910		1,544,984	2,400,000	
Transfer to GSA	14,464	1,356,374	-0-	-0-	
Unobligated Balance		$ 104,010*	$ -0-	$ -0-	

*Includes $49,025.96 unobligated balance lapsing.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

SUMMARY OF OBLIGATIONS BY ORGANIZATIONAL UNIT

	1969 ACTUAL	1970 ESTIMATE	1971 REQUEST	INCREASE 1971 COMPARED WITH 1970	PAGE REF.
NATIONAL ENDOWMENT FOR THE ARTS.....	$ 529,092	$ 570,000	$ 858,200	$288,200	S-6
NATIONAL ENDOWMENT FOR THE HUMANITIES...	456,138	551,400	882,200	330,800	S-7
SHARED STAFF.....	371,144	428,600	659,600	231,000	S-8
TOTAL.....	$1,356,374	$1,550,000	$2,400,000	$850,000	S-5

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

SUMMARY OF OBLIGATIONS BY OBJECT CLASSIFICATION

		1969 ACTUAL	1970 ESTIMATE	1971 REQUEST	INCREASE 1971 COMPARED WITH 1970	PAGE REF.
	PERSONNEL COMPENSATION:					
11.1	Permanent Positions.....	$ 944,548	$1,180,700	$1,451,500	$ 270,800	S-9
11.3	Positions Other Than Permanent.....	97,074	70,000	229,200	159,200	S-14
11.5	Other Personnel Compensation.....	3,842	3,200	10,300	7,100	S-16
	Total Personnel Compensation....	1,045,464	1,253,900	1,691,000	437,100	
12.1	Personnel Benefits - Civilians.....	72,320	95,400	127,200	31,800	S-16
21.0	Travel and Transportation of Persons	86,507	79,300	313,700	234,400	S-16
23.0	Rent, Communications and Utilities..	66,354	62,500	77,600	15,100	S-18
24.0	Printing and Reproduction.....	26,800	28,800	47,800	19,000	S-19
25.0	Other Services.....	8,465	14,400	79,200	64,800	S-20
26.0	Supplies and Materials.....	21,257	13,300	25,000	11,700	S-20
31.0	Equipment.....	29,207	2,400	38,500	36,100	S-21
	TOTAL.....	$1,356,374	$1,550,000	$2,400,000	$ 850,000	

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

NATIONAL ENDOWMENT FOR THE ARTS

OBJECT CLASSIFICATION

		1969 ACTUAL	1970 ESTIMATE	1971 REQUEST	INCREASE 1971 COMPARED WITH 1970
	PERSONNEL COMPENSATION:				
11.1	Permanent Positions	$359,869	$426,600	$494,400	$ 67,800
11.3	Positions Other Than Permanent	59,904	35,600	103,100	67,500
11.5	Other Personnel Compensation	1,265	-0-	3,200	3,200
	Total Personnel Compensation	421,038	462,200	600,700	138,500
12.1	Personnel Benefits - Civilians	28,495	34,800	44,900	10,100
21.0	Travel and Transportation of Persons	51,744	45,000	158,100	113,100
23.0	Rent, Communications and Utilities	13,503	14,500	19,900	5,400
24.0	Printing and Reproduction	8,654	8,300	20,000	11,700
25.0	Other Services	2,610	3,000	9,600	6,600
26.0	Supplies and Materials	3,048	2,200	5,000	2,800
31.0	Equipment	-0-	-0-	-0-	-0-
	TOTAL	$529,092	$570,000	$858,200	$288,200

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

NATIONAL ENDOWMENT FOR THE HUMANITIES

OBJECT CLASSIFICATION

		1969 ACTUAL	1970 ESTIMATE	1971 REQUEST	INCREASE 1971 COMPARED WITH 1970
	PERSONNEL COMPENSATION:				
11.1	Permanent Positions	$340,539	$438,600	$537,800	$ 99,200
11.3	Positions Other Than Permanent	28,247	27,700	117,700	90,000
11.5	Other Personnel Compensation	687	700	3,800	3,100
	Total Personnel Compensation	369,473	467,000	659,300	192,300
12.1	Personnel Benefits - Civilians	25,276	36,100	49,100	13,000
21.0	Travel and Transportation of Persons	31,036	25,200	126,700	101,500
23.0	Rent, Communications and Utilities	5,155	5,600	7,700	2,100
24.0	Printing and Reproduction	13,706	13,000	17,300	4,300
25.0	Other Services	1,983	2,400	13,500	11,100
26.0	Supplies and Materials	9,509	2,100	8,600	6,500
31.0	Equipment	-0-	-0-	-0-	-0-
	TOTAL	$456,138	$551,400	$882,200	$330,800

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

SHARED STAFF

OBJECT CLASSIFICATION

	PERSONNEL COMPENSATION:	1969 ACTUAL	1970 ESTIMATE	1971 REQUEST	INCREASE 1971 COMPARED WITH 1970
11.1	Permanent Positions.....	$244,140	$315,500	$419,300	$103,800
11.3	Positions Other Than Permanent.....	8,923	6,700	8,400	1,700
11.5	Other Personnel Compensation.....	1,890	2,500	3,300	800
	Total Personnel Compensation.....	254,953	324,700	431,000	106,300
12.1	Personnel Benefits - Civilians.....	18,549	24,500	33,200	8,700
21.0	Travel and Transportation of Persons....	3,727	9,100	28,900	19,800
23.0	Rent, Communications and Utilities.....	47,696	42,400	50,000	7,600
24.0	Printing and Reproduction.....	4,440	7,500	10,500	3,000
25.0	Other Services.....	3,872	9,000	56,100	47,100
26.0	Supplies and Materials.....	8,700	9,000	11,400	2,400
31.0	Equipment.....	29,207	2,400	38,500	36,100
	TOTAL.....	$371,144	$428,600	$659,600	$231,000

11.1 PERMANENT POSITIONS

FY 1970 - $1,180,700; FY 1971 - $1,451,500; Increase - $270,800

The FY 1971 estimate will cover the salaries and wages of a total staff of 115 employees with an average employment of 105.7 man-years.

11.1 PERMANENT POSITIONS - NATIONAL ENDOWMENT FOR THE ARTS

FY 1970 - $426,600; FY 1971 - $494,400; Increase - $67,800

The increase affords internal changes designed to tighten controls and expedite service within the existing framework.

In FY 1970, the National Endowment for the Arts requested seven new positions which, due to budget curtailments, were not possible. The urgent need for these positions remains; moreover, increased States program activity, as well as increased program funds, further dictates the necessity for additional positions.

Assistant Director - Music	GS-15
Assistant Director of States Program (West)	GS-14
Secretary - Visual Arts	GS-7
Clerk-Typist (2)	GS-5
Clerk-Typist (2)	GS-4

Chairman's Office

Clerk-typist, GS-5. Will be assigned to the Assistant to the Deputy to work where needed in that office, and to the Special Assistant to the Chairman. In addition, will be available for special assignment to Program Directors for overload periods.

Music

Assistant Director, Music, GS-15. A major program in support of orchestra/opera is planned for FY 71. It will require the expertise of a highly-trained specialist in this field.

State & Community

Assistant Director - West, GS-14. The States program has expanded to the point that additional supervision is needed. It is proposed that the present Assistant position be assigned to the Eastern States and the new position supervise the Western States. Visitations will be made to State offices on a regular basis.

Clerk-typist, GS-5. Assigned to Assistant Director - West.

Research

Clerk-typist (2), GS-4. Assigned to Research Office.

Visual Arts

Secretary, GS-7. Assigned to Visual Arts Office.

11.1 PERMANENT POSITIONS - NATIONAL ENDOWMENT FOR THE HUMANITIES

FY 1970 - $438,600; FY 1971 - $537,800; Increase - $99,200

In FY 1970, the National Endowment for the Humanities requested 12 new positions, of which only 2 were granted. The remaining 10 are needed even more urgently with the substantial increase in program funds and will be distributed as follows:

Congressional Liaison Officer	GS-14
Program Officer	GS-14
Assistant Program Director	GS-14
Assistant to the Deputy Chairman	GS-12
Program Analyst	GS-12
Program Analyst (2)	GS-11
Program Assistant	GS-11
Secretary (2)	GS-5

Chairman's Office

Congressional Liaison Officer, GS-14. The primary function of the Congressional Liaison Officer is to ensure that members of congress are fully informed of Endowment activities and the Endowment is responsive to inquiries, questions, and requests from members of congress, congressional committees and staff. Congressional Liaison Officer should remain constantly in touch with developments on the Hill which affect, or may potentially affect, any aspect of the Endowment. The office would coordinate all congressional correspondence, maintain congressional files, synopsize the Congressional Record, request printed and other materials from congressional offices and committees, assist in the preparation of documents for congressional use and offer continuing policy guidance and judgments to the Chairman, Deputy Chairman and other members of the staff.

Assistant to the Deputy Chairman, GS-12. Will assist in the administrative budget formulation and monitor administrative expenditures by offices and divisions, maintain program expenditures by offices and divisions and assist the Deputy Chairman in ensuring that decisions of the Chairman of the National Council on the Humanities are implemented promptly. The Assistant will assist where appropriate with correspondence, reports and special assignments absorbing a portion of the workload of the Deputy Chairman's office, which has increased in scope and complexity as the Endowment has grown.

Planning and Analysis

Assistant to the Director, GS-14. The present assistant is closely involved in planning activities. The second assistant is required for the evaluation and analysis of existing programs. He would also serve the Director in program budget preparation and congressional testimony preparation, thus freeing the Director to concentrate more fully upon planning.

Fellowships and Stipends

Program Assistant, GS-11. In fiscal year 1970 the workload of the division has already required the employment of a program assistant and two student assistants on a temporary basis for a total of approximately 900 hours, as a result of an increase in program responsibilities and the volume of applications. With the increasing complexity of controls which two new programs will entail and with the great increase in volume of applications and other business which will result not only from the new programs but from the growth in existing programs, there is a requirement that the program assistant function be staffed on a permanent and full-time basis.

Education

Program Officer, GS-14. With the major emphasis of the Education Program devoted to the program of development grants, a full-time program officer will be needed to supervise the reviewing of grant proposals, including the necessary site visits and panel meetings, as well as the evaluation visits and reports essential to the program.

Program Analyst (2), GS-11. With the increased amount of grant funds and the consequent increase in the number of proposals submitted for review, each Program Officer in this division will require the assistance of a Program Analyst, if proper supervision is to be maintained. These grants should not be awarded without adequate investigation and subsequent evaluation, if effective results are to be realized.

Secretary, GS-5. The very high increase in the volume of business for this division, particularly in the area of development grants, will require a total of three secretaries - one for the Director and one for each Program Officer-Program Analyst team. An additional secretary is therefore needed for the development grants team.

Public Program

Program Analyst, GS-12. Although existing staff will have capacity to cope with current operations (inquiries of prospective applicants, preparing applications for advisory panels, working out terms of grants, etc.) there is an important retrospective function which present staffing does not allow. This consists of analysis of completed projects on an individual basis and, more significant, comparative analysis of types and categories of such projects. The requested program analyst could make an important contribution by taking responsibility for the basic work in this area.

Secretary, GS-5. There is at present only one secretarial position for the entire program. An additional position is required.

11.1 PERMANENT POSITIONS - SHARED STAFF

FY 1970 - $315,500; FY 1971 - $419,300; Increase - $103,800

In FY 1970 the Shared Staff requested 14 new positions but received only one. Therefore, the audit capability required by law has yet to be established. Additionally, with the present and anticipated growth in program funds and the concurrent expanding administrative activity, it is imperative that the accounting, grants office, personnel and audit staff be enlarged. Therefore, 13 positions are requested.

Audit Supervisor	GS-14
Accounting Officer	GS-13
Office Services Manager	GS-12
Auditor	GS-11
Systems Accountant	GS-11
Grants Specialist	GS-11
Voucher Examiner	GS-7
Staffing Clerk	GS-5
Clerk-Typist	GS-5

Clerk-Typist (3)	GS-4
Supply Clerk	GS-4

Office of the Director of Administration

Office Services Manager, GS-12. With the growth of the two Endowments, office services (printing, reproduction, supply, maintenance, mail, etc.) become increasingly complex. There is a requirement for the direct supervision of these activities, as well as their coordination with the General Services Administration.

Clerk-typist, GS-4; Supply Clerk, GS-4. These positions to be assigned to the Office Services Manager to enable him to carry out his functions.

Office of Finance

To develop, coordinate, and implement the Foundation's financial policies and procedures, six additional persons will be required. Total activities will then include auditing, accounting, budgeting, payroll administration, and reporting. If this agency's financial management staff is not adequately strengthened, it will be unable to comply with many of the statutory and regulatory requirements imposed.

Accounting Officer, GS-13. To assist the Financial Manager in the areas of accounting, payroll administration, reporting, and budget analysis and preparation.

Systems Accountant, GS-11. To develop procedures with the object of producing and maintaining an Accounting Procedures Manual in compliance with GAO regulations. This activity is a continuing one as a result of changing statutes, regulations, and programs.

Voucher Examiner, GS-7. With the greater use of panelists and consultants, as well as the expanded activity of the Foundation, the work of the voucher examining unit will continue to increase substantially. Moreover, the present manning level of one does not provide for periods of leave or illness.

Audit Supervisor, GS-14; Auditor, GS-11; Clerk-Typist, GS-4. While it is expected that the services of other audit agencies will be used to the greatest possible extent, a backlog of four years' activity by this Foundation dictates the necessity for the establishment of an audit staff. Discussions with various Federal agencies reveal that audit costs vary widely. However, it appears they will average one percent of the audit-susceptible dollar volume. This agency has an accumulated volume of $47.2 million liable for audit.

Office of Grants, NEH

Grants Specialist, GS-11. Under current staffing, there is no allowance for continuity of operations in the absence of the Grants Officer. The addition of this position will provide for management and administrative responsibility as the Assistant Grants Officer.

Clerk-typist, GS-5. This position is required to provide for the increase in activity generated by the Treasury Department's requirement for quarterly reports from all grantees.

Office of Personnel

Staffing Clerk, GS-5; Clerk-typist, GS-4. The increased use of panelists and consultants and the proposed increase in permanent positions will impose a workload growth which cannot be met by the single clerical position now in this office. The Personnel Officer must have assistance in staffing, reporting, and personnel record maintenance.

11.3 POSITIONS OTHER THAN PERMANENT

FY 1970 - $70,000; FY 1971 - $229,200; Increase - $159,200

11.3 POSITIONS OTHER THAN PERMANENT - NATIONAL ENDOWMENT FOR THE ARTS

FY 1970 - $35,600; FY 1971 - $103,100; Increase - $67,500

This implements the proven wisdom of the recommendation of the House Appropriations Committee in 1968. Its report read, in part: "One of the best ways to achieve this (NEA purpose) is by continual appointment of panelists of the very highest caliber who are responsible for recommending awards of grants and loans. This not only materially assists in grant awards for the most meritorious projects, but also develops the highest quality of criteria available in this Nation . . . ." In short, the investment here secures participation of the Nation's best-informed advisors in the respective arts as defined by the Act.

Consultants serve basically the same purpose. They add new expertise to staff and panel knowledge and are able to objectively advise the Endowment about needs in particular art forms or areas of the country.

a. Council Meetings..... $20,800

Four two-day meetings averaging 20 members in attendance, $100 per day each, and executive committee meetings as required.

b. Panelists..... $31,100

Fifteen panels averaging 7 members, meeting on an average of two times each for two days at $75 per day (15 X 7 X 2 X 2 X $75).

c. Consultants and Experts..... $33,200

442 days averaging $75 per day.

d. Part-Time and Temporary..... $18,000

This amount represents the most economical method of meeting seasonably varying manpower needs.

11.3 POSITIONS OTHER THAN PERMANENT - NATIONAL ENDOWMENT FOR THE HUMANITIES

FY 1970 - $27,700; FY 1971 - $117,700; Increase - $90,000

To provide compensation for the National Council on the Humanities and to permit the Endowment to draw upon the resources of the most highly-qualified advisory panelists and consultants within the several fields of the humanities, the Endowment requests the following:

a. Council Meetings $25,100

Provision is made for four meetings of the National Council on the Humanities, one in each quarter of FY 1971. Additionally, four meetings of the Planning and Analysis Council Committee are envisaged, again one in each quarter. Meetings of other Council Committees are not provided for presently but should need arise funds allocated to Planning and Analysis Committee might be reallocated for those purposes.

b. Panelists..... $57,300

Each of the Endowment's four divisions utilize selection panels for the evaluation of fellowship and project proposals and for recommendations on and evaluation of programs both present and projected. The amount requested for this purpose is distributed as follows:

(1) Planning and Analysis..... $ 7,600

(2) Fellowships and Stipends..... 15,400

(3) Research and Publications..... 6,200

(4) Education..... 22,700

(5) Public Programs..... 5,400

c. Consultants and Experts..... $21,800

Individual consultants are normally retained to perform preliminary screening of applications, both fellowship and project, prior to panel review; to offer the Endowment advice and informed judgment in specialized subjects; and to act as editors of panel groups whose deliberations should be preserved in permanent form.

d. Part-Time and Temporary..... $13,500

This amount represents projected part-time and temporary employment costs, as the most economical method of meeting seasonably varying manpower needs.

11.3 POSITIONS OTHER THAN PERMANENT - SHARED STAFF

FY 1970 - $6,700; FY 1971 - $8,400; Increase - $1,700

This amount represents projected part-time and temporary employment costs.

11.5 OTHER PERSONNEL COMPENSATION

FY 1970 - $3,200; FY 1971 - $10,300; Increase - $7,100

National Endowment for the Arts..... $3,200

National Endowment for the Humanities..... 3,800

Shared Staff..... 3,300

Overtime estimates are based on experience to date and reflecting seasonal variations in Foundation workload.

12.1 PERSONNEL BENEFITS - CIVILIANS

FY 1970 - $95,400; FY 1971 - $127,200; Increase - $31,800

National Endowment for the Arts..... $44,900

National Endowment for the Humanities..... 49,100

Shared Staff..... 33,200

This amount will finance personnel benefits including contributions to the Civil Service Retirement Fund, Social Security, Health Services, and Federal Employees' Group Life Insurance.

21.0 TRAVEL AND TRANSPORTATION OF PERSONS

FY 1970 - $79,300; FY 1971 - $313,700; Increase - $234,400

21.0 TRAVEL AND TRANSPORTATION OF PERSONS - NATIONAL ENDOWMENT FOR THE ARTS

FY 1970 - $45,000; FY 1971 - $158,100; Increase - $113,100

To carry out the purposes of the Act, both Endowments are authorized to utilize panels of experts and special consultants. These are essential to the projects and programs of the Endowments. They make recommendations concerning grants to be made; they help initiate new ideas, and they serve to broaden the base of private participation in the Endowment's activities.

In order to evaluate projects already funded by the Endowments, to make careful assessments of projects for future funding, to contact leading representatives of the arts in various parts of the country, and thus to help develop new programs and ideas, it is essential that adequate travel funds be available for Endowment staff. It is emphasized that the following amounts represent the Endowment's minimum estimates for travel in keeping with the various programs and their objectives, and utilizing the minimum number of panelists necessary to discharge their responsibilities as prescribed in the Act.

Staff	$66,100
Council	20,000
Panelists	50,000
Consultants and Experts	22,000

21.0 TRAVEL AND TRANSPORTATION OF PERSONS - NATIONAL ENDOWMENT FOR THE HUMANITIES

FY 1970 - $25,200; FY 1971 - $126,700; Increase - $101,500

The requested amount is necessary for FY 1971 staff travel costs to carry out the program responsibilities in supervising various Endowment programs and in maintaining liaison with the academic and cultural community. Staff travel for these purposes includes meeting with various panels, site visits with grantees and with institutions both for purposes of evaluation for higher education supported programs, and for evaluation of institutional capabilities in relation to other Endowment programs. Staff travel is also required for attendance at symposiums and conferences in all the fields of the humanities, as well as in the areas of elementary and secondary education, higher education, museums, historical societies and communication media.

Travel costs of consultants and panelists have averaged $80 for each employee who traveled within a region of the United States, and $160 for each attendee at a national meeting. Each figure

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excludes per diem costs. These averages, applied to the consultant and panel use described under "Positions Other Than Permanent," are the basis for travel costs.

Staff	$25,500
Council	22,600
Panelists	66,300
Consultants and Experts	12,300

21.0 TRAVEL AND TRANSPORTATION OF PERSONS - SHARED STAFF

FY 1970 - $9,100; FY 1971 - $28,900; Increase - $19,800

The increase reflects the necessary travel costs for the proposed audit staff and grants office personnel.

23.0 RENT, COMMUNICATIONS AND UTILITIES

FY 1970 - $62,500; FY 1971 - $77,600; Increase - $15,100

23.0 RENT, COMMUNICATIONS AND UTILITIES - NATIONAL ENDOWMENT FOR THE ARTS

FY 1970 - $14,500; FY 1971 - $19,900; Increase - $5,400

This budget item will provide $16,400 for FTS service and $3,500 for commercial long distance telephone service and telegraph service.

23.0 RENT, COMMUNICATIONS AND UTILITIES - NATIONAL ENDOWMENT FOR THE HUMANITIES

FY 1970 - $5,600; FY 1971 - $7,700; Increase - $2,100

This budget item will provide $6,600 for FTS service and $1,100 for commercial long distance telephone service and telegraph service.

23.0 RENT, COMMUNICATIONS AND UTILITIES - SHARED STAFF

FY 1970 - $42,400; FY 1971 - $50,000; Increase - $7,600

This budget provides for $8,600 for office space and $19,700 for the rental of copying equipment. Of the $21,700 for communications, $13,300 will be for local telephone service (including installation and service charges), $8,000 for postage, and $400 for commercial long distance telephone and telegraph service.

24.0 PRINTING AND REPRODUCTION

FY 1970 - $28,800; FY 1971 - $47,800; Increase - $19,000

24.0 PRINTING AND REPRODUCTION - NATIONAL ENDOWMENT FOR THE ARTS

FY 1970 - $8,300; FY 1971 - $20,000; Increase - $11,700

The Arts Endowment receives a high volume of requests for information. Adequate supplies of materials of various kinds giving current program information must be maintained ready for mailing.

The estimate for printing and reproduction will be used to cover the following costs:

a. The need for more and better program announcements, application forms, and other program management tools is increasing. As programs develop, frequent revisions and reprinting will be necessary.

b. The Endowment's annual report as required by the Act.

24.0 PRINTING AND REPRODUCTION - NATIONAL ENDOWMENT FOR THE HUMANITIES

FY 1970 - $13,000; FY 1971 - $17,300; Increase - $4,300

Printing costs will show a substantial increase in 1971 because of:

a. A steadily increasing knowledge of the Endowment and its programs by the public and by institutions eligible for Endowment support, with a concurrent increase in informational materials required.

b. The expansion of presently existing programs and the establishment of new programs, both requiring increased numbers of program announcements, application forms, instructions and guidelines.

c. The increase in number of meetings of the National Council on the Humanities and its committees and an accompanying increase in materials reproduced for their needs.

24.0 PRINTING AND REPRODUCTION - SHARED STAFF

FY 1970 - $7,500; FY 1971 - $10,500; Increase - $3,000

This estimate will cover the cost of printing letterheads and envelopes for the Foundation, as well as the cost of the various Bureau of the Budget and Congressional submissions and grant administrative forms.

25.0 OTHER SERVICES

FY 1970 - $14,400; FY 1971 - $79,200; Increase - $64,800

25.0 OTHER SERVICES - NATIONAL ENDOWMENT FOR THE ARTS

FY 1970 - $3,000; FY 1971 - $9,600; Increase - $6,600

Current information on the status of the arts is most accurately kept by the professional association of arts organizations, of which there are more than one hundred. While certain kinds of information are available to the Endowment merely by requesting cooperation, other types of statistics and data are not routinely recorded. It is to the financial advantage of the Endowment to contract for these services with membership organizations which maintain regular contacts with their members than to attempt to gather this information independently.

In addition, it is necessary from time to time to contract with organizations specializing in specific background information in order to gather preliminary material for activities under consideration. Under these contracts would fall the updating, revising and expanding of already completed studies, as well as separate small contracts for statistical analysis of past and present projects.

The estimate for other services includes the cost of security investigations, training contracts, messenger and other miscellaneous services.

25.0 OTHER SERVICES - NATIONAL ENDOWMENT FOR THE HUMANITIES

FY 1970 - $2,400; FY 1971 - $13,500; Increase - $11,100

This budget item includes the cost of audio-visual materials, security investigations, training, messenger, clipping and other miscellaneous services.

25.0 OTHER SERVICES - SHARED STAFF

FY 1970 - $9,000; FY 1971 - $56,100; Increase - $47,100

The estimate for other contractual services includes the costs for employee training, $6,100; building alterations, $10,000; machine maintenance, $2,900; cost of two man-years of audit service to be provided at those locations where services are available from other agencies, $36,800; and other miscellaneous services, $300.

26.0 SUPPLIES AND MATERIALS

FY 1970 - $13,300; FY 1971 - $25,000; Increase - $11,700

National Endowment for the Arts..... $ 5,000

National Endowment for the Humanities..... 8,600

Shared Staff..... 11,400

Approximately $5,250 of this amount will be required for books, technical publications, and subscriptions to publications. The estimated cost for all other supplies is $19,750, which includes copying equipment as well as "desk top" items such as pens, pencils, pads, typewriter paper and ribbons.

31.0 EQUIPMENT

FY 1970 - $2,400; FY 1971 - $38,500; Increase - $36,100

This estimate covers the cost of furniture for the additional staff, as well as filing cabinets, typewriters, dictating equipment, and other office machinery.

PERMANENT POSITIONS

Mrs. HANSEN. You are requesting an additional seven permanent positions and an increase of $67,800 for the National Endowment for the Arts. Justify this request.

Mr. BERMAN. Madam Chairman, I think I ought to enlarge on that question, if I may. We are requesting at this time from the Bureau of the Budget an additional 12 people for the National Endowment for the Arts. When this budget was prepared Miss Hanks had not assumed her duties as chairman. When she did so and reviewed this budget, it was not in accord with the plans and the programs that she had envisioned for the agency, and we have subsequently submitted a request to the Bureau of the Budget to increase this number of 12 for a total of 19. They are now giving it consideration.

Mrs. HANSEN. Isn't it about time they made up their mind?

Mr. BERMAN. They say they will render a decision as soon as we have determined where the money will come from. At that time or in the very near future we will probably request a reprograming action from the committee for fiscal 1971 funds; therefore, hoping to transfer some of the money from the program in support of these people.

Mrs. HANSEN. How much of your 1970 funds have been placed in reserve.

Mr. BERMAN. None. You mean program money?

Mrs. HANSEN. Yes.

Mr. BERMAN. No, none. It is rather small.

Mrs. HANSEN. That doesn't bother the Bureau of the Budget.

Mr. BERMAN. They gave us adequate outlay funds to support our program.

Mr. KEENEY. We have got a lot of friends.

ENVIRONMENTAL FUNDS IN RESERVE

Mrs. HANSEN. I assumed environment had a lot of friends until I saw the amount of environmental funds that were placed in reserve by the Bureau of the Budget.

Mr. BERMAN. I was reminded the answer to that specific question is that our appropriation was so far below the President's request that we were not involved in that freeze. We had been cut some considerable amount.

PERMANENT POSITIONS FOR HUMANITIES

Mrs. HANSEN. You are requesting 10 additional permanent positions and an increase of $99,200 for the National Endowment for the Humanities. Please justify this request.

Mr. BERMAN. Madam Chairman, with the proposed increase in our program, we obviously will need more people to administer the program. As you know, if we are going to have a viable program obviously we must have the people to operate it. In 1970, in this year, our administrative funds amount to about 10.7 percent of our program. In 1971, with the greatly increased program appropriation request, our proposed administrative percentage will drop to 6 percent.

Mrs. HANSEN. In other words, it is mandatory that you have these funds? You can't reduce your administrative expenses by cutting the budget?

Mr. BERMAN. Not in proportion.

Mrs. HANSEN. That is right.

Mr. BERMAN. Because we have certain basic activities that we must carry on.

ADDITIONAL POSITIONS

Mrs. HANSEN. You are requesting 13 additional positions and an increase of $103,800 for the shared staff. Justify this request.

Mr. BERMAN. From the time we assumed our administrative activities in October 1967, we have been unable to provide, as is required, an audit staff, an internal or external audit staff. We are unable to perform or to carry out some of the——

Mrs. HANSEN. Who has been doing your auditing?

Mr. BERMAN. It hasn't been done. We have, with some exceptions, a 4-year backlog of audit service to be performed. Now some of them will be done by HEW on a contract basis.

GRANT OVERSIGHT

Mrs. HANSEN. Do you check on your grant recipients to see if they are on the job and doing the sort of thing that they are being paid to do?

Mr. BERMAN. I think that is a dual function, Madam Chairman. Part of it is the auditors function, but a great deal of it is the oversight of the appropriate program officer in that endowment, who makes visits. This is what the two chairmen were speaking of, when they discussed program evaluation.

Mr. KEENEY. We don't do an adequate job now. It is because of lack of funds. We require reports.

Mrs. HANSEN. Lots of people are specialists in good reports.

Mr. KEENEY. We can't go out and check them, you see.

Mrs. HANSEN. Will these funds allow you to check the recipients' performance?

Mr. KEENEY. It would help.

POSITIONS OTHER THAN PERMANENT

Mrs. HANSEN. $103,000 is requested for positions other than permanent for the National Endowment for the Arts. Justify this request.

Mr. BERMAN. This is to fund council meetings, panel meetings, and the employment of consultants.

Mrs. HANSEN. How many consultants do you employ?

Mr. BERMAN. We have on the rolls about 325. This includes the panelists.

Mrs. HANSEN. What do you pay your consultants?

Mr. BERMAN. They will vary, but some work for nothing. Some work for $50, some $75. The maximum is $100.

Mrs. HANSEN. Do you also pay their travel costs?

Mr. BERMAN. And their travel, of course.

Mrs. HANSEN. $117,700 is requested for positions other than permanent for the National Endowment for the Humanities. Justify this request.

Mr. BERMAN. It is the same justification, Madam Chairman. With the increase in program obviously we will need more panels. We will need as many or more consultants. Instead of having three council meetings during the year it is most desirable that each endowment have four and of course this will fund that.

COUNCIL MEETING ATTENDANCE

Mrs. HANSEN. Do you have full attendance at your council meetings?

Mr. KEENEY. Not quite. We have never lacked a quorum, but I don't think since the first meeting we have had full attendance of the humanities council. These are very busy people, and they can't always come. They are always ready to help and to take an interest, but they can't always physically be there.

Mrs. HANSEN. Miss Hanks, do you have full attendance at your council meetings?

Miss HANKS. About the same. We were missing six at the last meeting and five in October, but this does not mean as Dr. Keeney was saying that we aren't in touch with them and that they aren't helping our meeting.

Mrs. HANSEN. I understand. It is just that they can't physically be present at the meetings.

OTHER SERVICES

You are requesting an increase of $64,800 for other services. Justify this request.

Mr. BERMAN. Other services include stenography and reporting when there are meetings held at places other than the headquarters.

Mrs. HANSEN. What do you pay per day for the reporting services?

Mr. BERMAN. It will vary with the city, and I can't give you the amount.

Mrs. HANSEN. Do you use the standard rate of each city?

Mr. BERMAN. That is correct. Other costs, clipping service, robot-type service, messenger service, photo and art service. These are small amounts, a total of about $9,600 for the entire year, and in the humanities it is virtually the same.

Mrs. HANSEN. Insert in the record a list of your other service expenses for 1969.

Mr. BERMAN. Certainly. We will be glad to submit it for the record.

(The information follows:)

Other services fiscal year 1969

Clipping service	$1,886
Machine maintenance	1,519
Building alterations	1,213
Robotype service	1,208
Training	988
Miscellaneous	901
Photo and art work	639
Messenger service	110
Total	8,464

Mrs. HANSEN. What duties do your messengers perform?

Mr. BERMAN. As a matter of fact we use them to distribute press releases most generally.

Miss HANKS. I thought it was to carry bills and messages up to the Hill.

Mr. BERMAN. No, we use our own people for that.

Mrs. HANSEN. What tasks do the messengers perform?

Mr. BERMAN. There is a small amount in here for messengers service. As a matter of fact it is $100 in the budget.

Mrs. HANSEN. They will not distribute many press releases for $100.

Mr. BERMAN. It doesn't cost a great deal, of course.

EQUIPMENT

Mrs. HANSEN. You are requesting an increase of $36,100 for equipment. Justify this request.

Mr. BERMAN. That is based on a firm figure of $1,250 per person for new employees. That is what it costs to equip them with a typewriter, desk, file cabinet, bookcase and so forth. That is based on past experience.

OFFICE SPACE

Mrs. HANSEN. Where is your present office space located?

Mr. BERMAN. It is located in the GSA building at 19th and F Streets.

Mrs. HANSEN. What is the total square footage available?

Mr. BERMAN. 19,500.

Mrs. HANSEN. How many square feet per employee does this average?

Mr. BERMAN. This averages about 230 square feet.

Mrs. HANSEN. How does this compare with the GSA standard?

Mr. BERMAN. It is well within the GSA standard, and of course the square footage includes storage space, file space, and other special areas such as a conference room.

Mrs. HANSEN. What is the annual rental on this space?

Mr. BERMAN. We don't pay rental, in a Government-owned building. We pay what is called an operation and maintenance cost of $1.53 a foot per year until that amount has been included in the General Service Administration budget. Then we pay nothing.

USE OF GOVERNMENT VEHICLES

Mrs. HANSEN. To what extent do you provide vehicles for official transportation?

Mr. BERMAN. We as an agency provide no vehicles at all. We do not operate any Government vehicles.

Mrs. HANSEN. Do you use motor pool vehicles?

Mr. BERMAN. No.

Mrs. HANSEN. What do you do, walk?

Mr. BERMAN. Take cabs.

Miss HANKS. Yes.

Mrs. KEENEY. It is cheaper to take a cab.

Mr. BERMAN. To use a Government vehicle for a local trip, it would cost us much more than the effort is worth, where you can get in a taxi cab for 75 cents. It is a lot cheaper than wasting the time to go over, pick up the vehicle, bring it back, drive it, and then deliver it back to its home yard and come back again. You still have to use a cab to go over and get it and to return it, so you haven't saved anything.

REVIEW OF POSITION CLASSIFICATION

Mrs. HANSEN. When was the last time the Civil Service Commission reviewed your position classifications?

Mr. BERMAN. They have not yet reviewed our position classification since we have been an agency. I spoke to them about it about a year ago. They said that they were going to get to it before the end of that fiscal year. We haven't seen them as yet.

GAO REVIEW

Mrs. HANSEN. When was the last time your operations were reviewed by the General Accounting Office or other investigative staffs?

Mr. BERMAN. The General Accounting Office has reviewed on an ad hoc basis certain of our grants through Congressional inquiry or for other reasons, but they have made no broad review of our activity since we have been—

Mr. KEENEY. They did in 1967 you will remember.

Mr. EDGERTON. This committee also subsequently had a brief but broad scale review of administrative practices in both agencies.

Mrs. HANSEN. How many permanent positions for both Endowments and administration are currently authorized?

Mr. BERMAN. Eighty-five.

Mrs. HANSEN. How many vacancies existed as of the last reporting date?

Mr. BERMAN. Five.

PER DIEM AND MILEAGE ALLOWANCES

Mrs. HANSEN. Insert in the record a schedule of your current per diem and mileage allowances.

Mr. BERMAN. All right. For your information they are in accordance with the law at the rate not to exceed $25, and mileage at 12 cents a mile.

(The information follows:)

Per diem mileage allowance—12¢ per mile when it is advantageous to the Government to utilize privately owned vehicles

Lodging cost:	
$8.00 or less	$18
$8.01 to $9.00	19
$9.01 to $10.00	20
$10.01 to $11.00	21
$11.01 to $12.00	22
$12.01 to $13.00	23
$13.01 to $14.00	24
$14.01 or more	25

Mrs. HANSEN. How much foreign travel did you have, if any, in fiscal year 1969?

Mr. BERMAN. We had none.

TIME AND LEAVE REGULATIONS

Mrs. HANSEN. How strictly do you enforce the time and leave regulations?

Mr. BERMAN. The only thing I can say, Madam Chairman, we enforce in accordance with the law with humane considerations thrown in also. That doesn't mean to say that with a half hour lunch period some people don't take 40 minutes, but ordinarily we have a lot of people that work until 6, 6:30, or even 7 o'clock at night, and it all balances itself out.

PURCHASING

Mrs. HANSEN. To what extent, if any, do you purchase supplies and equipment from contractors other than those approved by the GSA?

Mr. BERMAN. We haven't. We do not do that.

TELEPHONE AND TELEGRAPH COSTS

Mrs. HANSEN. Please insert in the record a listing of your total telephone and telegraph costs, by month, for calendar year 1969.

Mr. BERMAN. All right.

(The information follows:)

	Telephone and telegraph	Federal Telecommunication service	Total
Fiscal year 1969:			
July	$953.60	$1,183.99	$2,137.59
August	1,296.90	1,184.00	2,480.90
September	1,192.76	1,184.01	3,376.77
October	1,650.36	1,341.99	2,992.35
November	1,571.45	1,342.00	2,913.45
December	952.17	1,342.01	2,294.18
January	1,183.25	1,341.67	2,524.92
February	1,246.23	1,341.67	2,587.90
March	1,273.86	1,341.67	2,615.53
April	1,144.00	1,341.33	2,485.33
May	1,344.96	1,341.33	2,686.29
June	1,232.95	1,341.34	1,574.29
Total	15,042.49	15,627.01	30,669.50

Mrs. HANSEN. Mr. Reifel?

Mr. REIFEL. I have no questions. I just want to thank Mr. Berman for his excellent response to questions.

Mrs. HANSEN. Mr. McDade?

Mr. MCDADE. No questions.

Mrs. HANSEN. Thank you very much. We appreciate the frankness of your answers and the excellent presentation.

Mr. KEENEY. We appreciate the manner in which the hearing was conducted. Thank you.

WEDNESDAY, April 8, 1970.

AMERICAN REVOLUTION BICENTENNIAL COMMISSION

WITNESSES

HOBART LEWIS, PRESIDENT AND EXECUTIVE EDITOR, READER'S DIGEST, VICE CHAIRMAN
M. L. SPECTOR, EXECUTIVE DIRECTOR
EUGENE SKORA, GENERAL COUNSEL (ACTING)
LAMAR WHITAKER, ADMINISTRATIVE OFFICER

Mrs. HANSEN. The committee will come to order.

This morning we have the American Revolution Bicentennial Commission. We are very happy to welcome the Commission back. I also note, Mr. Arthur Burgess, who used to be with Harry P. Cain and the Republicans of the Senate and formerly covered our Legislature.

This morning our principal witness is Mr. Hobart Lewis, president and executive editor of Reader's Digest.

GENERAL STATEMENT

Will you please insert Dr. Sterling's statement in the record and summarize it for us.

Mr. LEWIS. Very good.

(The statement follows:)

AMERICAN REVOLUTION BICENTENNIAL COMMISSION

STATEMENT OF DR. J. E. WALLACE STERLING, CHAIRMAN

My name is Dr. J. E. Wallace Sterling, Chairman of the American Revolution Bicentennial Commission. I am pleased to have this opportunity to appear before the Subcommittee on Interior and Related Agencies of the Committee on Appropriations to support the appropriation request of the Commission for fiscal year 1971.

As the members of the subcommittee are aware, President Nixon reconstituted the Commission on July 3, 1969. Of the 17 public members which he appointed, seven had served on the original Commission. The full roster of the present membership of the Commission is attached to my statement. The Commission is honored to have Congressmen Donohue, Marsh, Saylor, and Whitehurst as members. The Commission is gratified that Congressman Marsh is also a member of this subcommittee.

In announcing the appointments to the reconstituted Commission President Nixon said:

"Three years ago, Congress provided for the creation of an American Revolution Bicentennial Commission to 'plan, encourage, develop, and coordinate the commemoration of the American Revolution.' The Commission's charter is broad; its responsibility is great. The bicentennial is more than a ceremonial occasion. The way in which we as a nation choose to celebrate that 200th anniversary will have an important bearing on what we learn from it, and on the inspiration we draw from it."

The Commission agrees wholeheartedly with the President regarding the challenge and opportunity which the bicentennial affords to set a national attitude and tone as this Republic approaches and enters its third century. The bicentennial should be more than a ceremonial occasion. It presents an opportunity to reassess for today the principles which our Founding Fathers expressed in the Declaration of Independence, in the Constitution, and in the Bill of Rights.

In March of last year the Commission's appropriation request was made by the Executive Director, Richard Barrett. He then reported what the Commission had done up to March 1969.

Mr. Barrett indicated that the immediate task before the Commission was to develop recommendations for submission to the President; to establish channels of communications and appropriate facilities whereby activities by Federal, State, local, public, and private agencies and organizations might be coordinated; and to establish an administrative staff to carry out the day-to-day tasks of the Commission.

Since the reconstituted Commission came into being last July it has met five times. It organized an executive committee which has held four additional meetings. Regular meetings with Federal agencies have been instituted and liaison established with the States and territories and with several hundred national organizations and groups. It has recruited a small staff. The staff works in inadequate space at 811 Vermont Avenue NW. Permanent, more appropriate space on Jackson Place has been assigned.

The Commission gives highest priority to the preparation of a comprehensive report to the President for submission to the Congress incorporating specific recommendations for the commemoration of the bicentennial and of events related thereto. Public Law 89–491, as amended, requires the submission of this report by July 4, 1970.

The report will include:

(*a*) A national bicentennial plan as a possible blueprint for the bicentennial commemoration.

(*b*) A statement designed to set the tone for a decade of commemorative activities.

(*c*) An initial list of events and activities.

The Commission recognizes and attaches importance to the role which Federal agencies can play in this national undertaking and is grateful for the assistance already provided. But it is the sense of this Commission that a truly national celebration can best be achieved by stimulating and involving as many citizens as possible—individually and through voluntary organizations, associations, churches, schools, unions, clubs, etc. The commemoration should be as pluralistic and diversified as is our society, engaging all people in all walks of life.

With this in mind the Commission has made and is making major efforts to reach the maximum number of groups and organizations. For instance the Commission:

Has made contacts with representatives of the Governors of the States to discuss what each State might do to plan bicentennial activities. As of April 1, 1970, 30 States and territories have established commissions. In 14 others, the Governor has appointed a representative to act as liaison to the Commission.

Has organized its membership into six committees to facilitate contact with as many segments of American life as possible and to provide liaison in the exchange of ideas between the Commission and individuals and groups across the country. A list of these committes and their members is attached.

Has made contacts with more than 500 major national organizations and groups throughout the country encouraging them to begin planning for the bicentennial and to coordinate their efforts with those of the Commission.

Has begun publication of a monthly information bulletin called "Bicentennial Era" as a channel of communication to coordinate bicentennial planning. This newsletter is being distributed regularly to more than 3,000 national organizations and groups, Members of Congress, the executive branch, and State representatives.

Has produced a short film of a White House meeting of President Nixon with members of the Commission. This film is entitled, "A New Spirit for '76;" it presents the President's thoughts on the opportunities and challenges which may be seized and met as this country plans its bicentennial celebration.

Has endorsed the bids of the cities of Los Angeles and Denver for the summer and winter Olympics, respectively, and is doing its best to facilitate selection of these cities.

Is consulting with the President's national goals research staff to determine to what extent the bicentennial commemoration can be the vehicle for implementing programs for both short-range and long-range national goals.

I know that the members of the subcommittee are interested in the possibility of an international exposition as part of the bicentennial. The Commission has requested the assistance of the Department of Commerce and others to review and evaluate the presentations from Boston, Philadelphia, the National Capital region, and Miami, each of which wish to host an international exposition. Also under review are proposals from a number of individuals and organizations such as the Cambridge Seven, Polis '76, and TUBE. The study is nearly complete. At the Commission's request, the Department of State has taken appropriate action to assure that the Bureau of International Expositions will continue to reserve the year 1976 for a possible international exposition in the United States of a nature appropriate to the bicentennial.

I have already mentioned assistance provided by Federal departments and agencies. In accordance with section 4 of our enabling legislation, member agencies of the Commission are preparing their plans. For example, the Department of the Interior has submitted their comprehensive preliminary plan for historical site development and utilization coupled with a program of events and activities to focus attention on important aspects of our historical origin.

National Archives has a plan under consideration for the formation of a center for the study of the Revolutionary era.

The Smithsonian Institution plans, through exhibits and artifacts, to dramatize the varied contributions of all immigrants to our country and the impact of the United States on other nations.

The Department of State is developing plans for appropriate commemorative activities abroad and for foreign participation in the events and activities planned in the United States. The Departments of Justice; Defense; Commerce; Health, Education, and Welfare; the Librarian of Congress; the Chairman of the Federal Council on the Arts and the Humanities; and approximately 60 other Federal agencies are preparing similar plans and programs to be incorporated in the report to the President.

I have summarized what the Commission has been doing since July 1969. The next fiscal year will be a year of transition. The Commission's recommendations will have been submitted to the President and to the Congress and the bicentennial effort will have begun to move from the planning stage into a stage of operation and implementation.

The work of the Commission in fiscal year 1971 will include:

Continued and intensified efforts to communicate with State and local commissions, as well as the various nationwide groups and organizations which are planning bicentennial events and activities.

Continued development and expansion of the detailed catalog of events and activities planned at the National, State, and international levels.

Encouragement and development of programs in areas which have not yet reported plans.

Acting as a clearinghouse for the Bureau of the Budget in reviewing proposals of the various Federal agencies which bear on the bicentennial.

Acting as the agent of the executive branch in the further development of the proposals included in the report which require administrative and Congressional action.

The establishment and maintenance of a clearinghouse for information on bicentennial efforts to encourage complementary activities and avoid costly duplication.

This subcommittee approved an appropriation of $150,000 to the Commission for fiscal year 1969, $77,000 of which was carried over to the current fiscal year.

Fiscal year 1970 appropriation for the Commission amounted to $175,000 giving the Commission a total of $252,000 available for this fiscal year.

The Commission's request for fiscal year 1971 is $375,000. With this amount, the Commission hopes to carry out the expanded program I have described. To do so it will increase its full-time direct-hire staff from 10 to 16 positions. The Commission hopes that with this funding, plus support from other Federal departments and the private sector, it will be able to develop and assure a commemorative program that will do justice to a celebration of this Nation's 200th birthday.

Thank you for the opportunity to appear before the subcommittee; I will be pleased to answer any questions you may have.

AMERICAN REVOLUTION BICENTENNIAL COMMISSION
Suite 319, Lafayette Building - 811 Vermont Avenue, N.W.
Washington, D. C. 20242

(202) 382-8901

March 10, 1970

CONGRESSIONAL MEMBERS	Address	Telephone
Senator Edward W. Brooke	Room 232 Old Senate Office Building Washington, D. C. 20510	(202) 225-2742
Senator Harry F. Byrd, Jr.	Room 417 Old Senate Office Building Washington, D. C. 20510	(202) 225-4024
Senator Norris Cotton	Room 4121 New Senate Office Building Washington, D. C. 21510	(202) 225-3324
Senator John O. Pastore	Room 3215 New Senate Office Building Washington, D. C. 20510	(202) 225-2921
Representative Harold D. Donohue	Room 2265 Rayburn Office Building Washington, D.C. 20510	(202) 225-6101
Representative John O. Marsh, Jr.	Room 223 Cannon Office Building Washington, D. C. 20515	(202) 225-6561
Representative John P. Saylor	Room 2354 Rayburn Office Building Washington, D. C. 20515	(202) 225-2065
Representative G. William Whitehurst	Room 1227 Longworth Building Washington, D. C. 20515	(202) 225-4215

EX-OFFICIO MEMBERS	Address	Telephone
Honorable William P. Rogers	Secretary of State 2201 C Street, N. W. Washington, D. C. 20520	(202) 632-9630
Honorable John N. Mitchell	Attorney General of the United States Department of Justice Constitution Avenue, N. W. Washington, D. C. 20503	(202) RE7-8200 Ext. 2001
Honorable Walter J. Hickel	Secretary of the Interior C Street, N.W. Washington, D. C. 20240	(202) 343-6704
Honorable Melvin R. Laird	Secretary of Defense The Pentagon Washington, D. C. 20301	(202) OX5-5261
Honorable Robert H. Finch	Secretary of Health, Education and Welfare 330 Independence Avenue, S. W. Washington, D. C. 20201	(202) 962-2351
Honorable Maurice H. Stans	Secretary of Commerce 14th between E and Constitution Ave., N.W. Washington, D. C. 20230	(202) 967-2113
Honorable L. Quincy Mumford	Librarian of Congress First Street, S. E. Washington, D. C. 20540	(202) 967-7205
Honorable S. Dillon Ripley	Secretary of the Smithsonian Institution Jefferson Drive, S. W. Washington, D. C. 20560	(202) 381-5005
Dr. James B. Rhoads	Archivist of the United States 8th and Pennsylvania Ave., N. W. Washington,D. C. 20408	(202) 963-3434
Dr. James E. Allen, Jr. (U. S. Commissioner of Education)	Chairman, Federal Council on Arts and Humanities Room 4181D Department of Health, Education and Welfare 400 Maryland Ave., S. W. Washington, D. C. 20202	(202) 963-6212

PUBLIC MEMBERS

Chairman: Dr. J. E. Wallace Sterling (415) 321-2300
Office of the Chancellor Ext. 3481
Stanford University
P. O. Box 5096
Stanford, California 94305

Vice-Chairman: Mr. Hobart D. Lewis (914) 769-7000
President and Editor-in-Chief
The Reader's Digest Association, Inc.
Pleasantville,
New York 10570

Mr. James Biddle (202) 382-3304
President, National Trust for
Historic Preservation
748 Jackson Place, N. W.
Washington, D. C. 20006

Dr. Daniel J. Boorstin (202) 381-5785
Director
National Museum of History and
Technology
Smithsonian Institution
Washington, D. C. 20560

Mrs. Catherine D. Bowen (215) MI9-4975
260 Booth Lane
Haverford, Pennsylvania 19041

Mr. James S. Copley (714) 454-0411
Chairman of the Corporation
The Copley Press, Inc.
7776 Ivanhoe Avenue
La Jolla, California 92037

Dr. Luther H. Foster (205) 727-8501
President
Tuskegee Institute
Tuskegee Institute, Alabama 36088

Mrs. Ann Hawkes Hutton (215) 493-4076
6900 North Radcliffe Street
Bristol, Pennsylvania 19007

James E. Holshouser, Jr., Esq. (704) 264-8809
P. O. Box 328
Boone, North Carolina 28607

Mr. George M. Irwin (217) 224-2006
428 Maine Street
Quincy, Illinois 62301

Honorable Erik Jonsson (214) 742-7341
Mayor of Dallas
3300 Republic National Bank Tower
Dallas, Texas 75201

Mr. George E. Lang, Vice President (212) 974-6741
Restaurant Associates Industries, Inc.
1540 Broadway
New York, New York 10036

Mr. Thomas W. Moore (212) 644-2120
Chairman of the Board
Ticket Reservation Systems, Inc.
375 Park Avenue
New York, New York 10022

Mr. Clarke T. Reed (601) 335-2341
P. O. Box 479
Greenville, Mississippi 38701

Honorable Frederick A. Seaton (402) 463-3456
209 Tribune Building
908 West Second Street
Hastings, Nebraska 68901

Dr. Paul S. Smith (213) 693-0771
Chancellor
Whittier College
Whittier, California 90608

AMERICAN REVOLUTION BICENTENNIAL COMMISSION
Suite 319, Lafayette Building - 811 Vermont Avenue, N.W.
Washington, D. C. 20242

(202) 382-8901

March 9, 1970

SUBCOMMITTEES

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Secretary of Defense
Colonel Frank Borman, Advisor

BIOGRAPHY

Mrs. HANSEN. Will you also insert Mr. Sterling's biography in the record?

Mr. LEWIS. We will insert that in the record; we don't have it with us this morning.

Mrs. HANSEN. Please do.

(The biography follows:)

BIOGRAPHY—JOHN EWART WALLACE STERLING

Dr. J. E. Wallace Sterling, chairman of the American Revolution Bicentennial Commission, is chancellor of Stanford University.

Beginning his academic career in 1927 as a lecturer in history at Regina College, Saskatchewan, he successively served and taught at the University of Alberta, Stanford, California Institute of Technology, the National War College and Huntington Library and Art Gallery before being named president of Stanford in 1949. Dr. Sterling held the latter post until 1968 when he was appointed chancellor.

Born 1906 in Linwood, Ontario, Canada, he received his A.B. degree in 1927 from the University of Toronto, an A.M. from the University of Alberta in 1930 and a Ph. D. from Stanford in 1938. Dr. Sterling was naturalized as a citizen of the United States in 1947. A trustee of the Asia Foundation and a member of the Ford International Fellowship Board, Dr. Sterling has been decorated by the governments of the Federal Republic of Germany, France, Great Britain, and Japan for "promoting international goodwill" and for his "successful efforts in promoting the development of educational and cultural relations" between the United States and other nations.

JUSTIFICATION MATERIAL

Mrs. HANSEN. Also insert the justifications in the record.

(The information follows:)

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION

SALARIES AND EXPENSES

Program and Financing (in thousands of dollars)

Identification code 31-05-1900-0-1-910	1969 actual	1970 estimate	1971 estimate
Program by activities:			
American Revolution Bicentennial Commission - Total costs funded	64	258	375
Change in selected resources 1/.....	9	-	-
10 Total obligations.....	73	258	375
Financing:			
21 Unobligated balance available start of year (-).....	-150	-77	-
24 Unobligated balance available end of year.....	77	-	-
Budget authority.....	-	181	375
Budget authority:			
40 Appropriation.....	-	175	375
41 Appropriation transfer.....	-	-6	-
43 Appropriation and adjustment.....	-	169	375
44.20 Proposed supplemental for civilian pay act increase.....	-	12	-
Relation of obligations to outlays:			
71 Obligations incurred net.....	73	258	375
72 Obligated balance, start of year..	-	12	14
74 Obligated balance, end of year....	-12	-74	-24
90 Outlays.....	61	256	365

1/ Selected resources as of June 30 are as follows: unpaid undelivered orders - (total selected resources) 1969, 89; 1970, -0-; 1971, -0-.

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION

TRUST FUND - DONATIONS

Program and Financing (in thousands of dollars)

Identification code 31-05-8091-0-7-910	1969 actual	1970 estimate	1971 estimate
Program by activities:			
American Revolution Bicentennial Commission donations total cost funded	5	5	---
Change in selected resources 1/	---	---	---
10 Total obligations	---	5	---
Financing:			
21 Unobligated balance available, start of year (-)	---	-5	---
24 Unobligated balance available, end of year	5	---	---
Budget authority	5	---	---
Budget Authority:			
40 Appropriation	5	---	---
Relation of obligations to outlays:			
71 Obligations incurred, net	---	5	---
72 Obligated balance, start of year	---	---	---
74 Obligated balance, end of year(-)	---	---	---
90 Outlays	---	5	---

1/ Selected resources as of June 30 are as follows: unpaid undelivered orders (total selected resources) 1969, -0-; 1970, -0-; 1971, -0-

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION
SALARIES AND EXPENSES

OBJECT CLASSIFICATION (in thousands of dollars)

Identification code 31-05-1900-0-1-910		1969 actual	1970 estimate	1971 estimate
	Personnel compensation:			
11.1	Permanent positions	45	134	255
11.3	Positions other than permanent	—	5	30
11.5	Other personnel compensation			
	Total personnel compensation	45	139	285
12.0	Personnel benefits	2	12	26
13.0	Benefits for former personnel			
21.0	Travel and transportation of persons	6	35	30
22.0	Transportation of things	—	1	2
23.0	Rent, communications, and utilities	3	2	—
24.0	Printing and reproduction	—	17	10
25.1	Other services	13	26	18
25.2	Services of other agencies			
26.0	Supplies and materials	1	2	2
31.0	Equipment	3	24	2
32.0	Lands and structures			
33.0	Investments and loans			
41.0	Grants, subsidies, and contributions			
42.0	Insurance claims and indemnities			
43.0	Interest and dividends			
44.0	Refunds			
99.0	Total obligations	73	258	375

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION
DONATIONS

OBJECT CLASSIFICATION (in thousands of dollars)

Identification code 31-05-8091-0-7-910	1969 actual	1970 estimate	1971 estimate
Personnel compensation:			
11.1 Permanent positions			
11.3 Positions other than permanent			
11.5 Other personnel compensation			
Total personnel compensation			
12.0 Personnel benefits			
13.0 Benefits for former personnel			
21.0 Travel and transportation of persons	---	5	---
22.0 Transportation of things			
23.0 Rent, communications, and utilities			
24.0 Printing and reproduction			
25.1 Other services			
25.2 Services of other agencies			
26.0 Supplies and materials			
31.0 Equipment			
32.0 Lands and structures			
33.0 Investments and loans			
41.0 Grants, subsidies, and contributions			
42.0 Insurance claims and indemnities			
43.0 Interest and dividends			
44.0 Refunds			
99.0 Total obligations	---	5	---

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION
SALARIES AND EXPENSES

CONSOLIDATED SCHEDULE OF PERMANENT POSITIONS PAID FROM FUNDS AVAILABLE TO THE OFFICE OF THE EXECUTIVE DIRECTOR

Identification code 31-05-1900-0-1-910	1969 actual	1970 estimate	1971 estimate
GRADES AND RANGES			
GS-18, $33,495	1	1	1
GS-17, $28,976 to $32,840	-	1	1
GS-15, $21,589 to $28,069	1	3	6
GS-11, $11,233 to $14,599	1	1	3
GS-9, $ 9,320 to $12,119	1	2	1
GS-7, $ 7,369 to $ 9,934	-	1	3
GS-5, $ 6,176 to $ 8,030	-	-	1
GS-4, $ 5,522 to $ 7,178	-	1	-
Total	4	10	16
HIGHER LEVEL POSITIONS			
GS-18, $33,495 Executive Director	1	1	1
GS-17, $28,976 to $32,840 Deputy Executive Director	-	1	1

PERSONNEL SUMMARY

Identification code 31-05-19-0-1-910	1969 actual	1970 estimate	1971 estimate
Total number of permanent positions	4	10	16
Full-time equivalent of other positions	-	1	2
Average number of all employees	3	8	16
Average GS grade	13.3	12.0	12.1
Average GS Salary	$18,900	$18,200	$18,300

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION

ANALYSIS OF CHANGES IN PROGRAM REQUIREMENTS

Three year comparison
(in thousands of dollars)

	1969 actual	1970 estimate	1971 estimate
Budget authority (adjusted) (Federal funds)	150	258	375
Outlays (Federal funds)	61	256	365

Analysis of changes in budget authority

1970 Budget authority (Federal funds)	$181
1970 Current estimate	$181
Increases over FY 1970:	
Manpower changes required to effectively carry out the mandate of the Executive and Legislative branches of Government in the preparation of a comprehensive report recommending to the President an overall program of coordinated commemorative activities for the celebration of the 200th anniversary of the American Revolution; for planning for an exposition; printing of the report; increased travel and transportation costs; and other contractual services and administrative cost incident to increased staffing	117
Automatic (non-policy)	
Unobligated balance available, start of year	77
Total FY 1971 request	$375

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION
SALARIES AND EXPENSES
SUPPLEMENTARY SOURCE DOCUMENT (In thousands of dollars)

IDENTIFICATION CODE 31-05-1900-0-1-910	Function	Line No.	Exp. (E) / Loan (L)	Def. (D) / Indef. (I)	Leg. (G) / No leg. (N)	1969 actual	1970 estimate	1971 estimate
A. ANALYSIS OF BUDGET AUTHORITY AND OUTLAYS								
Budget authority	910	40	E	D	N	150	169	375
	910	44.20	E	D	N	-	12	-
Total						150	181	375
Outlays	910	40	E			61	256	365
Total						61	256	365
Memorandum entries:								
Appropriation to liquidate contract authority								
Loan repayments to miscellaneous receipts		98.43	L					
Limitations:		9						
		9						
		9						
		9						
B. DISTRIBUTION OF OUTLAYS								
From new authority—current		311				61	167	351
From new authority—permanent		312						
From obligated balances		313				-	12	14
From unobligated balances		314				-	77	-
From new appropriations to liquidate contract authority (memo entry)		315				( )	( )	( )

307-102

STANDARD FORM 307
June 1969 (Revised). Bureau of the Budget
Circular No. A-11 Revised

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION

SALARIES AND EXPENSES

31-05-1900-0-1-910	Function	Line No.	MC	Character code	1969 actual	1970 estimate	1971 estimate
C. GROSS CASH TRANSACTIONS (Public enterprise and trust revolving funds)							
Gross outlays		511					
Total							
Applicable receipts		512					
Total							
D. CHARACTER CLASSIFICATION							
Budget authority	910		1	6313-24	150	181	375
Total					150	181	375
Outlays	910		2	6313-24	61	256	365
Total					61	256	365

U.S. GOVERNMENT PRINTING OFFICE : 1969 O—340-484 (72-1)
879-377

ANALYSIS OF BUDGET AUTHORITY AND OUTLAYS
(in thousands of dollars)

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION

31-05-1900-0-1-910		1969 actual	1970 estimate	1971 estimate	Increase or decrease (-)	Explanation
Federal Funds						
Salaries and Expenses...910	NOA	150	169	375	206	
Proposed for separate transmittal, Civilian pay act supplemental.....		-	12	-	-12	
	EXP	61	256	365	109	

STATEMENT OF RECEIPTS - HISTORICAL AND MEMORIAL COMMISSIONS,
AMERICAN REVOLUTION BICENTENNIAL COMMISSION

Receipt Symbol	Receipt Account Title	Source category	Type	Function	1969 actual	1970 estimate	1971 estimate	Comments
76-8091	Donations, American Revolution Bicentennial Commission	1228	G		$5,000	---	---	

PUBLIC LAW 90-206 PHASE III
ANALYSIS OF PAY INCREASE COSTS AND FINANCING PLAN
Fiscal Year 1970

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION

Organization Unit and Account Title	Increase in Direct Pay and Other Related Cost of This Agency		Unabsorbed Amounts for Payment to Other Accounts	Net Absorption			Additional Appropriation required	Date Supplemental is Needed
	Direct Pay	Related Cost		Possible by Administrative Action	Requiring Congressional Action	Total		
SALARIES & EXPENSES	$10,500	$1,500	---	---	---	---	$12,000	3/31/70
TOTAL	$10,500	$1,500	---	---	---	---	$12,000	3/31/70

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION

NUMBERS OF CIVILIAN PERSONNEL

	Number of Employees at End of Year					
	1969		1970		1971	
	Full-time in permanent positions	Total	Full-time in permanent positions	Total	Full-time in permanent positions	Total
Salaries and Expenses	4	4	10	13	16	19
Total, American Revolution Bicentennial Commission financed from accounts in the budget of the Commission	4	4	10	13	16	19

HISTORICAL AND MEMORIAL COMMISSIONS

AMERICAN REVOLUTION BICENTENNIAL COMMISSION

SALARIES AND EXPENSES

Highlight Statement

The American Revolution Bicentennial Commission (ARBC) was established on July 4, 1966, under provisions of Public Law 89-491 (80 Stat. 259). The statute places on the Commission the responsibility of planning, encouraging, developing, and coordinating the commemoration during the bicentennial era.

Broadly representative of both the Government and private citizens, the Commission has 35 members. Four are Members of the Senate who are appointed by the President of the Senate, and four are Members of the House of Representatives appointed by the Speaker of the House. Also as members are the Secretary of State, the Attorney General of the United States; the Secretaries of the Interior, Defense, Commerce, and Health, Education and Welfare; the Librarian of Congress, Secretary of the Smithsonian Institution, Archivist of the United States, and Chairman of the Federal Council on the Arts and Humanities.

Seventeen members are appointed by the President from private life, one of whom is designated by the President to serve as chairman of the Commission.

Four of the seventeen Members appointed to the Commission by President Johnson in January 1967, are serving today. Three other Members who were among the initial appointees have recently resigned from the Commission because of more pressing business commitments.

43-216 O—70—pt. 4——38

Central to the effective discharge of its responsibilities is the development by the Commission of a National plan of commemorative activities throughout the Nation. This is to be in the nature of a report to the President to be transmitted to the Congress recommending activities and observances during the bicentennial era which are appropriate to the Bicentennial.

The original legislation establishing the ARBC required this report to be submitted on or before July 4, 1968, subsequently extended by Amendment to July 4, 1970. The amended legislation authorized appropriations and Congress appropriated $150,000 to the Commission in fiscal year 1969, $77,000 of which has been carried over to the current fiscal year. Fiscal year 1970 appropriations for the ARBC amounted to $175,000, giving the Commission a total of $252,000 available during this fiscal year.

The first elements of the staff were organized during January 1969. New members of the ARBC were appointed and others continued by President Nixon on July 3, 1969.

Since July 4, 1969, the full Commission has held five meetings and numerous meetings of its subcommittees. It has been given authority by the Bureau of the Budget to increase the size of its staff paid from its own funds from four to ten full-time permanent employees.

The Commission is mindful that, as stated in the Joint Resolution, the Bicentennial should be predicated on the ideas and principles on which the Nation was founded. The Bicentennial offers America a compelling opportunity to review 200 years of freedom, to recall with justifiable pride the heritage, the growth, and the accomplishments of two centuries, and to look forward to the Nation's third century, committing Americans, individually and collectively, to the fulfillment of those national goals which have not yet been achieved. As the Commission has stated, "Some of this work will be solemn--some will be festive, because the 200th birthday of our country should be at once a joyous celebration and a solemn rededication."

To be successful, however, the celebration of the Bicentennial must be a truly national occasion, with a role and sense of personal involvement for every citizen, every community, and every organization. It is this sense of involvement that the Commission seeks to encourage in the discharge of its responsibilities.

The ARBC's major efforts to date have been devoted to the collection of information and formulation of ideas to be included in the National Bicentennial Plan which will be submitted to the President. The plan will catalogue programs and activities which are representative of the types of events appropriate to the occasion. The Commission and its staff are in contact with interested individuals and organizations in many fields of endeavor at the local, state, national, and international levels.

Indicative of the broad scope of ARBC efforts to develop a coordinated program of commemorative activities throughout the Nation are the following:

1. The Governor of each State, Territory, and of the Commonwealth of Puerto Rico has been asked to establish a Bicentennial Commission to work with the ARBC and its staff in developing program plans and in generating a sense of involvement on the part of the people. Sixteen States and Territories thus far have created such organizations. In addition, twenty-three governors have appointed a representative in anticipation of the establishment of similar Commissions. A number of cities have also established Bicentennial Commissions, and recommendations from all of these groups are to be submitted to ARBC by April 1, 1970.

2. The ARBC has established six committees comprised of its Members to work with national organizations in the fields of (a) Arts and Humanities; (b) Commerce, Agriculture, and Labor; (c) Events and Expositions; (d) Media; (e) Sciences; (f) Voluntary, Military, and Patriotic Organizations. Recommendations from these committees are to be submitted by April 1, 1970.

3. Approximately 100 prominent citizens have been asked for their individual recommendations concerning the commemoration of the Bicentennial.

4. Sixty Federal agencies have been asked to identify which of their programs and activities fall within the framework of the National Plan.

5. The Ex-Officio Members of the Commission who represent the 10 departments and agencies are preparing their recommendations for participation in the Bicentennial.

The ARBC is seeking the broadest possible range of concepts appropriate for commemorating the Nation's Bicentennial at National, State, local and international levels. The results of these efforts are now beginning to bear fruit.

Responses to ARBC's inquiries now are being received and the Commission is examining, classifying, and integrating individual proposed programs into the outline of the National Plan. These responses will form the basis of the report to the President on July 4, 1970, but more importantly they represent the beginning of a dialogue which must through time be more fully developed. The most important product of this dialogue, hopefully, will be a rededication to the principles on which the country was founded. The process of involving the broad range of Americans in such an undertaking is time consuming to the extreme, but as individuals become aware of the constructive potential inherent in commemorating

our Nation's 200th birthday both individuals and institutions become very enthusiastic over the possibilities.

The major part of the national Bicentennial will be the multitude of activities taking place throughout the United States at the local level, with each city, town, county, and community having its own program of activities which generate local interest and involvement. As required under provisions of the enabling legislation, the Commission has under study such matters as the issuance of commemorative coins, stamps, and medals and appropriate international participation in Bicentennial celebrations. The Commission has endorsed and is actively supporting efforts of Denver and Los Angeles to host the 1976 Winter and Summer Olympic Games, respectively. The matter of an international exposition in the United States during the Bicentennial also is under intensive study. In these and other related matters, the Commission has sought and is receiving technical advice from recognized experts and consultants.

The Commission is, in effect, seeking a multitude of suggested programs and activities. The ARBC and its staff are assisting and encouraging the development of individual and group Bicentennial programs throughout the Nation. Illustrative of some of the activities anticipated are a completion of county histories; studies of ethnic contributions to state and regional development over the period of 200 years; preparation of film documentaries on local enterprises; projects to be undertaken by each classroom across the country; organized travel among students between various regions of the country; and round-table discussions and debates throughout the country on local radio and television stations.

As instructed by the Congress, the ARBC will recommend how the administrative and fiscal responsibilities for various programs should be assigned, and it will match suggested activities with potential sponsors. The Commission will devote its efforts to the encouragement of the widest possible participation in the Bicentennial at every level, and will coordinate activities throughout the Nation to insure a meaningful celebration.

Much of the work of the American Revolution Bicentennial Commission during fiscal year 1971 will be directed toward refinement and development of efforts already undertaken. Specifically, the Commission will:

1. Develop and maintain a detailed catalogue of Bicentennial programs and activities planned at the National, State, local, and international levels.

2. Encourage the development of programs in areas which have not reported plans.

3. Provide assistance and advice in the development of proposed programs.

4. Disseminate information and ideas through personal contacts by ARBC members and staff, through regional meetings, and through use of communications media.

5. Maintain liaison with state and local Bicentennial commissions as well as with Bicentennial committees within private organizations and associations, and other appropriate groups.

6. Encourage and develop the widest possible national interest and involvement in Bicentennial programs through use of films, brochures, newsletters, and other media, as well as certificates of recognition for contributions to the Bicentennial efforts.

7. Establish and maintain a clearinghouse for information on Bicentennial efforts to encourage complementary activities and avoid costly duplication.

In addition to the above activities concerned directly with the further development and coordination of a National Plan, the Commission will have a supporative role in the interim period when the Congress has under consideration the President's recommendations. This will involve the coordination and follow-up of the administrative and legislative actions necessary to translate the recommendations into realities. Also if it is so directed, the Commission will allocate responsibilities and will initiate such activities of the National Plan as the President and the Congress determine appropriate.

To adequately service a constantly growing number of requests for information and guidance, and to provide the requisite encouragement and coordination of Bicentennial program efforts across the Nation, the Commission requires an increase in its staff and a cooresponding increase in its appropriation for salaries and expenses.

The members of the American Revolution Bicentennial Commission are deeply aware of the responsibility they have to the Nation as a whole in planning activities surrounding the 200th anniversary of the founding of this country. They and the members of the ARBC staff are cognizant that theirs is a limited role, one in which they will, nevertheless, be deeply involved in the whole spectrum of activities across the Nation leading up to and during 1976.

To adequately develop an effective and carefully coordinated program of national activities requires constant dedication over these years preceding 1976. The Commission is also very much aware that the support and encouragement of the President, Congress, and the people is absolutely essential if the celebration of America's Bicentennial is to have meaning for its citizens and the people of the World who look to us as the hallmark of liberty.

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HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION

SALARIES AND EXPENSES

DETAIL OF PERMANENT POSITIONS

Identification code 31-05-1900-0-1-910	1969 actual		1970 estimate		1971 estimate	
GRADES AND POSITIONS						
GS-18, $33,495						
Executive Director	1	$33,495	1	$33,495	1	$33,495
GS-17, $28,976 to $32,840						
Deputy Executive Director	-	-	1	$32,840	1	$32,840
GS-15, $21,589 to $28,069						
Director, Policy and Plans	1	$21,589	1	$21,589	1	$22,309
Director, Research and Information	-	-	1	$28,069	1	$28,069
Director, International Affairs	-	-	-	-	1	$25,189
Executive Secretary, Committees	-	-	-	-	2	$56,138
Administrative Officer	-	-	1	$22,309	1	$23,029
GS-11, $11,233 to $14,599	1	$11,233	1	$11,607	3	$37,916
GS-9, $ 9,320 to $12,119	1	$ 9,320	2	$18,951	1	$ 9,942
GS-7, $ 7,639 to $ 9,934	-	-	1	$ 7,639	3	$23,172
GS-5, $ 6,176 to $ 8,030	-	-	-	-	1	$ 6,176
GS-4 $ 5,522 to $ 7,178	-	-	1	$ 5,522	-	-
Total full-time permanent employment	4	$75,637	10	$182,021	16	$298,275
Less man-year lapses	-1.3	-$30,637	-3.1	-$ 59,021	-2.4	-$ 43,275
Net full-time permanent employment	2.7	$45,000	6.9	$123,000	13.6	$255,000

HISTORICAL AND MEMORIAL COMMISSIONS

AMERICAN REVOLUTION BICENTENNIAL COMMISSION

Salaries and Expenses

Appropriation 1970		$175,000
Unobligated balance from prior years		77,000
Proposed supplemental for civilian pay act increase		12,000
Less appropriation transfer 1/		-6,000
Total available for obligation		$258,000
1970 Budget authority (Federal funds)	$181,000	
Increases:		
Manpower changes required to effectively carry out the Commission's responsibility for planning, encouraging, developing and coordinating the commemoration activities in an expanding work environment	117,000	
Automatic (non-policy) Unobligated balance available start of year	77,000	
Budget estimate 1971		$375,000

Analysis by Activities

	Amount Available 1970	Budget Estimate 1971	Total available 1971 compared to total available 1970
1. American Revolution Bicentennial Commission	$258,000	$375,000	+$117,000

1/ Appropriation transfer to General Services Administration for office space.

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL COMMISSION

Itemization of Estimate

	Actual 1969	Available 1970	Estimate 1971	Increase (+) or Decrease (-)
Program and Financing:				
Total Obligations	$ 73,000	$258,000	$375,000	+$117,000
Unobligated balance available, start of year	-150,000	-77,000	---	77,000
Unobligated balance available, end of year	77,000	---	---	
Appropriation	---	$181,000	$375,000	+$194,000
Obligations by Object:				
11 Personnel compensation	$ 45,000	$139,000	$285,000	+$146,000
12 Personnel benfits	2,000	12,000	26,000	+14,000
21 Travel and transportation of persons	6,000	35,000	30,000	- 5,000
22 Transportation of things	---	1,000	2,000	+ 1,000
23 Rent, communications and utilities	3,000	2,000	---	- 2,000
24 Printing and reproduction	---	17,000	10,000	- 7,000
25 Other services	13,000	26,000	18,000	- 8,000
26 Supplies and materials	1,000	2,000	2,000	---
31 Equipment	3,000	24,000	2,000	-22,000
Total obligations	$ 73,000	$258,000	$375,000	+$117,000

Mr. LEWIS. Thank you, Madam Chairman.

As I say, I first want to say Dr. Sterling is very sorry he could not appear this morning. He is ill in California. He asked me at the last minute as vice chairman to represent him.

Mrs. HANSEN. I do not know how anybody can be ill in California with the beautiful weather they have out there.

Mr. LEWIS. It is difficult, but he managed it.

The statement of Dr. Sterling has been given to you but I would like to read for you a summary which represents his views.

GENERAL STATEMENT

I am glad to have this opportunity to appear before your committee on behalf of the Commission, and I am gratified that the statement that is submitted will be printed in the record.

The Commission is requesting the sum of $375,000 to finance its work through June of 1971. It feels the request is reasonable and justifiable. The Commission is attempting under its mandate from Congress, as you know, to plan and prepare for the celebration of the Nation's 200th birthday. The Commission shares with the Congress the view that this anniversary is not and should not be a mundane and commonplace event. It should be signalized, we think, as a memorable milestone in the history of the Republic. To this end, the Commission and the staff have been in touch with and are working with all of the States of the Union and its Territories and considerably more than 600 voluntary organizations and associations throughout the country. In addition we have been in touch with more than 80 Federal departments and agencies.

This budget request is to provide the funds necessary to sustain and nurture this nationwide work that we have begun and in which we are really in midstream.

PROGRESS OF COMMISSION

Mrs. HANSEN. Are you sure you are as far as midstream?

Mr. LEWIS. We are in this year's work.

Mrs. HANSEN. I know, but how far has your work on the Bicentennial progressed?

Mr. LEWIS. I would like to describe what we have done since this Commission was reformed in July of last year. Our major effort this year is to prepare a report to the President which is due on July 4 of this year and we will have that in his hand at that time. If it is approved by him and by the Congress, it will be the foundation of all of the work of the Commission in the future.

I assure you the Commission and the staff have been working very diligently this year.

Mrs. HANSEN. I presumed the staff worked diligently last year also, but there was not much evidence of that.

Mr. LEWIS. I was not with the Commission last year. I can only speak for the present performance.

Mrs. HANSEN. Congress views this as a very exciting challenge. This is why we are very anxious. Congressman Marsh, from Thomas Jefferson's old district, has been very interested in and excited about the Bicentennial.

Mr. LEWIS. I know that; he is on our Commission.

Mrs. HANSEN. I have been waiting to see what has happened. I am still waiting.

Please proceed.

Mr. LEWIS. I agree with you that it has been slow going, but I think our purpose here is to report to you on progress to date this year.

I hope it will be impressive.

As part of Dr. Sterling's justification for the budget, I was saying that this involves a good deal of travel, communication by phone and mail, and meeting with the many official and volunteer agencies which we have helped to bring into association with this enterprise.

The budget request, as I think you will discern from its relative modesty, is not intended to finance the development and implementation of whatever recommendations for the bicentennial——

USES OF FUNDS

Mrs. HANSEN. Are these funds going to be used to redecorate any of your offices?

Mr. LEWIS. I think it will have to redecorate some of the offices—new offices—for the Commission. It will be a modest sum.

It is not intended, however, to finance the development and implementation of whatever recommendations for the bicentennial celebration the Commission will make to the President, nor what the President and Congress may choose to approve. Now, Madam Chairman, a brief word about our activities since the Commission was reconsituted last July.

ACCOMPLISHMENTS

You were asking what we have accomplished. The full Commission has met five times in this fiscal year.

Mrs. HANSEN. Where did you meet?

Mr. LEWIS. We met here in Washington. We have heard presentations from Washington, Philadelphia, Boston, and Miami, about their proposals for handling a part of the bicentennial.

MIAMI'S PROPOSAL

Mrs. HANSEN. What was Miami's proposal?

Mr. LEWIS. They think they have the ideal site for an international exposition, which I must say, was unencumbered by any industrial areas.

Their presentation is being carefully considered in an overall study. We have organized the Commission into six working committees; one which would cover the arts and humanities and education under Dr. Boorstin of the Smithsonian Institution.

There is a Committee on Events and Exhibitions, chaired by George Lang, who is a vice president of Restaurant Associates; a Committee on Media under James Copley of the Copley Press; a Committee on Agriculture and Labor and Commerce, whose Chairman is Maurice Stans, the Secretary of Commerce; a Committee on Patriotic and Voluntary and Service Organizations under Dr. Paul Smith, chancel-

lor of Whittier College; and a Committee on the Sciences, which takes in the environment and ecology, under Eric Jonsson, the mayor of Dallas.

In addition to the work which I mentioned above and the meetings, our Chairman, Dr. Sterling, addressed the Governor's Conference in Colorado Springs last September 2. The Commission met with the President last October 8; this meeting also included the representatives of 38 States. We have a very busy, able, and, I assure you, a very dedicated small staff.

We have been advised that 30 States have now appointed State Commissions, and 14 other States have appointed representatives of the Governor. The Commission's approach to its task derives from the legislation which brought it into being.

First, we very much want to make the anniversary celebration a national event, involving as many citizens and communities as possible, and second, to develop this celebration during the bicentennial era which we think should begin at the point the President has received and considered the report. The focal point of the bicentennial era will be the anniversary year of 1976.

GOALS OF CELEBRATION

We think the celebration should be festive as befits a birthday party, and solemn, as befits an event which affords an opportunity for this Nation to remember its historic beginnings and review its achievements, and, indeed its failures.

And to renew its dedication to those principles of freedom and justice which attended its birth and have guided its growth.

STATUS OF LEGISLATION

Mrs. HANSEN. Your current legislative authorization expires June 30, 1970. What is the status of proposed legislation to extend the Commission?

Mr. LEWIS. I believe the proposed legislation is at this moment in the House and in the Senate.

Mrs. HANSEN. Is the authorization in committee?

Mr. SKORA. Perhaps I might answer.

The legislation in both the House and Senate is in the Judiciary Committee.

They assure us that they will give it consideration. It was introduced by Senators Pastore and Cotton who are members of the Commission. And by the four House Members of the Commission.

PERSONNEL REQUESTS

Mrs. HANSEN. You currently have authorized 10 permanent positions. How many of these are filled?

Mr. SPECTOR. All 10, Madam Chairman.

Mrs. HANSEN. How many people do you have on your staff that are employed by other Government agencies?

Mr. SPECTOR. If I may answer that, we have nine; eight full-time, and one part-time.

Mrs. HANSEN. What agencies are these people from?

Mr. SPECTOR. From the Department of State, the U.S. Information Agency, the Departments of Health, Education, and Welfare and Housing and Urban Development.

Mrs. HANSEN. Are there any employees on the staff from the CIA?

Mr. SPECTOR. No, Madam Chairman, as far as I know.

Mrs. HANSEN. You are requesting six additional positions for 1971. What are the grades and titles of the six additional positions?

Mr. LEWIS. I would like to ask Mr. Spector to respond to that.

Mr. SPECTOR. Madam Chairman. In the past, the Commission has relied on assistance in the form of nonreimbursable detail of personnel to accomplish some of its work. Although I myself am a nonreimbursable detail from the Department of State, I believe that the Commission should be paying for as many of its people as possible, either by reimbursing the other agencies for their employees or by hiring them directly. This, you will agree, is better personnel management practice.

It gives the Chairman and the Executive Director better control of the staff. What in effect we propose to do, is to regularize these jobs.

One position, for example, will provide for a general counsel. We have an acting general counsel, Mr. Skora, who has been provided by USIA. We should have the general counsel directly on our own payroll.

IMPORTANCE OF PUBLIC RELATIONS

We have had no one in the public relations field, or Director of Communications as such, other than a consultant in that field. I think we should have a full-time man concerned with public communications because it is such an important aspect of our work.

Mr. Lewis. You need a head for each committee.

Mrs. HANSEN. There is not an agency in the Government that does not have a good public relations department.

Mr. LEWIS. We certainly are going to need one for this Commission.

Mrs. HANSEN. You surely are if you intend to reach the people of the United States.

Mr. LEWIS. The six committees which I mentioned are a very important part of the organization and we need to have one full-time staff member to back up each of the committees, and to be in liaison with the private groups all over the country. That is a big job and we are understaffed in that area now.

USE OF CONSULTANTS

Mrs. HANSEN. To what extent do you use consultants?

Mr. LEWIS. I will have to ask Mr. Spector. I am not sure how many consultants we have been using.

Mr. SPECTOR. I think at last count we had around five or six consultants. We have only been using two of them extensively. We find that this is a good way to get the kind of expertise we need.

Mrs. HANSEN. What type of consultants are you using?

Mr. SPECTOR. One consultant we have is what I would call a first-rate management man who is helping us to organize and do our job and plan our future organization.

Another consultant we have, perhaps you remember him, Harry Carlson, who handled public relations for the Seattle World's Fair. Harry is a first-rate public relations man.

Mrs. HANSEN. Any public relations man, who can have a World Fair, make the Government pay for it, end up with no deficit, and leave the buildings behind is first-rate. He did a terrific job.

Mr. SPECTOR. The same Mr. Carlson handled Expo 67 publicity in the United States. He has been shaping a public relations program for us and is going to help us find a public relations man. He has been working with the Public Relations Society of America (PRSA), which has put together a committee to back him up and advise us. PRSA represents the top 6,000 or 7,000 public relations men in America. A third consultant has also been working in public relations, and has experience in government operations.

He has been working with us regularly and terminates in 2 weeks since we can only have a consultant for a period of 130 days.

Now we come to the consultants we may never use because when we hired them we though we would need them on the commerce and labor committee. One is the vice president of Olin Mathieson who we thought would be helpful with industry.

I do not think we will need him now because the Secretary of Commerce has taken over that area.

(Discussion off the record.)

Mr. SPECTOR. I think that is it.

CONTRACTS WITH CONSULTANTS

Mrs. HANSEN. Insert in the record a listing of the contracts with consultants, that have been executed during fiscal year 1970, indicating the name of the consultant, the type of activity for which he was secured, and the total amount of the contract.

(The information follows:)

AMERICAN REVOLUTION BICENTENNIAL COMMISSION

ANALYSIS OF CONSULTANT SERVICES

CONSULTANTS	APPOINTED	RATE PER DAY	TOTAL ANNUAL CEILING	HOURS TO DATE	RATE PER HOUR	TOTAL PAID
CARLSON, Harry 2/	3/30/1970	$75.00	$9.750			
LEVIN, Arthur D. 2/	11/26/1969	$75.00	$9.750	784	$9.38	$7,353.92 1/
ORCHARD, John E. 3/	Not appointed	$75.00			$9.38	
RAGAN, Jr., James F. 4/	2/24/1970	$75.00			$9.38	
HARRIS, Godfrey 5/	8/15/1969	$75.00	$9.750	468	$9.38	$4,389.84 1/

1/ As of March 21, 1970
2/ Public Relations and Communication Medium Consultant
3/ Advisor on International Fairs and Expositions
4/ Management Consultant
5/ Management Consultant and State Coordinator.

Mrs. HANSEN. If you contracted for a consultant and his services are not used do you have to pay him?

Mr. WHITAKER. We pay them on a daily basis.

Mrs. HANSEN. Do you also pay per diem?

Mr. WHITAKER. When they are in travel status; yes.

TRAVEL COSTS

Mrs. HANSEN. Please insert in the record a complete breakdown of the various per diem and travel allowances for permament members of the staff and members of the Commission.

(The information follows:)

ANALYSIS OF TRAVEL - COMMISSION STAFF

NAME	From	To and Return	Transportation	Per Diem Days	Per Diem Cost	MISC.	TOTAL
Rodger C. Abraham	Wash.DC	Williamsburg	$ 68.38	1	$ 38.00	--	$ 106.38
	Wash.DC	Williamsburg	107.31	2	62.50	--	169.81
	Wash.DC	Ottawa	88.00	3	84.00	18.85	190.85
	Wash.DC	New York City	44.00	1	7.50	26.00	77.50
Arthur E. Burgess	Wash.DC	Williamsburg	--	2	62.50	--	62.50
R. Lynn Carroll	Wash.DC	Los Angeles	229.00	5	145.53	84.25	458.78
	Salisbury	New York City	46.20	1	20.00	15.00	81.20
	Wash.DC	New York City	38.00	1/2	4.00	6.50	48.50
	Wash.DC	New York City	38.00	1	16.00	16.35	70.35
	Wash.DC	New York City	44.00	1/2	4.00	15.30	63.30
	Wash.DC	Tampa	114.00	2	40.00	28.06	182.06
	Wash.DC	New York City	44.00	1/2	4.00	10.95	58.95
	Wash.DC	San Francisco	289.00	5	105.50	148.60	543.10
	Wash.DC	Miami/Tampa	141.00	3	44.00	45.76	230.76
	Wash.DC	Williamsburg	--	3	62.50	9.75	72.25
	Wash.DC	New York City	44.00	2	37.50	14.35	95.85
	Wash.DC	S.F./Ottawa	358.00	7	156.75	94.14	608.89
	Wash.DC	New York City	44.00	1/2	5.00	9.70	58.70
	Wash.DC	Atlanta	84.00	1	31.25	21.75	137.00
	Wash.DC	New York City	44.00	1/2	5.00	6.00	55.00
	Wash.DC	New York City	44.00	-	--	6.00	50.00
	Wash.DC	Los Angeles	270.00	7	168.75	65.84	504.59
	Wash.DC	New York City	27.50	3/4	7.50	5.60	40.60
Hugh A. Hall	San Diego	Wash.DC	283.50	4	120.00	17.45	420.95
	San Diego	Wash.DC	283.50	7	200.75	79.37	563.62
	San Diego	Denver/Wash.DC	255.75	18	349.52	79.97	685.24
	Wash.DC	Williamsburg	--	3	62.50	8.76	71.26
	Wash.DC	New York City	44.00	2	43.75	24.79	112.54
	Wash.DC	White Sulphur Spgs.	56.50	3	68.75	7.25	132.50
	Wash.DC	New York City	44.00	1	27.98	23.25	95.23

ANALYSIS OF TRAVEL - COMMISSION STAFF

NAME	From	To and Return	Transportation	Per Diem Days	Per Diem Cost	MISC.	TOTAL
Julian K. Morrison, III	Wash,DC	S.F./Ottawa	$ 392.00	6	$ 138.00	$ 72.33	$ 602.33
Patricia L. Reynolds	Wash.DC	Williamsburg	--	2	62.50	5.24	67.74
Martha Jane Shay	Wash.DC	San Francisco	304.00	4	81.25	11.32	396.57
	Wash.DC	Williamsburg	--	2	62.50	--	62.50
Edward T. Simms	Wash.DC	Williamsburg	--	1	38.00		38.00
	Wash.DC	Williamsburg	121.00	2 1/2	62.50	--	183.50
Eugene Skora	Wash.DC	New York City	44.00	1/2	4.00	9.95	57.95
	Wash.DC	Williamsburg	--	2 1/2	62.50	--	62.50
M. L. Spector	Wash.DC	L.A./S.F.	299.00	5	147.54	98.13	544.67
	Wash.DC	L.A./San Diego	380.00	4	80.65	64.86	525.51
	Wash.DC	New York City	43.30	4	76.63	23.50	143.43
	Wash.DC	New York City	44.00	1/2	4.00	21.10	69.10
	Wash.DC	New York City	44.00	1/2	4.00	19.50	67.50
	Wash.DC	Williamsburg	--	1	38.25	.50	38.75
	Wash.DC	S.F./Albaquerque	297.00	4	162.00	91.11	550.11
	Wash.DC	Montreal	130.90	2	46.70	40.66	218.26
	Wash.DC	Williamsburg	--	2	62.50	43.00	105.50
	Wash.DC	S.F./Mexico City	468.00	2	44.65	29.81	542.46
	Wash.DC	New York City	44.00	2	40.57	28.70	113.27
	Wash.DC	S.F./Ottawa	392.00	6	138.00	34.74	564.74
	Wash.DC	New York City	44.00	1/2	5.00	25.30	74.30
	Wash.DC	New York City	52.50	1/2	5.00	25.05	82.55
	Wash.DC	New York City	56.00	-	-	10.30	66.30
O. Lamar Whitaker	Wash.DC	Williamsburg	--	1	38.00	1.00	39.00
	Wash.DC	New York City	44.00	1	7.50	17.35	68.85
	Wash.DC	New York City	44.75	1	7.50	11.65	63.90
			$6,418.09		$3,404.77	$1,574.69	$11,397.55

ANALYSIS OF TRAVEL - INVITATIONAL TRAVEL-CONSULTANTS

NAME	From	To and Return	Transportation	Per Diem Days	Per Diem Cost	MISC.	TOTAL
James D. Atwater 1/	Wash.DC	San Francisco	$ 304.00	2	$ 56.25	$ 14.00	$ 374.25
Carol V. Harford 1/	Wash,DC	Williamsburg	37.80	2	37.50	6.00	81.30
Godfrey Harris 2/	Los Angeles	Wash. DC	274.00	3	40.00	15.50	329.50
	Los Angeles	Wash. DC	300.25	5	72.00	15.85	388.10
	Los Angeles	Wash. DC	274.00	5	68.00	13.90	355.90
	Los Angeles	New York City	290.00	2	24.00	21.75	335.75
	Los Angeles	Wash. DC	341.40	2	59.22	15.10	415.72
	Los Angeles	San Francisco	27.00		-	18.60	45.60
	Los Angeles	Williamsburg	304.00	3	62.50	3.60	370.10
	Los Angeles	Whittier	-	-	-	6.20	6.20
	Los Angeles	San Diego	14.76	-	-	9.75	24.51
	Los Angeles	San Francisco	30.00	3	56.25	20.60	106.85
	Los Angeles	Wash. DC	270.00	3	62.50	13.90	346.40
	Los Angeles	Wash. DC	270.00	3	62.50	15.10	347.60
	Los Angeles	Wash. DC	270.00	2	43.75	24.35	338.10
Arthur D. Levin 2/	Wash.DC	Williamsburg	27.25	2	62.50	8.15	97.90
James F. Ragan, Jr. 2/	New York City	Williamsburg	46.20	2	56.25	68.01	170.46
			$3,080.66		$763.22	$290.36	$4,134.24

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1/ Invitational travel White House Staff
2/ Consultants

ANALYSIS OF TRAVEL - PUBLIC MEMBERS

NAME	FROM	TO	TRANSPORTATION	PER DIEM DAYS	PER DIEM COST	MISC.	TOTAL
Dr. Daniel J. Boorstin	Chicago	Wash.DC (Ret)	$ 105.00	4	$ 120.00	$ 19.00	$ 244.00
Col. Frank Borman 1/	Houston	Wash.DC (Ret)	204.75	2	79.80	9.00	293.55
Catherine Drinker Bowen	Boston	Wash.DC (Ret)	60.90	3	90.00	27.62	178.52
	Haverford	Wash.DC (Ret)	14.50	2	58.60	8.63	81.73
	Haverford	Wash.DC (Ret)	22.25	2	58.45	8.90	89.60
	Philadelphia	Wash.DC (Ret)	26.00	2	69.21	2.15	97.36
	Philadelphia	Wash.DC (Ret)	26.00	1	34.45	7.55	68.00
James S. Copley	San Diego	Wash.DC (Ret)	340.20	3	102.37	--	442.57
Dr. Luther H. Foster	Atlanta	Wash.DC (Ret)	106.00	3	94.20	12.53	212.73
	Tuskegee	Wash.DC (Ret)	128.50	2	68.20	6.50	203.20
	Tuskegee	Wash.DC (Ret)	128.50	2	56.00	1.00	185.50
Ann Hawkes Hutton	Trenton	Wash.DC (Ret)	32.80	3	93.98	11.95	138.73
	Trenton	Wash.DC (Ret)	35.00	2	64.45	1.25	100.70
	Trenton	Wash.DC (Ret)	21.50	2	59.30	.50	81.30
	Trenton	Wash.DC (Ret)	27.15	3	103.15	10.84	141.14
	Trenton	Wash.DC (Ret)	32.80	2	85.25	6.06	124.11
George E. Lang	New York City	Wash.DC (Ret)	39.90	2	72.12	--	112.02
	New York City	Wash.DC (Ret)	39.90	1	35.72	--	75.62
	New York City	Wash.DC (Ret)	46.20	2	83.00	--	129.20
	New York City	Wash.DC (Ret)	46.20	2	46.87	--	93.07
Dr. Paul S. Smith	Whittier	Wash.DC (Ret)	279.00	3	90.00	8.14	377.14
	Whittier	Wash.DC (Ret)	279.00	2	64.15	16.28	359.43
	Whittier	Wash.DC (Ret)	279.00	2	64.25	1.25	344.50
	Los Angelos	Wash.DC (Ret)	283.50	3	113.60	35.80	432.90

ANALYSIS OF TRAVEL - PUBLIC MEMBERS

NAME	FROM	TO	TRANSPORTATION	PER DIEM DAYS	PER DIEM COST	MISC.	TOTAL
Dr. J.E.Wallace Sterling	San Francisco	Wash.DC (Ret)	$ 324.00	3	$ 94.60	$ 13.18	$ 431.78
	San Jose	Santa Anna (Ret)	32.38	1/2	4.65	4.50	41.53
	San Francisco	Wash.D.C.(Ret)	324.00	2	63.37	14.08	401.45
	San Francisco	Colorado Springs	156.00	1/2	4.05	11.20	171.25
	San Francisco	Wash.DC (Ret)	338.00	3	97.67	15.91	451.58
	San Francisco	Wash.DC (Ret)	338.00	4	150.00	15.00	503.00 2/
	San Francisco	Wash.DC (Ret)	338.00	3	118.00	12.00	468.00 2/
			$4,454.93		$2,339.46	$ 280.82	$7,075.21

1/ Invitational travel (Col. Borman has been selected for appointment pending retirement from USAF.

2/ Estimated.

Mrs. HANSEN. How many trips has the staff made since July?

Mr. LEWIS. We will have to insert that in the record.

(The information is supplied on pages 608–612.)

Mrs. HANSEN. When you appear before this committee you are supposed to have the information available. I dislike everything being inserted in the record because we cannot talk to the record.

Mr. LEWIS. Of course.

Mrs. HANSEN. That is a fundamental rule I have on this committee.

Mr. LEWIS. Very good.

ACTUAL EXPENSES

Mrs. HANSEN. Are your actual expenses about what you estimated?

Mr. WHITAKER. Madam Chairman, they are running about what we have available for use during fiscal 1970. We have a total availability of $258,000. I checked yesterday and it would appear that if we continue at the going rate we will have expended an amount in the neighborhood of $2,800 over our obligational authority for fiscal year 1970. Certainly we can control this before the end of the year.

Mrs. HANSEN. How many Chairmen has the Commission had?

Mr. SPECTOR. Two.

OVERALL COSTS OF PROGRAM

Mrs. HANSEN. Have you compiled an estimate of the overall cost of this program?

I find it very wise to anticipate expenditures, so that the public can be made aware what the Federal costs will be. Do you also propose to have the States meet part of the costs?

What are your overall plans?

1976 EXPOSITION

Mr. LEWIS. I think some of this might be off the record. Our overall plans are still informal and subject to approval by the President and by the Congress. There is the basic problem of whether or not there will be an international exposition in 1976. As you know, the United States has applied for and reserved the opportunity to have an international exposition in 1976. Our information is that no other country has applied for that position.

Mrs. HANSEN. I am sure if another country applied they would receive permission.

Mr. LEWIS. I know. In any case, I think there is every chance the 1976 exposition would go to the United States.

Mrs. HANSEN. I think you should make very sure that the U.S. will be granted the opportunity to have the exposition.

Mr. SPECTOR. I believe we have, Madam Chairman. We have been informed officially by our Paris Embassy that the Bureau of International Expositions is reserving 1976 for a possible exposition in the United States.

Mrs. HANSEN. Very good.

What plans do you have for the International Exposition? Is that to be a multi-city affair?

Mr. LEWIS. I think the Commission would be agreed that we hope that if there is an International Exposition, it will not be the traditional World's Fair type of exposition. We would like to do something out of the tradition.

Mrs. HANSEN. What do you have in mind?

Mr. LEWIS. We would like to have an exposition or event which would take in all of the States of the Union and all of the people of the United States so that they could participate.

It should not be just a celebration of the 13 Colonies, or Boston, New York, and Philadelphia. We would like somehow to have a very broad celebration—a year long celebration—which would involve all parts of the country.

SYMBOLIC GOALS

Mrs. HANSEN. Mr. McDade, mentioned last year, that the type of things that are done should be symbolic of what the United States intends to do or they should be symbolic of past accomplishments.

Mr. LEWIS. We think, to quote one of the founding fathers, Thomas Paine, "These are the times that try men's souls," these certainly are times that try men's souls.

We think it would be salutary and, in fact, indispensable for the bicentennial to recall to the American people the struggles of the American Revolution, the goals and the ideals of the Revolution, the aims of the founders, what they went through to achieve and create this country, and to apply some of that same kind of inspiration and determination to solve our own problem.

We would like to engage in some goal setting, such as Jack Kennedy did when he said, "We will put a man on the moon by 1970."

URBAN PROBLEMS

Mrs. HANSEN. That is exactly right. This is 1970. One of the major problems of America today is our urban problem.

Mr. LEWIS. That is right.

Mrs. HANSEN. What kind of a city program are you going to have? We have great problems today, with our transportation systems. The transportation system is probably in worse condition today than it was a few years ago.

Mr. LEWIS. I agree with you fully and the Commission agrees with you fully, we would like to see this as an opportunity to get people to work with goals which might be achieved, or at least partly achieved by 1976, in the area of transportation, education, et cetera. One of the members of the Commission is Dr. James Allen, the Commissioner of Education. He has a goal of his own, which is a 10-year project, to insure that every American child, when he leaves school, is able to read English. He says 40 percent of the children who leave high school are not adequately able to read.

Mrs. HANSEN. I am sure he is right.

Mr. LEWIS. That is a tremendous occupational impediment. He is confident that it can be done within 10 years.

I would hope it could be done within 6 years.

Mr. REIFEL. Madam Chairman, that must account for the kinds of radio and television programs the public must endure.

Mr. LEWIS. I think it must. I think it depends on that. It does have an effect on that. Then there is the whole question of air pollution and river pollution. In many of these areas we can enlist the work of the young people.

Mrs. HANSEN. We are not only looking back to celebrate the founding, but we are looking ahead for the next 100 years.

Mr. LEWIS. That is correct.

We are carrying water on both shoulders. We want to look back and rededicate this country to those ideals and make it a national effort.

STATE PARTICIPATION

Mrs. HANSEN. Have the States indicated how they might participate?

Mr. LEWIS. We have, as I said, 30 States who have appointed commissioners. Mr. Spector, have you been in touch with them directly to know what plans they have?

Mr. SPECTOR. Yes.

I was privileged to meet with the Florida Preparatory Commission. They have set up this group to plan their commission. I think you would be heartened to know that they are talking about goals, just as you are.

They are not only talking about it, but really bringing Florida's history up to date, with a program for junior historians in every county and they are talking of better goals in education.

They have goals in the environment.

The Chairman of that group told me, one of their goals is to do something about the environment in Florida. There is a mixture of both past and the future themes in the State's programs.

Mr. LEWIS. Certainly the report will urge every State and every city and every community and every individual to take this as an important goal, to raise its sights and clean the place up.

Mrs. HANSEN. You really have only 5 years.

Mr. LEWIS. That is right.

SEATTLE WORLD'S FAIR

Mrs. HANSEN. I happen to have been in the Legislature of my State when plans for the Seattle World's Fair were started. We took a lot longer than 5 years getting ready for the fair. It took 5 years to settle the disagreements and to establish a location.

I think now is the time to establish some very forthright goals. You have to determine what your goals are going to be.

Mr. LEWIS. We would like to have you on the Commission, Madam Chairman.

Mrs. HANSEN. I am afraid you would not enjoy it.

(Discussion off the record.)

Mrs. HANSEN. Have you chosen an insignia that will be an overall symbol?

FESTIVAL OF FREEDOM

Mr. LEWIS. We have all but chosen the right man to do it. It is in some kind of small competition. James Biddle, the Director of the National Trust on our Board, is working on this avidly. We have almost reached a title for the whole celebration which is a Festival of Freedom.

As I say, our report will be in the hands of the President, but we would like to share some of it with you as we work along.

Mrs. HANSEN. I think that is a great title.

(Discussion off the record.)

Mr. LEWIS. The Commission will not be reorganized necessarily after July 4, but we will have recommendations for the organization of the Operating Committee, or the operating organization. We are not a functioning body.

(Discussion off the record.)

TYPE OF QUARTERS

Mrs. HANSEN. What type of quarters do you presently have?

Mr. LEWIS. We have three houses on Jackson Place fronting on Lafayette Square and they are in the process of being painted. We spent a part of yesterday afternoon discussing ways and means of getting people to donate some furniture and exhibits. We think it could be a small museum, actually. It will be a central place for people who are interested in the bicentennial. I think we can get private donations of antiques, et cetera, to give the proper atmosphere. We know the Smithsonian will cooperate in giving us some exhibits for the small museum. Correct me, Mr. Spector, if I am wrong, but I think that Government funds would be used for painting and reconstruction. We hope we can get most of the decoration done through donations from interested people.

DONATIONS OF PUBLIC

Mrs. HANSEN. How many donations have you received from the public?

Mr. LEWIS. We have received one donation of $10,000. That is for extra expenses, nongovernmental expenses.

Mrs. HANSEN. Mr. Marsh.

Mr. MARSH. Thank you, Madam Chairman.

It is a pleasure to welcome the Commission here today. I am impressed with the progess that has been made. The one point that I would like to make is, don't you share the view that actually the bicentennial event should be continued beyond the year 1976?

CONTINUING CELEBRATION

Mr. LEWIS. We think it probably should go at a minimum to 1983 which is the anniversary of the signing of the Treaty of Paris.

Mr. MARSH. What would be your view on actually extending the observance to 1989, the bicentennial of the adoption of the U.S. Constitution?

Mr. LEWIS. I think the longer we can keep it going legitimately, the better. This would give us a longer time to keep the goals before the people. Each event could be a commemorative event in those years anyway.

Our immediate year of celebration would be 1976, but the longer we can keep it going beyond the year 1989, the better.

Mr. MARSH. The year 2000 when we can point toward the third century and beginning the second millennium.

Mr. LEWIS. Actually get our house in order by that time.

Mr. MARSH. As a buildup to that, don't you think it would be helpful if we tried to lay the groundwork with the public by pointing to 1976 by observing the bicentennial events occurring at this period? For example, the Boston massacre occurred in March 1770.

Mr. LEWIS. That is right. We did not suggest commemorating that this year because we had not made our report to the President.

Mr. MARSH. Only by understanding this particular period before 1776 can we understand the Declaration of Independence which in a lawyer's language is simply a bill of particulars.

If you do not understand the causes, you don't understand the American Revolution.

Mr. LEWIS. I think you wrote a very good memorandum to Mr. Spector in which you spoke of the need for a national celebration.

Mr. MARSH. I think the extension of the bicentennial to the West is one of greatest priority in my own view.

Mr. LEWIS. I agree fully. All the achievements of the people in those States.

PARTICIPATION OF MIDWEST AND FAR WEST

Mrs. HANSEN. For instance, the State of Washington was the first State to give the people the right of referendum and initiative on the ballot.

Mr. LEWIS. That is right.

Mr. MARSH. The western movement is actually an extension of the American experiment.

Mr. LEWIS. That is right.

Mr. MARSH. We want the Midwest and the Far West to think in terms of it being a continuation of the American Revolution.

Mr. LEWIS. It is just an extension of all the rights, privileges, across the country; I agree.

Mr. MARSH. How are you coming on the report?

At what stage are you?

Mr. LEWIS. I would say surprisingly well. I am in the editing business and I know what deadlines are, and I have been terrified this whole year. This staff has done a monumental job on the basic report. We are having some problems with the philisophic part of the report which can be resolved. We have plenty of time on that. I think we are well along on the report. We have it in hand in rough draft now. It is only a matter of ironing it out and having it before the full Commission which we will do, when?

Mr. SPECTOR. Mr. Chairman, we will send to the Commission this weekend a new draft, and then have it before the full Commission by April 21 and 22.

Mr. MARSH. Would it be too late to solicit some ideas or suggestions to put in the first rough draft?

Mr. LEWIS. Certainly not. We will be working on this until the middle of May.

Mr. MARSH. I was thinking of Mrs. Hansen.

Mr. LEWIS. I would like you and Mrs. Hansen particularly to look at it.

Mr. MARSH. She and I talked on this at length.

Mr. LEWIS. With your experience in Seattle and in this city, your contribution would be most valuable.

Mrs. HANSEN. Incidentally, we are both descendants of people who were in the American Revolution.

Mr. MARSH. When you are in Congress you do not really think you got out of it.

Mr. LEWIS. You are still fighting it.

MANY CELEBRATIONS

Mrs. HANSEN. This year there are many celebrations going on in California. They are celebrating the arrival of the Spanish people who arrived prior to our revolution.

Mr. SPECTOR. This is their 200th anniversary.

Mrs. HANSEN. That is right. The State of Washington will celebrate it's 200th anniversary in 1989.

Mr. SPECTOR. The State of Colorado will have its hundredth in 1976.

Mr. LEWIS. I might mention in this connection that the chairman sent out letters to about 100 philosophers and thinkers in the United States. We have gotten back some really interesting replies.

A lot of people have fascinating ideas which we are screening now. We are very fascinated, obviously.

Mr. MARSH. Thank you, Madam Chairman.

Mrs. HANSEN. Mr. Obey?

IDEALS OF THE REVOLUTION

Mr. OBEY. It seems to me the ideals of the Revolution are embodied in the Bill of Rights more than any other document that I can think of and maybe you mentioned this before I came in.

Mr. LEWIS. No; I did not.

Mr. OBEY. How much thought have you given and what are your ideas, if any, on really emphasizing what the Bill of Rights means to the people?

My feeling is that I don't know if you could pass a Bill of Rights today.

Mr. SPECTOR. Mr. Congressman, we feel very strongly that you are right. One idea which we hope will see the light of day, is to institute, or help institute, electronic town meetings of the air, working with the public broadcasting people. I have had some talks with the president of PBC, John Macy. The suggestion is to go down the Bill of Rights one-by-one and to have discussions about them around the country; to call meetings of people who cannot afford a television set in the local church or chamber of commerce; then to use everything

we can to stimulate a discussion to bring the Bill of Rights up to date and show how important each of those rights are today.

Often people do not appreciate some parts of them, such as the freedom of speech, when they won't allow people to speak.

Mrs. HANSEN. I agree with Mr. Obey, because there is a singular drive in the United States right now by a great many people from all segments, to curtail the rights provided in particular segments of the Bill of Rights. It seems to me this Bicentennial is needed today for the sake of America's soul.

Mr. LEWIS. While we probably will not do it, we had one thought that, in the report, we would have references to the Bill of Rights, and then have each of the Founding Fathers, quote raise the question unquote, of how we are taking care of the rights and privileges which they put into the Constitution.

(Discussion off the record.)

Mrs. HANSEN. Mr. Reifel?

Mr. REIFEL. Thank you, Madam Chairman.

As the chairman indicated, carry our best wishes back for the early recovery of Dr. Sterling who was here before us. I think he is a very able as well as a charming gentleman.

Mr. LEWIS. Yes.

INDIAN PARTICIPATION

Mr. REIFEL. We are glad to have Mr. Spector back and Mr. Whitaker and Mr. Skora. There is one concern I had which I expressed when you were here before. My mother's ancestors were here to welcome your folks to these shores. Indian names of the more than 300 tribes or thereabouts are attached to rivers, States, cities, towns and counties. I am sure you are giving some consideration as to what the Indian role is in this.

Mr. LEWIS. We certainly are.

Mr. REIFEL. I am particularly concerned because it should be properly presented, or I hope can be properly presented, there are a lot of charges that the history of this country has been inaccurate with respect to the Indians' role in the things that have happened. It might result, if accurately handled, in inspiring the Indian young people to see that it is not as dark as some people would like to portray it.

(Discussion off the record.)

Mr. MARSH. I think something ought to be done and what the Commission ought to do is to point out the story of the contributions of the American Indians on the side of the Revolutionary cause, and there are examples of that. I think you had an unusual military unit from the State of Delaware which was a reconnaissance unit, it was comprised in part of American Indians. There are other examples of that that you find in the Revolution. I think those things ought to be emphasized and pointed out.

Mrs. HANSEN. In the settling of the West it was said that the reason the Hudson Bay Co. didn't suffer many difficulties during the Indian wars was because of the Indian wives.

Mr. LEWIS. We have been in touch with the Executive Director of the National Council on Indian Opportunity, and he indicated, as a goal, an Indian university might be needed. The training of Indian doctors and nurses is essential, and soil and plant experimentation ought to be gone through. We would like, if we could, to check this

portion of the report particularly with you, Congressman Reifel, as we develop it.

Mr. REIFEL. Whatever is done I am concerned with accuracy, and I am concerned that whoever is brought in as consultants, or whoever is asked to assist, that you get a balance. Recently, because it is popular, apparently, we have had attacks on the Bureau of Indian Affairs. It has a small constituency, and so other than this committee and concerned Members of Congress, don't see it as the article appears in your magazine. It is going to call for some pretty discriminating, intelligent, deep thinking look at who you get to do this. You can get some anthropologists and some are in this city that are romanticists, who think that everything that is done by the white people has been to their disadvantage. I don't think we are getting an accurate picture. The American people are probably more ignorant of what the Indians' situation is and what the Indians are in America than, say, in Europe. There is a great deal more knowledge about Indians in Europe than there is in the United States.

Mr. LEWIS. Is that so?

Mr. REIFEL. Because of many things that have happened. You go through Germany and you see the teepee signs where the camps are. They have Indian clubs all through Germany, Austria, and other European countries.

France has been very much interested, I suppose, because of the early settlement of this country by the French. For the Spanish and English, the same kind of interest in Indians exists. Again all I plead for is—they played a role somewhere—the role of the Indian should be portrayed with utmost accuracy. We just don't want to stir up the emotions of people in the wrong direction, based on misinformation.

Mr. LEWIS. One of the real programs that the Commission will recommend will certainly be to memorialize and signalize the contributions made by all nationalities in the United States. The Indian role is certainly an important one.

Mr. MARSH. In that particular regard, you might look at the life of Jefferson who was a great champion of the Indian and was really a pioneer in Indian rights.

Mr. REIFEL. There is a story of Thomas Jefferson searching out an old woman who was the last of the tribe who could speak that language and he got to her and translated and made a record, and the comment, as reported by him, was that any language that any group of human beings ever spoke was of sufficient importance that it ought to be made a matter of record.

Mr. LEWIS. That is certainly true. I would like to get in touch with you on both these points.

Mr. REIFEL. Madam Chairman, as I said earlier in other meetings before the committee, I know we are looking at the role of the Indian but I think special pains must be taken that we do not get carried away by romanticism. I would like to see it in its accurate form as it evolved. I think this would be more meaningful and more inspiring to the young Indians than some of this flag waving and the sit-ins we are facing at the present time.

Mr. LEWIS. Certainly one of the goals we would recommend is to help solve once and for all what may be called the Indian problem and to do justice to them.

FUNDS IN RESERVE

Mrs. HANSEN. Speaking of the Indian problem, the solution to those problems are adequate funds, which the Bureau of the Budget has never allowed.

When we visited the Navajo country last January the committee was so impressed with the Navajo needs after sitting in on a council meeting of the Navajos and listening to their plea for the hasty construction of the Navajo irrigation project, that the committee provided additional funds.

They had the capability engineering-wise. What do you think happened to those funds? They were placed in reserve by the Bureau of the Budget.

Mr. LEWIS. Incredible.

POLLUTION ABATEMENT FUNDS IN RESERVE

Mrs. HANSEN. They also placed in reserve a large portion of the pollution abatement funds for the national parks and yet the President issued an order that all pollution by Federal facilities must cease by December 31, 1972. Mr. Wyatt.

Mr. WYATT. Thank you, Madam Chairman.

Mr. Lewis, I appreciated the presentation of you and your able staff, and I am delighted you are underway. I am enormously interested in the activities of the Bicentennial Commission, because I think you have a rare opportunity to give the people a reminder of what they have to be proud about and what they have to bring them together at a time when it is extremely critical for any kind of contribution of this kind.

So far as I am concerned, and I am sure this will be true with other members of this subcommittee. We will give you all the help you need.

Mr. LEWIS. Thank you.

Mr. WYATT. We appreciate your contributions as individual citizens.

Mr. LEWIS. Thank you.

Mrs. HANSEN. Thank you, Mr. Wyatt.

Mr. Lewis, I may say that the committee has thoroughly enjoyed the discussion this morning. I do congratulate the Commission on having you as a member.

Mr. LEWIS. The most kind thing is that you would allow us to consult with you and members of your committee as we work.

Mrs. HANSEN. We would be delighted.

I think that nothing could be done that would be more significant than to provide an Indian university. This could be one of your goals because there is probably nothing that would give these people more of a sense of achievement.

Mr. LEWIS. If you and Mr. Reifel agree with that, we shall make that a cardinal point, as a goal, in our report.

Mrs. HANSEN. I think it is an excellent idea. Education is one of the great tools we can offer. I may suggest that you ask the Santa Fe Indian Art Institute to participate in the celebration. They have some very talented young poets, sculptors, painters, and dramatists.

I would like to see some of their drama programs go abroad as representative of our country.

Mr. LEWIS. I should think they well might. USIA might well want to do that.

Mrs. HANSEN. They have excellent programs. They have the most imaginative young director. Thank you so much for coming and thank you for your courtesy.

Mr. LEWIS. Thank you, Madam Chairman.

WEDNESDAY, April 8, 1970.

COMMISSION OF FINE ARTS

WITNESSES

WILLIAM WALTON, CHAIRMAN
CHARLES H. ATHERTON, SECRETARY

Mrs. HANSEN. Next, we have the Commission of Fine Arts. Mr. Walton, it is a genuine pleasure to welcome you back to the committee. I may make one observation, the lights are on at the White House.

LIGHTING AROUND THE WHITE HOUSE

Mr. WALTON. Yes, this is a step forward; isn't it? There are a lot of new lights coming on in the Ellipse in the back.

Mrs. HANSEN. Why have they installed a fence?

Mr. WALTON. I do not really know. It is an underground something or other. It is not a new building, if that is what you are worried about.

Mrs. HANSEN. I had not noticed it until last night and I was wondering why it was there.

Mr. WALTON. It is all utility equipment. There is going to be something new on the front of the west wing, a sort of small portico the President wanted. He wants to build up the importance of that entrance for receiving people who do business with him. We had to say "Yes." We were pleased to. It was not a bad idea.

JUSTIFICATION MATERIAL

Mrs. HANSEN. Insert pages 1 through 3 of the justifications in the record.

(The justifications follow:)

COMMISSION OF FINE ARTS

Salaries and Expenses

Appropriation/Total available, 1969	$115,000
Appropriation/Total available, 1970	115,000
Budget Estimate, 1971	115,000

Analysis by Activities

Activity	F.Y. 1969 Amount Available	F.Y. 1970 Amount Available	F.Y. 1971 Estimate	Increase (+) Decrease (-) 1971 comp. with 1970
Administration	$ 114,855	$115,000	$115,000	---
Unobligated balance lapsing	145	---	---	---
Total	115,000	115,000	115,000	---

Administration: Fiscal Yeal 1970, $115,000; Fiscal Year 1971, $115,000;

No change.

JUSTIFICATION

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 two-fold purpose; first, to give advice concerning aesthetic 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 Commission is composed of seven members, appointed by the President, who serve without compensation, receiving only actual travel expenses incurred in attending meetings. Since the Commission was established in 1910, more than 70 distinguished architects, landscape architects, painters, sculptors, and laymen in the field of fine arts have given freely to the Government the benefit of their experience and professional skills in advising the President, the Congress, and government agencies on matters involving the fine arts.

Specific functions of the Commission comprise the following:

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 requested to do so by the President, heads of executive departments, or by any committee of either House of Congress.

It advises specifically on all plans for parks, public buildings, and other structures constructed by 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 advises upon location of statues, fountains, and monuments in public squares, streets and parks in the District of Columbia and upon the selection of models for the statues, fountains, and monuments erected under the authority of the United States and upon the selection of artists for the execution of the same.

On occasion, the Commission also advises on projects of an important Federal character outside of Washington, both in continental United States and abroad. It also renders opinions on the merit of designs for medals, insignia, coins, or other art projects created and produced by the executive department.

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 semi-public buildings in certain areas of the National Capital. In this function the Commission reports its findings on the above features to the Commissioner of the District of Columbia before building permits are issued at the Permit Branch of the Department of Economic Development.

The Commission also carries out the provisions of the Old Georgetown Act, Public Law 808-81st Congress (64 Stat. 903, Chap. 984), approved September 22, 1950, an act to regulate the height, exterior design and construction of private and semi-public buildings in the Georgetown area of the National Capital. This action also requires review and recommendations to the Mayor-Commissioner of the District of Columbia on the merits of designs submitted for building permits.

An appropriation of $115,000 is requested for Fiscal Year 1971 for payment of travel expenses of the members of the Commission and a supporting staff of six permanent positions who assist the members on matters involving the fine arts.

EXPLANATION OF LANGUAGE CHANGE

SALARIES AND EXPENSES

For expenses made necessary by the Act establishing a Commission of Fine Arts (40 U.S.C. 104), [including payment of actual traveling expenses of the members and secretary of the Commission in attending meetings and Committee meetings of the Commission either within or outside the District of Columbia, to be disbursed on vouchers approved by the Commission,].....

The above language, appearing in brackets, is deleted. There is no longer any need for such wording as it is now covered by general legislation.

PERSONNEL SUMMARY

	1969 Actual	1970 Estimate	1971 Estimate
Total number of permanent positions	7	7	6
Average number of all employees	6	6	6
Average GS grade	11.1	11.1	11.1
Average GS salary	$12,887	$14,213	$14,780

ITEMIZATION OF ESTIMATE

Appropriation Title: Salaries and Expenses	Actual 1969	Estimate 1970	Commission of Fine Arts Estimate 1971	Increase (+) Decrease (-)
Program and Financing:				
Total obligations	$ 114,855	$ 115,000	$ 115,000	---
Unobligated balance lapsing	145	---	---	---
Budget authority (appropriation)	115,000	115,000	115,000	---
Object classification:				
11 Personnel compensation	71,144	88,000	88,000	---
12 Personnel benefits	4,632	7,000	7,000	---
21 Travel and transportation of persons	1,473	2,000	2,000	---
23 Rent, communications and utilities	1,838	2,000	2,000	---
24 Printing and reproduction	10,624	6,000	6,000	---
25 Other services	16,165	8,000	8,000	---
26 Supplies and materials	1,125	1,000	1,000	---
31 Equipment	7,854	1,000	1,000	---
Total obligations	114,855	115,000	115,000	---

GENERAL STATEMENT

Mrs. HANSEN. Mr. Walton, it is a pleasure to have you here this morning. Do you have any general comments on Washington, D.C.'s building programs?

Mr. WALTON. Madam Chairman, it is always a pleasure to be here. I will insert my opening statement for the record.

(The statement follows:)

STATEMENT OF WILLIAM WALTON, CHAIRMAN, COMMISSION OF FINE ARTS, BEFORE THE SUBCOMMITTEE ON APPROPRIATIONS FOR THE DEPARTMENT OF INTERIOR AND RELATED AGENCIES

The Commission of Fine Arts is requesting an appropriation of $115,000, which is the same as the amount appropriated for fiscal year 1970. No major changes are planned in our programs for the coming year.

During fiscal year 1969, the Commission acted upon 346 formal submissions, carrying an estimated cost of many millions of dollars. In addition to the continuing complexity of formal submissions, there has also been a steady number of informal reviews and daily requests for information about Washington. Balanced with current programs proposed for the development of the Capital, I expect the total number of submissions will continue at approximately the same level as the present year.

The appropriations for the Commission have remained relatively small throughout its 59-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 70 distinguished architects, landscape architects, painters, sculptors, and laymen in the 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.

FEDERAL BUILDING PROGRAM

Mr. WALTON. I think the Washington building program is in a fair state. There is some action going on. There are old authorizations being carried out. In the last year as we look back the two biggest projects we have approved are the addition to the National Gallery, which is a whopping building and very expensive. You should love it because it is all private funds.

Mrs. HANSEN. We enjoy that kind of budget.

Mr. WALTON. The price tag is up to $40 million now. It started at $20 million. That and the Federal Triangle which, as you know, is essentially putting parking underneath the plaza behind the Labor-Commerce Buildings.

Mrs. HANSEN. What is happening on Pennsylvania Avenue?

PENNSYLVANIA AVENUE

Mr. WALTON. It is in a sad state of flux. What I hear is that the President is going to make a new proposition on it, probably along the lines of recommending a Comsat type of corporation to be given authority to raise private funds to be used along with public funds in the development of that area. I probably should not be saying this but that is what the people at the White House tell me he is planning to do at this session, and to bring in such a bill.

Mrs. HANSEN. For example, the Willard Hotel is empty, and development of Pennsylvania Avenue is not progressing very rapidly.

Mr. WALTON. No. The Federal Triangle project in which a lot of money is involved is a very big contribution to the avenue because it solves an awful lot of parking. It could provide for the completion of the last three buildings in a sort of neoclassical style, taking out the Coast Guard Building which is a terrible old brown brick building that should not have been there. So it does contribute to the whole thing. It is not as big a contribution as something on the north side would be. However, the FBI Building is underway and that is a whopper.

Mrs. HANSEN. Isn't that going to be a rather large structure?

Mr. WALTON. I am afraid you can read a lot of symbolism into it.

Mrs. HANSEN. It would have been better if it were located in another section of Washington, D.C., rather than just a short distance from the Capitol.

Mr. WALTON. It should have been put in another section of town. But the head of that agency wanted it right there.

Mrs. HANSEN. How many stories will the FBI Building have?

Mr. WALTON. On the back it will be about eight.

Mr. ATHERTON. It is about 150 or 160 feet high on E Street and eight stories on the front.

Mr. WALTON. It will look like a fortress.

Mr. WYATT. Is it true there is a nuclear reactor in the basement?

Mr. WALTON. It has been hidden from us if it is true. What would they want it for?

Mr. WYATT. I don't know. I had heard that there was going to be a small nuclear reactor there, for what purpose, I have no idea. Maybe this is just street talk.

Mr. WALTON. The construction is of a nature that would make it very possible, if you have looked at the foundation they are pouring there.

Mrs. HANSEN. May we suggest that you investigate the possibilities?

Mr. WALTON. Yes, we will be happy to try to find out. We won't guarantee to find out.

(Discussion off the record.)

Mrs. HANSEN. I think the committee would be very interested.

Mr. WALTON. We will find out.

DISTRICT HIGHWAY PROGRAM

I would think that the biggest factor in the District of Columbia now certainly is the highway program and how it develops. Incidentally, I am in favor of some highways. I am in favor of the Three Sisters Bridge which is considered unconventional by way of my liberal friends. But I think the problem is insuring that it is of good design and that it does not harm the city. I think it can be done. It is going to be an awful struggle because it has been put in the wrong perspective completely.

It is not antihousing or antipeople, it is people that use these highways.

Mrs. HANSEN. We discussed this problem last year. Do you expect this will be a contributing factor in eliminating the present condition of the Georgetown waterfront?

Mr. WALTON. It is a very crucial question. The design as it stands now does not really enhance the waterfront. It will take down some of those hideous buildings, the cement storage elevator, cement plant, and so on. But they insist on using the Whitehurst Freeway, which is elevated, and to do that they will have to build a parallel Whitehurst Freeway. In other words, making it look twice as bad as it is now because there will be an interchange there with two approaches crossing right beyond Wisconsin Avenue on the waterfront, blotting out the river forever. That is the way the design stands now.

Mrs. HANSEN. I was in Seattle last week and I had a good opportunity to look at its freeway system. As you drive along the freeway you see nothing but concrete and pillars. It is very much like the Whitehurst Freeway concept. Seattle is probably one of the most unique and charming cities in the country. But when you look toward the water, you see nothing but pillars, or another cloverleaf.

Mr. WALTON. The courageous thing to do now on the Georgetown waterfront would be to junk the Whitehurst Freeway, admit it was badly designed. It is really very short. It is a short thing we are eliminating. Put it all on the street grade, deck it over and you have a great esplanade up and down the whole waterfront. Some day this will happen, but if they carry out their current plans it will postpone it another decade because they will have sunk X millions more into trying to pretend that the Whitehurst Freeway was right when it was wrong.

Mr. WYATT. It will happen a billion dollars later.

Mr. WALTON. I think that is right.

HIGHWAY DESIGN

Mrs. HANSEN. Mr. Walton, there is nothing the U.S. Government needs to do more than to establish some criteria for highway design.

Mr. WALTON. I agree with you.

Mrs. HANSEN. All over the United States we have miles of concrete. There has been no criteria established that will prevent the destruction of a city's environment.

Mr. WALTON. Won't you have an opportunity to do that next year? Doesn't the National Highway Act expire and you have to write a new one? That is the moment to write into it these criteria for highway design.

Mrs. HANSEN. I think it must be done.

Mr. WALTON. The Highway Act was written for great open spaces and it was all right then.

Mrs. HANSEN. It was written at a time when people were angry at inhibitions and prohibitions remaining from the war. The only consideration in the highway program years ago was the necessity of getting somewhere fast.

Mr. WALTON. I would like to put in a little good word for the District Highway Department. They have gotten to be quite sensitive to our demands on design. This underpass at the foot of the Capitol; we put big restrictions on them on the materials to use. They had to use granite that harmonized with the Capitol, no big cuts that were visible, and restrictions on lighting. They followed them

all. I think they were rather pleased that we were teaching them a few things about how they could make a highway acceptable to the community.

Mrs. HANSEN. I think it is something that has to be done country-wide because the pressure for transportation facilities will increase. If you do not develop guidelines you will have nothing but chaos and cement.

SOUTH LEG, INNER LOOP HIGHWAY

Mr. WALTON. I would hope that you would put your pressure on the decision that is going to be made very shortly about the routes in the District of Columbia. One of the crucial ones is how to get that south leg past the Lincoln Memorial—underground as much as possible. It is a very crucial one to the heart of the city.

We have been using all our minor strength, but we need a lot of help.

Mr. WYATT. Where does it go?

Mr. WALTON. We are talking about taking traffic that will have entered across the Three Sisters and Theodore Roosevelt Bridges, come down and split up near Watergate. Then the south leg has got to somehow either go around the Lincoln Memorial or under it to connect with the Southwest Freeway which would be at Maine Avenue. There is an entrance ready for the traffic. We would be willing to lose a little bit of the Tidal Basin, if necessary, that bay that has a bridge attached to it. There is one proposal that would go right through there and it would not harm the looks much.

But we want to protect the trees as well because the whole magic of that area is the size of the trees and their uniformity. If we ever let them go through there and cut, there will be a scar for two generations because the trees will be missing. We will all be to blame. That is what we are trying to prevent.

Mrs. HANSEN. What progress have you made?

Mr. WALTON. As you know, it is very complicated because of the legal attachment on the Three Sisters Bridge. The judge ordered the District to have new public hearings. He has ruled that they did not follow the legal system correctly in public hearings. By opening this up again legally I do not know where we are going to stand now.

Mr. REIFEL. Mr. Walton, it seems very unfortunate that you do not have some kind of leisurely walk all along the channel and all along the Potomac clear up to Georgetown.

Mr. WALTON. Yes, connecting up.

Mr. REIFEL. Every one around in these days of the auto, as someone said, is living in the age of, "the quick and the dead." If you are not quick, you are dead.

You just have to run from one place to another.

Mr. WALTON. That is right.

Mr. REIFEL. As I drive down that place where Mrs. Johnson had fixed up with the trees, a little boulevard, what a relief it would be if you could close that block off and there would be no traffic there so people could go in there and sit down without dodging traffic. It would be the only place in the city of Washington where you would not have to be dodging traffic.

Mr. WALTON. I think the key to the Georgetown waterfront is not for the benefit of the residents of Georgetown. It is really the big link from Hains Point to the canal. You could connect that with a walk and esplanade.

Mr. REIFEL. I was fortunate enough to get in to Harbor Square where the city has fixed up that walk along the channel front. When the weather is nice, it is so comforting to look out the window and see the people strolling around and not dodging traffic. They come there from blocks around. This morning as I was eating breakfast, here was this fellow with his dog. He reached into his pocket and put on his glasses and was looking into the water. He seemed to be enjoying life. He didn't have to wonder if somebody would run over him with a motorcycle or car. I thought so many times if the area Mrs. Johnson had set up downtown could be shut off, I suppose the business people would be unhappy, still the customers would not have to walk more than half a block.

Mrs. HANSEN. Mr. Marsh.

Mr. MARSH. No questions.

Mrs. HANSEN. It has been a pleasure, Mr. Walton. We always look forward to the Commission on Fine Arts hearing. I only wish that you could extend the sort of thing you are doing in Washington countrywide.

Mr. WALTON. The trend is in that direction.

Thank you very much.

WEDNESDAY, APRIL 8, 1970.

NATIONAL COUNCIL ON INDIAN OPPORTUNITY

WITNESSES

ROBERT ROBERTSON, EXECUTIVE DIRECTOR, NATIONAL COUNCIL ON INDIAN OPPORTUNITY

CARL M. GUIDICE, CHIEF, DIVISION OF FISCAL SERVICES, OFFICE OF MANAGEMENT OPERATIONS

Mrs. HANSEN. Next we have the National Council on Indian Opportunity. We are very happy to welcome the Council here because the committee has been very interested in Indian opportunity programs. The principal witness is Robert Robertson, the Executive Director.

Please insert your general statement in the record and summarize it for us.

Mr. ROBERTSON. Yes, ma'am.

JUSTIFICATION MATERIAL

Mrs. HANSEN. Will you also insert your biography and pages 1 through 4 of the justifications in the record?

Mr. ROBERTSON. Yes. I don't have the biography with me, but I will insert it in the record.

(The information follows:)

Robert Robertson (NMI), came to Washington, D.C., in April 1969 as consultant to the Vice President of the United States and the Secretary of the Interior for the National Council on Indian Opportunity. I was made Executive Director of the Council on April 6, 1970.

I was, until April 1969, executive administrator to the Governor of the State of Nevada, Paul Laxalt. Prior to joining with the then Lieutenant Governor Laxalt, I was director of the Nevada Citizens Committee for a year while on leave of absence from the Home Builders Association of Northern Nevada with whom I served for 9 years. During this period I was active in many community projects in Reno and for the State of Nevada. I have also had experience in the field of broadcasting in Nevada and Ohio.

While attending the school of foreign service at Georgetown University, Washington, D.C., and John Carroll University, Cleveland, Ohio, I was employed by the Federal Bureau of Investigation.

I am a 7-year U.S. Marine Corps veteran.

I am one of three sons of John and Jessie Robertson of Barberton, Ohio, and was born March 5, 1929, in Bayonne, N.J. My brother Ronald, Ph. D., is director of the hearing clinic at the University of Arizona at Tucson, and my brother John, M.S. Ed., is with the Washoe County school system, Reno, Nev.

I am married to the former Nona Kay Ott and we have six children. We now reside in McLean, Va.

NATIONAL COUNCIL ON INDIAN OPPORTUNITY
OFFICE OF THE VICE PRESIDENT
WASHINGTON 20506

STATEMENT OF ROBERT ROBERTSON, EXECUTIVE DIRECTOR, IN SUPPORT OF APPROPRIATIONS FOR THE NATIONAL COUNCIL ON INDIAN OPPORTUNITY FOR FISCAL YEAR 1971

It is a genuine pleasure to appear before this Subcommittee today to support the Fiscal Year 1971 budget request of the National Council on Indian Opportunity, hereinafter called the Council.

ORIGIN OF THE COUNCIL

The Council was established on March 6, 1968 through the issuance of Executive Order No. 11399. It was authorized by the Congress in late November of 1969 and was given its first appropriation in late December of 1969.

The Council membership consists of the Vice President, who is chairman; the Secretary of the Interior; the Secretary of Agriculture; the Secretary of Commerce; the Secretary of Labor; the Secretary of Health, Education and Welfare; the Secretary of the Department of Housing and Urban Development; the Director of the Office of Economic Opportunity; and six Indian leaders appointed for two-year terms by the President of the United States.

PROBLEM LEADING TO THE CREATION OF THE COUNCIL

The Department of the Interior through the Bureau of Indian Affairs administers the principle Federal programs on Indian reservations, but other Federal agencies (HEW, OEO, Labor and others) have, in recent years, become increasingly involved in operating programs for Indian people on trust land reservations. Also, it is now estimated that over half of all American Indians now live beyond the boundries of reservations, one-third of them in urban areas. This broadened participation of Federal agencies on the reservations, while offering expanding opportunities for our Indian citizens, coupled with the pressing needs of urban and rural Indians also increases the need for cooperation and coordination between Federal agencies, and with state and local governments. The Council is the instrument which must be alert to opportunities to maximize the effectiveness of programs, to minimize duplication and overlap, and to reduce delays in decisionmaking and program implementation.

OPPORTUNITY FOR COORDINATION AND COMMUNICATION

The Council provides the chance for Federal Cabinet officers to work directly with Indian leaders in:

-carrying out the policies of the President

-carrying out new policies developed in consultation with Indians

-encouraging full use of all Federal programs by Indian people

-appraising the impact and progress of Federal programs for Indians

-Suggesting ways to improve such programs

The Vice President has said that it is absolutely essential that each Cabinet member assures that his department has the necessary mechanism and procedures which will provide the full and complete consultation with Indian people called for by the President. This should be done in cooperation with the Council.

Maximal involvement of Indian people in the governmental processes affecting them is the primary responsibility of the Council. Late last year Mr. Leonard Garment, Special Consultant to the President, wrote to an Indian spokesman underscoring this need, "Officials must begin by listening to Indian voices speaking on their own terms ... the process of listening must be begun at the local level ... the Indian voices heard must embrace ... elected tribal officials, grass roots spokesmen, Indian organizations of all perspectives, urban Indians, Indian youth and those many other voices not yet heard ... the process must be as open as possible." The Council provides all Indian people with this opportunity.

Full meetings of the Council,such as the one held at the White House on January 26, 1970, offer the chance to focus on the problems of interest to Indian people and to take inventory of our accomplishments and failures and to plan, as the Vice President observed, for a better day for the American Indian. The Indian member's statement of recommendations presented at the January 26 meeting is now being responded to in detail by the Federal members of the Council at the request of the Vice President.

COUNCIL'S WORK PROGRAM

In carrying out its responsibilities in the stimulation, coordination and evaluation of programs for Indians by way of this appropriation the Council will have to draw heavily on outside consultants rather than create a large and permanent staff of its own. This is desirable as a means of drawing together for a specific assignment the expertise needed, but, of more importance, it provides a means of employing Indian people in the analysis of programs affecting them. A permanent professional staff of five persons headed by an executive director will aid members of the Council and subcommittees. The professional staff is assisted by two secretarial or clerical employees.

A basic strategy of the Council will be to hold public hearings and sponsor public forums throughout the nation in an effort to both generate new insights which will have applications for governmental policy and publicize neglected areas in Indian affairs. In Fiscal Year 1969 a series of hearings were conducted on off-reservation problems and a comparable effort will be directed toward developing resources in reservation communities.

One of the serious inhibitors of reservation development is the lack of motivation on the part of the Indians themselves. They feel that the intrusion of new industry may conflict with the traditional values and mores of the community. The Council proposes to conduct well publicized meetings in areas which have enjoyed conspicuous success in the attraction of outside industry and in areas which are not economically viable at the present time because of the absence of non-agricultural resources. These hearings should perform the dual functions of publicizing the successful experiences American industry has enjoyed in Indian country and inviting additional industrial development. In this entire program , the Council staff will solicit the cooperation of the Economic Development Administration , the Small Business Administration and other relevant governmental agencies.

The Council will establish ad hoc committees as needed to encourage coordination among Federal agencies involved in the administration of programs. For example, the Council was responsible for the signing of a three-department plan designed to meet reservation housing needs. If this first-of-a-kind agreement functions as desired , the sad condition of Indian reservation housing should be corrected within five years. The agencies involved in this coordinated effort and their parts in it are: the Department of Housing and Urban Development, loan programs; Indian Health Division of the Public Health Service, sewer and water; the Bureau of Indian Affairs, construction supervision. In spite of this effort, there exists no machinery to effect coordinated planning. One of the thrusts of the Council will be the creation of a joint planning committee and, of greater significance, the re-establishment of a subcommittee headed by an Indian member of the Council to investigate the entire Federal housing effort as to the appropriateness of standards and procedures utilized in Indian projects.

Another major thrust of the Council will be the stimulation of local initiative on the part of Indians in program planning. Although most agencies intend to involve the people themselves in planning, this is not often accomplished through national categorical programs. A special committee of the Council will visit Indian communities to determine the extent of true local involvement with the Federal programs being carried out and, subsequently, discuss its findings with the administrators of the programs investigated. This, on a continuing basis, can offer to Indian people a recourse and review where programs administered from outside the community appear to be insensitive to local needs.

EXAMPLES OF RECENT AND CURRENT ACTIVITIES

The last of five public Council hearings on urban Indian problems was held in 1969. These hearings were conducted in Dallas, Texas; Minneapolis, Minnesota; San Francisco, California; Los Angeles, California; and Phoenix, Arizona. The transcripts of the hearings are being printed and will be distributed. The testimony has been analyzed and was utilized by the Indian members of the Council in the drawing up of their recommendations for the full Council at the January 26, 1970 meeting.

The Council contracted last year with a leading national consulting firm to conduct studies on two western reservations in order to determine what community actions took place in their acquisition of Federal programs and the establishment of priorities which led to this acquisition. The results will be published in manual form and will be sent to the leadership of all reservations to enable them to acquire Federal programs for their people. The final draft of the report is in hand and is being analyzed. The report will go to the printers shortly.

The first Federal-state-Indian affairs conference ever held took place at Lake Tahoe, Nevada, August 19-21, 1969 under the sponsorship of the Council. This meeting drew together the representatives of thirty governors and those Federal officials involved in Indian programs. The results of this conference, aimed at better Federal-state relations in Indian affairs, have been published and distributed. Additional efforts in this important area are planned for the near future.

A full Council meeting was called by the Vice President in the Roosevelt Room at the White House on January 26, 1970 at which time the Indian members presented a statement of recommendations which are being answered in detail by the Federal members.

A two-day meeting of Federal policy and program people was held March 5-6, 1970 to assess how all departments can best carry out the national purpose in Indian affairs and how all departments can render maximum support to Indian people in the areas of reservation resource development, urban Indian problems , and Federal-state-Indian relations. Extensive discussion was held with regard to assisting the Council in carrying out its coordinative and evaluative charges.

An all-Indian "outreach" task force has been formed to gather the feelings of reservation Indian people on a broad range of subjects. This task force will visit nearly fifty tribes in eight regions of the country. Their collective report is expected to be completed about the middle of April, 1970.

The Council holds frequent meetings in Washington among member agencies to discuss programs and coordinate efforts. A regular monthly meeting of staff who work mainly with Indian programs is held and higher level meetings are especially called as needed.

The Council reviews the budget projections for the member departments and provides opportunity to coordinate projects proposed for interdepartmental funding. Further, the Council serves as a clearing-house for proposals from Indian groups to several agencies. The Council also works to bring Indian matters to the attention of private organizations, colleges and universities, and local governing bodies.

In closing, I would like to again thank you for the privilege of appearing before you to speak in support of appropriations for Fiscal Year 1971 for the National Council on Indian Opportunity.

NATIONAL COUNCIL ON INDIAN OPPORTUNITY

Salaries and Expenses

Appropriation, 1969	$100,000	
Reimbursements from Federal funds	88,000	
Total available, FY 1969		$188,000
Appropriation/Total available, 1970		286,000

Summary of Increases and Decreases, 1971

	Base for 1971	Increase 1971	
Administrative expenses:			
Full funding of current authorized staff	$ 286,000	$ 14,000	+ 14,000
Budget estimate, 1971			300,000

Analysis by Activities

Activity	F.Y. 1969 Amount Available	F.Y. 1970 Amount Available	F.Y. 1971 Estimate	Increase (+) or Decrease (-) 1971 Compared with 1970
Administration	$ 175,946	$ 286,000	$ 300,000	+ $ 14,000
Reimbursements from Federal funds	- 84,903	---	---	---
Unobligated balance lapsing	8,957	---	---	---
Total	100,000	286,000	300,000	+ 14,000

JUSTIFICATION

Administration: Fiscal year 1970, $286,000; fiscal year 1971, $300,000; increase, $14,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
+$14,000	---	$ 300,000	7	To provide full funding of current authorized staff.

The National Council on Indian Opportunity was created through the issuance of Executive Order No. 11399 on March 8, 1968. The Council membership consists of the Vice President, who is chairman; the Secretary of the Interior; the Secretary of Agriculture; the Secretary of Commerce; the Secretary of Labor; the Secretary of Health, Education and Welfare; the Secretary of Housing and Urban Development; the Director of the Office of Economic Opportunity; and six Indian leaders appointed for two year terms by the President of the United States.

In the Executive Order, the President directed that the Council shall:

(a) Encourage full use of Federal programs to benefit the Indian population, adapting them where necessary to be available to Indians on reservations in a meaningful way.

(b) Encourage interagency cooperation and coordination in carrying out Federal programs as they relate to Indians.

(c) Appraise the impact and progress of Federal programs for the Indians.

(d) Suggest ways to improve such programs.

An appropriation of $300,000 for fiscal year 1971 is requested to provide the Council with the operating funds necessary to carry out its responsibilities.

In carrying out its responsibilities in the stimulation, coordination, and evaluation of programs for Indians, the Council will have to draw heavily upon outside consultants rather than create a large and permanent staff of its own. This is desirable as a means of drawing together for a specific assignment the expertise needed, but, of more importance, it provides a means for Indian people to analyse programs concerning them. This is accomplished through the establishment of six advisory sub-committees, each composed of four Indian leaders. In addition, the Council and its special advisory sub-committees will draw from the general public and the academic communities of the Nation the expertise needed to conduct evaluation of programs, plan and conduct special projects, develop program recommendations, and the like. A permanent professional staff of seven persons headed by an executive director will aid members of the Council and sub-committees.

A basic strategy of the Council will be to hold public hearings and sponsor public forums throughout the Nation in an effort to generate new insights which will have applications for governmental policy and to publicize neglected areas in Indian affairs.

One of the serious inhibitors of reservation development is the lack of motivation on the part of the Indians themselves. They feel that the intrusion of new industry may conflict with the traditional values and mores of the community. The Council proposes to conduct well publicized meetings in areas which have enjoyed conspicuous success in the attraction of outside industry and in areas which are not economically viable at the present time because of the absence of non-agricultural resources. These hearings should perform the dual functions of publicizing the successful experiences American industry has enjoyed in Indian country and inviting additional industrial development. In this entire program, the Council staff will solicit the cooperation of the Economic Development Administration, the Small Business Administration and other relevant governmental agencies.

The Council will establish ad hoc committees as needed to encourage coordination among the Federal agencies involved in the administration of programs. For example, in April of last year the Council was responsible for the signing of a three-department plan designed to meet reservation housing needs. If this first-of-a-kind agreement functions as desired, the sad condition of Indian reservation housing should be corrected within five years. The agencies involved in this coordinated effort and their parts in it are: the Department of Housing and Urban Development, loan programs; Indian Health Division of the Public Health Service, sewer and water; the Bureau of Indian Affairs, construction supervision. In spite of this effort, there exists no machinery to effect coordinated planning. One of the thrusts of the Council will be the creation of a joint planning committee and, of greater significance, the re-establishment of a sub-committee

headed by an Indian member of the Council to investigate the entire Federal housing effort as to the appropriateness of standards and procedures utilized in Indian projects.

Another major thrust of the Council will be the stimulation of local initiative on the part of Indians in program planning. Although most agencies intend to involve the people themselves in planning, this is not often accomplished through national categorical programs. A special committee of the Council will visit Indian communities to determine the extent to true local involvement with the federal programs being carried out and, subsequently, discuss its findings with the administrators of the programs investigated. This, on a continuing basis, can offer to Indian people a recourse and review where programs administered from outside the community appear to be insensitive to local needs.

The Council reviews the budget projections for the member departments and provides opportunity to coordinate projects proposed for interdepartmental funding. Further, the Council serves as a clearing-house for proposals sent from Indian groups to several agencies. The Council also works to bring Indian matters to the attention of private organizations, colleges and universities, and local governing bodies.

Personnel Summary

	1969 Actual	1970 Estimate	1971 Estimate
Total number of permanent positions	1	7	7
Full-time equivalent of other positions	1	5	5
Average number of all employees	1	8	12
Average GS grade	18.0	12.4	12.4
Average GS salary	$30,239	$18,102	$18,443

Appropriation Title: Salaries and Expenses — National Council on Indian Opportunity

	Actual 1969	Estimate 1970	Estimate 1970	Increase (+) or Decrease (-)
Programs and Financing:				
Total obligations....	$175,946	$286,000	$300,000	+$14,000
Reimbursement from Federal funds.....	-84,903	---	---	---
Unobligated balance lapse	8,957	---	---	---
Budget authority (appropriation)	100,000	286,000	300,000	+ 14,000
Object classification:				
11. Personnel compensation....	23,460	166,000	197,000	+ 31,000
12. Personnel benefits.....	1,222	9,000	9,000	---
21. Travel and transportation of persons	25,767	52,000	50,000	- 2,000
22. Transportation of things.....	137	6,000	3,000	- 3,000
23. Rent, communication, and utilities.....	11,278	18,000	14,000	- 4,000
24. Printing and reproduction..	1,167	7,000	5,000	- 2,000
25. Other services..	109,561	16,000	12,000	- 4,000
26. Supplies and materials.....	1,970	9,000	5,000	- 4,000
31. Equipment.....	1,384	3,000	5,000	+ 2,000
Total obligations	175,946	286,000	300,000	+ 14,000

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Mr. ROBERTSON. It is a genuine pleasure to appear before this committee, Madam Chairman and members, this morning, to support the fiscal year 1971 budget request of the National Council on Indian Opportunity which, with your permission, we will refer to hereinafter as the "Council."

Mrs. HANSEN. Also insert in the record a list of the Council members.

COUNCIL MEMBERS

Mr. ROBERTSON. Yes, ma'am. The Council consists of the Vice President as Chairman, seven Cabinet officers from the departments having substantial Federal Indian programs, and six Indian members. These six Indian members are nearing the end of their 2-year appointment period.

(Discussion off the record.)

CREATION OF COUNCIL

Mr. ROBERTSON. The Council was created in March of 1968 by President Johnson. It received its authorization from the Congress in late November of last year. The first formal appropriation to the Council following the authorization was received about the first day of the new year, 1970. The Council is the first national forum in our history allowing Indian people a direct role in advising the President of the United States on the policies and programs of interest to Indian people.

ACTIVITIES OF COUNCIL

The Council by way of the Executive order has been given some basic charges to coordinate all Federal programs of interest to Indian people, to evaluate those programs and policies, to innovate in the area of programs and policies, and to act almost daily in the role of ombudsman in assisting Indian people in their dealings with the Federal Government. In our statement we have outlined the Council's work program, which in essence is designed in all of its aspects for maximum involment of the Indian people in the policy and program formulation process. Working through numbers of committees assigned in critical activity areas, this is and will be accomplished. On page 3 of the submission we have given to you, we have listed examples of recent and current activities of the Council in dealing with the areas of urban Indian problems, reservation outreach, and other off-reservation Indian people—State reservations and rural Indian people living on the parameters of Indian reservations but not coming under the aegis of the BIA.

As we have indicated these are the current accomplishments, the current ongoing activities, and the activities which will be generated in the months ahead.

COUNCIL STAFF

Mrs. HANSEN. You have seven permanent positions.

Mr. ROBERTSON. Yes, ma'am.

Mrs. HANSEN. This is the same number you have in 1970.

Mr. ROBERTSON. That is correct.

Mrs. HANSEN. What are those seven positions?

Mr. ROBERTSON. By positions they are the Executive Director; three professional positions—one administrative assistant and two secretarial-clerk positions.

Mrs. HANSEN. How much have you accomplished? When the Council was created the members of this committee felt that this was a great opportunity for the Indian people to express their goals and aspirations. Yet your Indian opportunity program has had little impact upon the Bureau of the Budget. I refer to the action taken by the Bureau of the Budget in placing funds for the Navajo irrigation project in reserve. This is just one example.

It seemed to members of this committee that one of the basic ingredients of a viable economy for the Navajos is to improve the quality of their land. Yet the funds were placed in reserve. You cannot accomplish very much without coordinating within Government, through your Council, the goals that have been set by the Indian people themselves. This is one of their priority items. Yet the Bureau of the Budget placed the funds in reserve. It was the feeling of the committee that he would rather spend funds for Indian irrigation projects than for increasing welfare payments.

The Indian people themselves are very proud and wanted to have this basic economy developed. But if the Bureau of the Budget, continues to curtail necessary funds the only thing you can do is to make promises and the Indians have had enough promises.

The BIA is making a great effort to train Indians for urban employment. But if jobs are not existent when the Indian relocates, he will again find himself penniless and without hope. The Council of Indian Opportunity should be a symbol of Indian opportunity and hope.

You say on page 2 of your justifications: "One of the serious inhibitors of reservation development is the lack of motivation on the part of the Indians themselves. They feel the intrusion of new industry may conflict with the traditional values and mores of the community." I think the Indians are far wiser than we realize, because many industries have gone in to spoil an area. How many industries have been developed without any planning? I can remember an industry development in my hometown locating on the prettiest piece of landscape in that area.

Nobody said then, "Don't go down there on the riverfront and spoil it." The sawmill stayed in business 2 years and left the remains. I do not blame the Indians for not wanting their lands cluttered. You have seen the problems the Quinaults have had with tourism. They have probably one of the most beautiful stretches of beach in the United States and they are working very hard in the tribe to develop some techniques and information which will allow them to develop a tourist business without damaging their lands. Yet a group of speculators is buying Indian land and is slowly encroaching on the land that faces the ocean. Other speculators are destroying not only the beauty of the land but are also depositing freshly cut trees on the Indian beaches.

I made a personal trip to that area and took some pictures to show the Secretary of Interior what needed to be done and what could be done. Nothing was done. The Quinaults wrote letters to the White House but nothing was done. It seems to me you have a tremendous

challenge to coordinate Indian opportunities with other departments. What, for instance, is the Defense Department doing when they use Indian lands to make sure that their operations can contribute to the Indian economy?

What are you doing in Alaska to see that the land claims are settled as expeditiously as possible because part of the development of Alaska is contingent on the Indians knowing exactly what their basic economy is going to be. The Indians are entitled to their share of oil and their share of the resources. These are the things that I hope you consider.

LUMMI AQUACULTURE PROJECT

Mr. ROBERTSON. To comment on a couple of things, just last week life became a lot more pleasant. I made a trip to the Lummi Reservation in your own State and what is going on up there heartens anybody to the potential that does exist.

The Lummi people are involved in this. This is one of the most wonderful, innovative, forward-looking, potentially lucrative Indian projects I have ever seen. I think it is very exciting and it can be a model, for instance, for Alaska natives who live in basically the same type of terrain near the ocean. The work they are doing with oysters is a historic innovation.

Mrs. HANSEN. That is great.

The Quinaults started a hatchery which has been built, but the Bureau of the Budget placed funds to operate that hatchery in reserve.

Mr. ROBERTSON. We are fully aware of the need, and work is going on right now. The Vice President has asked the Bureau of the Budget to effect cost-benefit ratio studies on Indian projects.

COORDINATIVE ACTIVITIES

In the area of coordination we do have quite a bit of activity going on, and some exciting things are happening here. Just to mention a few, Dale Wing joined the council from the Office of Minority Business Enterprise at the Department of Commerce. He has been one of the prime movers in the Navajo tourist project.

This involves commerce, as the lead department, and two other agencies. I think the final meeting that will lead to implementation of the program will occur very shortly.

We have in the process of assemblage right now a Michigan task force to be activated in the first week of May. There are a number of small reservations in the upper reaches of Michigan who are without Federal services whatsoever. They need help. We are putting together a task force similar to the one we put together for the State of Maine.

We are working very hard at utilizing to the highest possible degree for the benefit of Indian people the 10 regional councils which have been set up around the country. This, I feel, is a very positive mechanism which will lead to better coordination. We are involved now in a broad overview of the entire Indian policy and program area. To mention a few specific items, we are looking at education, economic development, and the whole matter of self-determination.

Mrs. HANSEN. The education program conducted by the BIA is excellent. I think I can say with some pride that their boarding schools

are without serious drug problem. But they need more buildings and more counselors in their boarding schools. They also need better roads but a great deal of those funds were placed in reserve by the Bureau of the Budget.

Mr. ROBERTSON. We are aware of this and vitally concerned about it.

Mrs. HANSEN. When Mr. Reifel and I visited a dormitory last year we saw some of the most enthusiastic students I had ever seen. These were great young people. But 160 youngsters were living in a dormitory with only one night counselor.

Mr. ROBERTSON. I realize that. The Stewart Indian School is just a few miles from my home in Carson City, Nev. I am familiar with the situation there. We visited the people in the bottom of the Grand Canyon, the Hava Supai, and observed a rather sad situation. Their children have to leave the family after the second grade. So we are working very hard to get at least a school situation whereby they can stay at home through hopefully the sixth year before they have to go to the boarding school.

Mrs. HANSEN. There were several roads that needed to be constructed throughout the Indian country this year, but the funds for these projects were placed in reserve.

The Indians in many areas of the State of Arizona only receive $39 a month for living expenses. You cannot live on this amount. This is a disgrace. Yet the basic economy of these areas could be developed if enough funds were allowed. Many of the Indian reservations are on some of the most beautiful lands in the United States. But they need more and better housing, more water programs, and sewage disposal systems.

The Quinaults have a program where the young work throughout the year for spending money, and they have done more to upgrade their villages and towns than any group I have seen. Maybe we need a National Youth Corps.

The challenge is endless. But funds must be provided. You can develop many programs but if the BOB does not place the necessary funds in reserve nothing will be accomplished.

Mr. ROBERTSON. You are quite right.

Mrs. HANSEN. I invite the Bureau of the Budget to accompany Mr. Reifel and me to the Indian reservations of this Nation and to some of the villages in Alaska to see the needs.

Mr. ROBERTSON. Money is an important factor.

Mrs. HANSEN. It is one of the most important factors in providing the basic ingredients for education, health, housing, roads, and sewage disposal.

PROJECT OUTREACH

Mr. ROBERTSON. You mentioned you would like to hear about some council projects. At the end of this month we will be holding the debriefing on what we call Project Outreach. We have hired as consultants to the council 10 Indians to reach out to over 50 reservations in the country, to bring us back some data on the level of involvement of tribes in taking over federally administered programs, and just how many are desirous of doing this, but because of the bureaucratic structure, cannot. We want to find out why not.

Mrs. HANSEN. I think you will find the tribes are very interested.

But don't blame bureaucracy because Commissioner Bruce as well as former Commissioner Bennett have a great desire to have greater involvement of the Indian people in the BIA programs.

Mr. ROBERTSON. I did not mean it that way. There are impediments that are evident in the structuring.

Mrs. HANSEN. This is something that can be cured by somebody who will take the initiative to develop adequate programs. The system is not all wrong. You must bear in mind that your younger Indians want an education. One of the basic ingredients of that is more scholarships and schools.

You also have to consider the older Indians who have not had the education and opportunities and you cannot let them starve. I have found that the tribes in my State are very eager to participate in the BIA programs.

Mr. REIFEL. Madam Chairman, I think it would be well to have Mr. Robertson put in the record the seven or eight regional agents of outreach and the background. Supply that for the record. I want to see who they are and what they are doing.

The list of consultants include:

1. John Baker, Ignacio, Colo.
2. Herschel Sahmaunt, Elgin, Okla.
3. William Cuny, Pine Ridge, S. Dak.
4. George Harris, Missoula, Mont.
5. Leo LaClaire, Auburn, Wash.
6. William Hallett, Silver Spring, Md.
7. David Lester, Los Angeles, Calif.
8. Myron Jones, Albuquerque, N. Mex.
9. Ernie Stevens, Sacramento, Calif.
10. Tandy Wilbur Jr., Washington, D.C.
11. John Relindo, Springfield, Va.

Background experience for each consultant is attached.

JOHN BAKER, FULL BLOOD SOUTHERN UTE INDIAN, 3 2/3 YEARS COLLEGE

Presently Chaiman Southern Ute Public Housing Authority, Member Southern Ute Community Action Program Board, Member Advisory Board Council, Navajo Community College, Chairman Southern Ute Overall Economic Development Program, and Member of Tribal Council, Editor, Southern Ute Drum, newsman for weekly Southern Ute news broadcast; 1957–63 and 1965–66, Chairman, Southern Ute Tribal Council; College student under Tribal and BIA funding, 1963–65 and 1966–67; 1952, Chairman of First Planning Commission for Comprehensive long-range plan for Southern Ute Tribe; Indian leader in Indian Tribal Government; Panel member on the Panel on Tribal Government, First Convocation of Indian Scholars and Students, Princeton University, 1970; Expert Witness on behalf of the Southern Ute Tribe at Congessional Hearings.

HERSCHEL SAHMAUNT, FULL BLOOD KIOWA; MASTERS DEGREE, GUIDANCE AND COUNSELING

Presently Human Relations Coordinator, Oklahoma State Department of Public Welfare; 1969, Senate Sub-committee on Indian Education, Minority Counsel; 1968, Oklahoma State Rehabilitation Counselor; Commanche County Community Action Program Director; 1965–68, Oklahoma Vocation Rehabilitation Counselor; 1964–65, teacher Oklahoma Public School; 1959–60, teacher Colorado Public School; 1958–59, BIA Teacher Advisor, Colorado; 1956–58, teacher coach, Oklahoma Public School; 1954–56, United States Army. At present is President, Human Relations Council, Oklahoma, SOLID; also Title III Advisory Committee, BIA; advisory Committee to Governor of Oklahoma. Athletic awards in college; Consultant to Indian Division, continuing education, Oklahoma University; Kiowa Tribal Business Committee, 1½ years.

WILLIAM CUNY, PINE RIDGE SIOUX; COLLEGE 3 YEARS PLUS

Presently Associate Director, Pine Ridge Community Action Program, South Dakota; prior experience includes 1968–69, Head Start teacher, Pine Ridge Community Action Program; 1965–67, University of South Dakota, Indian Community Action Program field representative; 1948–65, teacher public schools in South Dakota and California. Affiliations include President, South Dakota Education Assciation; past member California Education Association; past member of South Dakota Education Association; past president of local Knights of Columbus; president of local development company.

GEORGE HARRIS, SHOSHONE INDIAN; BS COLLEGE DEGREE

Presently graduate student MBA program, University of Montana; advisor counselor to Indian Study Program, University of Montana; 1968–69, executive director, Montana ICAP; 1966–68; University Utah ICAP, TA field specialist for North West; 1965–1966, Shoshone Tribal Liason on Education; 1964–1965, self-employed construction worker; 1959–64, undergraduate student, University of Wyoming; recognitions include 3½ years football scholarship, University of Wyoming; Shoshone Tribal Scholarship; past Indian OEO Advisory Board, State of Washington; advisor to Indian Study Program, University of Washington; Indian Advisory Board to University of Utah; advisor to University of Wyoming Indian Education; associate member and advisor to KYI–YO Indian Club, University of Montana; Mr. Harris' father has been chairman of the Wind River Tribal Council for 31 years, Wyoming.

LEO LA CLAIRE, MUCKLESHOOT INDIAN; BA DEGREE, CENTRAL WASHINGTON COLLEGE

Presently a second year law student at University of Washington Law School; 1968–1969, UCLA Law School; Lee Kramer consultant at UCLA on Indians; 1967–1968, University Utah ICAP field representative; 1966–1967, University of Utah Vista Staff; 1965–1966, American Friends Service Committee, Seattle, Indian Education field representative; 1964, Eleanor Roosevelt Foundation Intern, Community development, 1964, BA, Central Washington College; member Muckleshoot Tribal Council, Economic Development Committee; Law and Order Committee, Fishing Committee, and Housing Committee; 1961 Muckleshoot Tribal representative Chicago, American Indian Conference; Indian Affairs Workshop, University of Colorado; Washington Indian Inter-Tribal Council representative; American Indian Rights Committee, NIYC; education advisor to Tulalip Tribal Council; recipient scholarship from United Missionary Committee of Philadelphia; United Scholarship Service scholarship recipient and grant from Eleanor Roosevelt Foundation for Community Development; organizer and secretary-treasurer of the National Association of Inter-Group Relations, Washington State.

WILLIAM HALLETT, RED LAKE CHIPPEWA INDIAN; B.A. DEGREE IN BUSINESS ADMINISTRATION

Program director, Industrial Development, National Congress of American Indians, 1968 to present; 1967–68, director, Housing and Manpower, Red Lake Tribal CAP; 1965–67, personnel officer, Chicago Police Department; 1965, B.A. degree, Bemidji State College; NCAI member, officer BYU student organization, "Tribe of Many Feathers"; football college scholarship; Minnesota Indian education scholarship. Life on reservation.

DAVID LESTER, CREEK INDIAN; B.A., BYU

Presently executive director, Urban Indian Development Association, Los Angeles; 1969–70, project director, National Indian Development Project, NCAI; 1967–69, California Federal Savings, Los Angeles, savings section head; 1965–67, BYU; 1963–65, Peru-LDS church program; NCAI member, past chairman, NIYC Conference; public speaking for NCAI; BYU Indian education award; BYU representative to Model United Nations; member UIDA.

MYRON JONES, TUSCARORA INDIAN; BACHELOR OF ARTS DEGREE

Presently project director, NCAI Economic Development Project, Albuquerque. Past experience includes 1968–69, executive director, South Brooklyn

Community Anti-Poverty Corporation; 1967–68, director, NYC Training Institute; 1966–67, director, training Qualicap Community Progress Center, Long Island City, N.Y.; 1966, director, training Brownsville East N.Y. Community Progress Center; 1965–66, teacher, Friends Seminary, N.Y. City; 1959–65, teacher, Grace Church School, N.Y. City; 1957–59, manager, coffee house, N.Y. City. Member, All Indian Pueblo New Mexico Economic Development Commission.

ERNIE STEVENS, ONEIDA INDIAN; 2 YEARS COLLEGE

Presently executive director, Inter Tribal Council of California; prior experience includes, 1968–69, director, Economic Development, Indian Community Action Project, Arizona State University; 1967–68, director, Los Angeles Indian Community Action Project; 1965–67, consultant, Indian Program Planning, Los Angeles County CAP; 1966–68, human relations commissioner, Los Angeles; 1963–65 Los Angeles Indian Center board member; prior to this was assistant superintendent, Kueffel & Esser Co., Los Angeles. Also, past editor, 1964–68, editor, Talking Leaf, Los Angeles paper, circulation 4,000; member, Arizona Indian Association, board member, Indian Consultants, Inc.; member, National Indian Motion Picture Advisory Committee, Department of Labor; consultant to Urban Indian Development Association, Los Angeles; special consultant, U.S. Indian Civil Rights Commission.

TANDY WILBUR, JR., SWINOMISH TRIBE; 3 YEARS COLLEGE; AA DEGREE PLUS ONE YEAR

Special Assistant to the Executive Director, National Council of American Indians, Washington, D.C. 1969 to present; 1968–69, Business Consultant to Makah Tribal Council; 1967–68, Field Representative Univ. of Utah ICAP, 1965–67, Swinomish Tribal Business Council employee; prior to 1965 self employed. Eighteen years in Swinomish Tribal Council; Chairman Fishing and Oyster Committee; Chairman Forestry Committee; Chairman Recreation Committee; 9 years Vice Chairman of Tribal Council; Member NCAI; Athletic Scholarship, Skagit Valley College; Father, Tandy Wilbur, Sr., is Business Manager of Swinomish Tribal Business Council, 24 years, and councilman.

JOHN BELINDO, KIOWA-NAVAJO INDIAN; BA DEGREE

Executive Director, National Congress of American Indians 1966–69; 1964–66, Columnist THE OKLAHOMA JOURNAL; Radio Announcer KOCY–AM, FM, KFNB, FM part time; 1962–1966 undergraduate student; 1957–1961, Oklahoma City Veterans Administration Hospital, Research Assistant; Navajo Tribal Scholarship, 1964–68; during college years, active in First Indian Baptist Church of Oklahoma City program. Indian Consultant for Indian programs; Ford Foundation and the National Council on Indian Opportunity.

INDIAN CONSULTANTS

Mr. ROBERTSON. John Belindo is coordinator of the project.

Mr. REIFEL. He will take care of the Bureaucracy, all right.

Mr. ROBERTSON. In California and Nevada, we have Ernie Stevens, the present director of the California Intertribal Council. John Baker, a southern Ute for the Colorado and Wyoming area; George Harris in Montana and Idaho; Bill Cooney for the Dakota area; Bill Hallett for Minnesota and Wisconsin. Myron Jones for New Mexico; David Lester for the Arizona area; Herschel Sahmaunt for the Oklahoma area; Leo LeClaire for the Washington-Oregon area; and Tandy Wilbur Jr., representing the National Congress of American Indians.

Mr. REIFEL. Will you submit their names and who they were associated with and what their background is for the record? Belindo was thrown out of the National Congress of American Indians recently.

Mr. RORERTSON. They had a change of leadership. It was our feeling that he has a tremendous amount of knowledge in this area that could be very useful.

Mr. REIFEL. I would also like to ask, if I might, you are listed as consultant to the Secretary of Interior. Does the National Council on Indian Opportunity have a director?

Mr. ROBERTSON. I am the director now. But this only occurred after paper processing was completed on Monday of this week.

Mr. REIFEL. Belindo was one of the most serious critics of the Bureau of Indian Affairs all along. Here the Indian Bureau is the major Federal agency that is dealing with Indian people. The Indian people repeatedly have made it known to us that they do not want the Indian Bureau done away with.

Mr. ROBERTSON. Neither do we.

Mr. REIFEL. You have one individual who does not give that indication.

Mr. ROBERTSON. He is assembling the input that is coming in and which will be submitted to the Indian members of the council on the 28th of this month to be evaluated by them.

Mr. REIFEL. We just had one round this morning, or at least I had, with the head of the Readers Digest on the Bicentennial Commission and an article in the Readers Digest, which is full of such inaccuracies that I refused to read the article. If you are collecting these kind of people, I wonder where you are heading?

Mr. ROBERTSON. I feel oftimes, Mr. Reifel, it does well to bring a person in contact with that of which he has been an adversary.

Mr. REIFEL. They have plenty of opportunities on the outside to do this.

(Discussion off the record.)

Mr. REIFEL. The reason we are concerned is we are spending a quarter of a million a year of the taxpayers' money for an agency that we think is doing well and could even be doing better if we could get money out of the Bureau of the Budget to improve the educational programs and the roads and the irrigation. We just don't need any more individuals going around depreciating this agency that has been responsible for the progress that the Indians have made.

(Discussion off the record.)

INDIAN INVOLVEMENT

Mrs. HANSEN. If I were President Nixon, I would review the Council on Indian Opportunity and change its structure to involve greater Indian participation. He should suggest that the Indian tribes elect their own leaders, because this would be gratifying to the Indians themselves, that they have a right to say who is going to represent them.

Mr. ROBERTSON. I agree that the Indian people should be maximally involved. In a number of meetings, at one of the Northwest Affiliated Tribes' meeting in Spokane, I was asked this question and we spent a half hour discussing this need, here is a Council with Indian representation on it. When I came back, I passed this information along with the suggestion that perhaps it might be considered that the number of Indian members on the Council be raised perhaps to eight.

Mrs. HANSEN. I think you should have a larger representation.

Mr. ROBERTSON. To allow for greater geographic representation. It is always difficult to cover all the major organizations, the geographic areas of the country, and the categories of people.

Mrs. HANSEN. If you are going to have a limited number of representatives, then it would seem to me that you would go to the Congress of Indian Organizations and have them elect the representatives. This would be one way to have further involvement of the Indian people. I disagreed with President Johnson on the structure of this Council.

Mr. ROBERTSON. We are certainly following and abiding by the principal dictums of the administration in terms of involvement and self-determination to the utmost degree. We are trying to find out how best to do this.

Mrs. HANSEN. I would like to recommend that you discuss with the President, the Secretary of the Interior, and Commissioner Bruce the possibility of having the Indian people select their own leaders. Then they will begin to feel the democratic process in effect among their own groups. With a new look you have a new challenge.

Mr. ROBERTSON. That is right.

Mr. REIFEL. Madam Chairman, I think they do face two problems. One is the nonreservation urban Indian for whom the Congress does not spend any money. At some point I imagine on this list you will find individuals who are not reservation Indians who are making decisions for reservations.

Mr. ROBERTSON. This has to be done carefully. The President stated there is no one single panacea or solution for all problems.

Mr. REIFEL. If you are going to go out on the Rosebud Reservation or where I grew up or the reservations of South Dakota, it seems to me the individuals who are residents of the Reservation and face the problems are going to be in a better position to advise you rather than having someone who has been living in Chicago who happens to have Indian blood and kicks up enough fuss to get your attention, and say he can adequately represent the Indian people.

Mrs. HANSEN. When you are considering reservation problems, you should have reservation Indian representation.

Mr. REIFEL. If you have areas like Chicago, Indianapolis, San Francisco, get representation from them, but don't mix the two. If Congress were appropriating money for all Indians, that is one thing. But Congress says it appropriates money only for Indians on the reservation. I think you need to make that distinction.

Mr. ROBERTSON. The President said we have to work with the Indian people on a community by community and a reservation by reservation basis. This is essentially what you are saying, that the people at Rosebud or wherever at the local level should be the people who are involved in the setting of their priorities and in utilizing Federal assistance that they want to the maximum to determine which way they want to go.

Mr. REIFEL. As Mrs. Hansen pointed out, they are the ones that should nominate two or three from their people from which you might select one, or given the opportunity to nominate or elect the one that will be the regional representative.

Mrs. HANSEN. I think the Indians themselves would prefer that representation.

I want to thank you, Mr. Robertson, and the members of your staff. We are interested in your program.

INDIAN CLAIMS COMMISSION

WITNESSES

JEROME K. KUYKENDALL, CHAIRMAN
MARGARET H. PIERCE, COMMISSIONER
HARRY E. WEBB, JR., CHIEF COUNSEL

Mrs. HANSEN. The committee will come to order. Next, we have the Indian Claims Commission. It is always a pleasure to welcome you, Mr. Kuykendall.

Mr. KUYKENDALL. Thank you.

Mrs. HANSEN. Mr. Kuykendall is from my own State. I knew his father, who was a very distinguished person.

By the way, Mr. Reifel, Mr. Kuykendall's father was tremendously well informed on the Indian lore of eastern Washington. He had lived there many years. When did he come to the State?

Mr. KUYKENDALL. He was born in 1870, and he went to Pomeroy, I think, where he lived most of the time when he was about 12. His father was a government physician at Fort Simcoe, which was an Indian reservation, and he lived there as a boy and played with the Indians and went to school with the Indian boys and girls.

Then, of course, he was in that country at quite an early date, so there still were Indians around.

JUSTIFICATION MATERIAL

Mrs. HANSEN. Mr. Kuykendall, please insert pages 1 through 3 of the justifications into the record.

(The pages follow:)

JUSTIFICATION OF 1971 BUDGET ESTIMATE

Requirements for FY 71. The Indian Claims Commission is requesting an appropriation of one million dollars, of which $911 thousand is for personnel costs and $89 thousand is for other purposes.

Establishment and Adjudicatory Duties of the Commission. The Indian Claims Commission is an independent quasi-judicial agency, created by the Indian Claims Commission Act of August 13, 1946, (60 Stat. 1049), codified as Section 70 of Title 25, United States Code. The Commission consists of five members appointed by the President by and with the advice and consent of the Senate. It is responsible for the hearing and adjudication of claims existing up to and including August 13, 1946, as defined under Section 2 of the Act. The Commission is due to terminate on April 10, 1972.

Status of Work. A total of 606 claims involving 1,011 substantive decisions have been filed by various Indian groups residing within the territorial United States. Through FY 1969, 304 dockets involving 549 substantive decisions were completed; and 302 dockets involving 462 decisions remained.

OBJECT CLASSIFICATION STATEMENT

11. Personnel Compensation. It is estimated that $849 thousand will be required for personnel compensation. The increase of $134 thousand is for the hiring of additional attorneys and support personnel, including personnel qualified to do investigative work.

12. Personnel Benefits. It is estimated that $62 thousand, an increase of $11 thousand, will be required under this object to cover the Government's contribution, in accordance with existing legislation, to employees' group life insurance, group health benefits, increased retirement, and FICA taxes.

21. Travel and Transportation of Persons. The Commission needs at least $45 thousand for travel, principally for the conduct of anticipated hearings in the field. The Investigation Division will be required to investigate some claims at their place of origin.

23. Rent, Communications, and Utilities. It is anticipated that $11 thousand will be required for these expenditures. This amount will cover hearing room rent (field hearings), telephone service including FTS, telegraph service and penalty mail.

24. Printing and Reproduction. It is estimated that $5 thousand will be required for this object to take care of printing expenses, including printing and reproduction of findings and orders, annual reports, and other issuances of the Commission.

25. Other Services. It is estimated that $20 thousand will be required for this object to cover such costs as court reporting services (locally and in the field); surety bond premiums; maintenance of office machines; and miscellaneous administrative services.

26. Supplies & Materials. It is anticipated that $5 thousand will be required to cover the cost of miscellaneous office supplies.

31. Equipment. It is estimated that $3 thousand will be needed for this purpose, much of which will be necessary for purchasing office furniture for the additional personnel programmed for FY 71.

SALARIES AND EXPENSES

Appropriation FY 1969	$ 619,000
Appropriation FY 1970	850,000
Budget Estimate FY 1971	1,000,000

REQUIREMENTS FOR FISCAL YEAR 1971

The estimate for funds allowed by the Bureau of the Budget to operate the Indian Claims Commission in fiscal year 1971 is $1,000,000.

INCREASES FISCAL YEAR 1971
(in thousands of dollars)

Personnel Compensation	+134
Personnel Benefits	+ 11
Travel	+ 5
Rent, Communications & Utilities	-
Printing & Reproduction	-
Other Services	-
Supplies & Materials	-
Equipment	-
	+150

PERSONNEL COMPENSATION
(dollar amounts in thousands)

		1969 Actual	1970 Estimate	1971 Estimate	Change in 1971 from 1970
1.	Number of permanent positions	29	36	41	+5
2.	Number of other positions	3	1	3	+2
3.	Salary cost of permanent positions	$521	$758	$884	+$126
4.	Salary cost of other positions	$ 25	$ 8	$ 27	+$19
	Total Personnel Services	$546	$766	$911	+$145

PERSONNEL SUMMARY

	1969 Actual	1970 Estimate	1971 Estimate
Total number of permanent positions	29	36	41
Full-time equivalent of other positions	3	1	3
Average number of all employees	32	37	44
Average GS-grade	12.1	11.9	11.8
Average GS-salary	$15,770	$17,368	$17,071

OBJECT CLASSIFICATION
(in thousands of dollars)

		1969 Actual	1970 Estimate	1971 Estimate	Change in 1971 from 1970
11	Personnel Comp.	$511	$715	$849	+$134
12	Personnel Benefits	35	51	62	+11
21	Travel	12	40	45	+5
23	Rent, comm. & utilities	10	11	11	--
24	Printing & Reproduction	3	5	5	--
25	Other Services	16	20	20	--
26	Supplies	4	5	5	--
31	Equipment	26	3	3	--
	Total Obligations	$617	$850	$1,000	
	Increase				+$150

ANALYSIS BY ACTIVITIES
(in thousands of dollars)

Activities	Amount Available, 1969	Amount Available, 1970	Estimate 1971	Change in 1971 from 1970
Hearing & Adjudication of Claims	$617,000	$850,000	$1,000,000	+$150,000
Unobligated balance no longer available	2,000	---	---	---
Total	$619,000	$850,000	$1,000,000	+$150,000

NOTE: Explanation of language change--It is proposed that the limitation on travel be increased from $40,000 to $45,000 per year as set forth in the estimate for fiscal year 1971.

Mrs. HANSEN. Please insert your general statement in the record and summarize it for us.

Mr. KUYKENDALL. If I may, before I start, I'd like to introduce my colleagues.

Mrs. HANSEN. Please do.

INTRODUCTION OF STAFF

Mr. KUYKENDALL. On my left, Mrs. Pierce, and on her left Commissioner Brantley Blue. While we are speaking of Indians, I might say that Commissioner Blue is a Lumbee Indian. The Lumbees are from North Carolina. You might not have heard of them because they are one of the few tribes who do not have anything to do with the Bureau of Indian Affairs or the Department of the Interior. They are on their own, and have been all along. It seems very clear beyond a doubt that the Lumbee Indians are descended from the Lost Colony of Roanoke. Many of them were found a hundred years or so later and had English names and were rather light skinned and had houses of English-type construction.

Mrs. HANSEN. The Lost Colony has always been a very interesting subject.

Mr. KUYKENDALL. Right behind me is David Bigelow, our Executive Director, who has not been here before. He has been with us a few months. To his left and your right is our chief counsel, Harry Webb.

Mrs. HANSEN. It's nice to have you.

Mr. WEBB. It's nice to see you.

Mr. KUYKENDALL. All right. One more thing. Commissioner Yarborough is ill and is not here and Commissioner Vance was here earlier, around 1 o'clock. All the commissioners are present or accounted for.

Mr. REIFEL. Tell them that we miss them very much, wish Mr. Yarborough an early recovery, and John is always such a delightful person, we are sorry he wasn't able to stay.

Mr. KUYKENDALL. All right. I will convey the message to both.

GENERAL STATEMENT OF 1971 REQUESTS

The Commission is requesting an appropriation of $1,000,000 for fiscal year 1971. This represents an increase of $150,000 over the fiscal year 1970 appropriation. The increase is necessitated, for the most part, by the planned addition of five permanent positions in 1971.

Mrs. HANSEN. What are those positions?

Mr. KUYKENDALL. They will be lawyers. Top priority in the utilization of these positions will be given to strengthening the Commission's legal and investigative staff through employment of attorney-investigators.

They will do fundamentally legal work but they will be competent to investigate other matters. The investigation generally is done in the Archives or investigation of law.

As you know, the Indian Claims Commission is a small independent agency engaged in the adjudication of Indian claims filed under the Indian Claims Commission Act, as amended. The latest amendment to the act (April 1967) increased the number of Commissioners from three to five and extended the life of the Commission to April 1972.

NUMBER OF DOCKETS

As indicated in the Commission's justification, 606 claims involving over 1,000 substantive decisions have been filed by various Indian groups, and 304 dockets were completed through fiscal year 1969. The remaining 302 dockets require the issuance of at least 462 case phase decisions including findings of fact.

Mrs. HANSEN. How many dockets remain?

Mr. KUYKENDALL. How many dockets do we have remaining?

Mr. WEBB. Right up to date, 295.

Mr. KUYKENDALL. 295 dockets, but, as you probably know, our cases go in three phases: the title phase, the value phase and the offsets phase. So on the average generally there are three decisions, three appealable decisions in each case. Recognizing that completion of this work by April 1972 would necessitate a very substantial increase in funding and staff, the Commission presented to the Bureau of the Budget a plan for mounting a crash program. However, the fiscal and administrative problems inherent in this approach proved to be insurmountable.

ANNUAL REPORT

As described in its 1969 annual report, the Commission has already implemented a number of changes in policies and procedures designed to expedite its work. Current plans focus on achievement of maximum productivity within stringent financial, personnel and office space limitations. A secretary has already been recruited for one of the three positions released by the Bureau of the Budget on February 18 of this year; and an active effort is being made to recruit two attorney-investigators. Based upon our current budget request, five more positions must be filled in fiscal year 1971 to bring the Commission's staff to full strength. However, because of our limited term, we anticipate increasing difficultly in recruiting and retaining competent personnel.

This subcommittee's past and present interest and involvement are deeply appreciated; and you may be sure that the Commission will continue to intensify its efforts toward early completion of its work.

TIME IN SETTLING CLAIMS

Mrs. HANSEN. How much time is involved in settling one of these claims?

Mr. KUYKENDALL. If it is settled, perhaps not too much time would be taken. But they are not all settled and we don't know what ones will be settled. But it is a matter of years with a typical case. I don't believe—I am a little cynical now.

Mrs. HANSEN. What are the basic ingredients involved in settling a claim?

Mr. KUYKENDALL. First, the tribe will come in to prove that they aboriginally occupied the land for which compensation is sought. Frequently that is a difficult and expensive job. They will perhaps have to use historians, historical documents or perhaps archaeologists to prove what land they did occupy. Of course the boundaries can never be fixed precisely. But the Commission ultimately defines the boundaries in a reasonably accurate manner. Then after they know

what land they owned and are claiming damages for, it must be evaluated. The Indian tribe engages one or more appraisers and the Department of Justice does likewise and they appraise the land. Many times there are hundreds of thousands of acres involved. That takes a long while and takes money too.

ESTABLISHMENT OF APPRAISALS

Mrs. HANSEN. When is the appraisal value established?

Mr. KUYKENDALL. As of the time the land was taken from the Indians and that raises difficult appraisal problems, as you can imagine.

Then we have the second phase, where the parties put in their evidence as to what the property was worth. Then the Commission has to decide that.

The first judgment in which we find that the Indians own title to certain land is appealable. It need not be appealed, though, at that time. The second judgment, at which we fix the value, is appealable but it need not be appealed at that time. It can be appealed later.

The third phase is the offsets phase, where perhaps the Government in the past has given the Indians gratuities and done things for them which show in the Government books and which may or may not be offsetable against any judgment the Indians will recover. This frequently requires quite a bit of accounting to determine. That is the typical case.

There are other causes of action, particularly causes of action for accounting, where the Government was holding funds or property in trust for the Indians and didn't always account for them the way they should. We have a number of those cases remaining.

CASE LOAD

Mrs. HANSEN. At your present rate, because of the limitations on funds and staff, when will you complete the cases that remain?

Mr. KUYKENDALL. We can give you our answer to that question. We estimate that we could not promise to have it done before April of 1977, 5 years after this next termination date.

We are having a hearing on Friday of this week before the Senate Interior Committee on that subject. We have studied our case load and we have all our statistics and anlayses and I don't believe there is much room for dispute that it could not be done sooner than that.

We presently are only a little over 50 percent completed. I don't think anyone knew that until last year.

Mrs. HANSEN. How many years?

Mr. KUYKENDALL. It goes back to 1946, when the act was passed. We propose to do in the next 7 years virtually as much as the Commission has done since 1946, which is 24 years.

Mr. REIFEL. May I ask here, Madame Chairman, a question?

Mrs. HANSEN. Surely.

NEW CLAIMS

Mr. REIFEL. If tribes feel they have additional claims or a new claim, the door is closed now, is that right?

Mr. KUYKENDALL. Right, it is.

Mr. REIFEL. So what you have before you is all you are going to have?

Mr. KUYKENDALL. Yes. As you know, those people can go to the Court of Claims on new matters. Our door is closed and we are just working off the backlog. I do not think anyone realized until we studied it that we are only just a little better than half through. But we propose to get through in 7 more years, as compared to the 24 years it has taken to get half through.

Mr. REIFEL. If the Bureau of the Budget, however, permits you to have the money so you can do it within that time.

Mr. KUYKENDALL. Yes. We think they will because that projection, of doing it within 7 years, is based on an appropriation that will maintain our staff at the size that we can get with a million dollar appropriation here.

VALUE OF CLAIMS

Mrs. HANSEN. What is the total value of the claims that are under consideration?

Mr. KUYKENDALL. The claims would be tremendous. It's not too indicative a figure. Do you know what it would run?

Mr. WEBB. We would have to make an estimate. We have awarded approximately $350 million on claims adjudicated up to this date. And the claims that are coming up are, we have to assume, mostly good claims. Therefore, awards should run something more than an additional $350 million. I would say $350 or $400 million is a reasonable guess.

Mr. KUYKENDALL. In the early days there were a number of cases which were found not to be justiciable, and they have been dismissed. They couldn't prove the case, or what they alleged didn't constitute a case. But now practically all of those have been dismissed, and what we have left are probably justiciable claims. The attorneys for the Indian tribes know it and the Government knows it and we know it. They will be tried or settled and recoveries will be had in many cases.

SEMINOLES OWNERSHIP

Mr. REIFEL. Mr. Chairman, if it is appropriate here to ask, and you can reply if it is appropriate, a good deal of publicity came out in the papers about the Seminoles with respect to their former ownership of a large part of the State of Florida. I think it would be interesting if you could comment. If not, you don't have to go into that.

Mr. KUYKENDALL. Your information is correct. The Commission several years ago determined that the Seminoles did have aboriginal title to most all of the State of Florida. The Government appealed that case to the Court of Claims and it was affirmed and then it came back to us for trial on the value. We have tried that case. I was the presiding Commissioner. The evidence is all in and we are working on a decision. I would say that we will probably have a decision during this fiscal year, before July 1. I won't comment on what it may amount to.

CLAIMS OF TRIBES

Mrs. HANSEN. Do any of the tribes who have been protesting at Fort Lawton have any claims pending for settlement?

Mr. KUYKENDALL. I really don't know what members of what tribes have been there.

Mrs. HANSEN. They are all State of Washington tribes.

Mr. WEBB. I think that the Puyallup case has been determined on title and is pending on value.

Mrs. HANSEN. Have the Colville Indian claims been settled?

Mr. KUYKENDALL. Their claim is still with us. We have had a lot of proceedings on it.

Mrs. HANSEN. Thank you very much.

Mr. REIFEL. I think it might be well here to recognize Mrs. Pierce as the Commissioner who represents one of the minorities we hear about.

Mrs. HANSEN. We are actually a majority but the men don't realize it.

Mr. REIFEL. But they don't show up on the payrolls as a majority.

Mrs. HANSEN. It is a pleasure to have you, Mrs. Pierce, and we are proud that a woman is on the Commission.

Mrs. PIERCE. I am very happy to be on it.

Mrs. HANSEN. Frankly, I recommend that the President appoint a woman for the Supreme Court.

Mrs. PIERCE. He said he might if he could find a qualified woman.

Mrs. HANSEN. There are many qualified women in the United States in the judicial field. I am sure the Senate would be gallant enough to accept one.

FEDERAL FIELD COMMITTEE FOR DEVELOPMENT PLANNING IN ALASKA

WITNESSES

GEORGE O. SHARROCK, CHAIRMAN, FEDERAL FIELD COMMITTEE FOR DEVELOPMENT PLANNING IN ALASKA
DAVID M. HICKOK, NATURAL RESOURCES OFFICER, FEDERAL FIELD COMMITTEE FOR DEVELOPMENT PLANNING IN ALASKA
JAMES E. HAWKINS, SPECIAL ASSISTANT TO THE SECRETARY OF COMMERCE FOR REGIONAL ECONOMIC COORDINATION
WARREN W. KANE, BUDGET OFFICER, OFFICE OF REGIONAL ECONOMIC COORDINATION, DEPARTMENT OF COMMERCE

Mrs. HANSEN. Next we have the Federal Field Committee for Development Planning in Alaska, and our principal witness is Mr. Sharrock, the Chairman.

JUSTIFICATION MATERIAL

Insert in the record pages 1 through 10 of the justifications.

(The pages follow:)

GENERAL STATEMENT

An appropriation of $263,000 is requested for fiscal year 1971 for the Federal Field Committee for Development Planning in Alaska to continue its task of coordinating Federal planning in Alaska.

The Committee was established by Executive Order 11182 on October 2, 1964. In August, 1967, Congress authorized an annual appropriation not to exceed $300,000 through fiscal year 1970 to carry out the work of the Federal Field Committee (P. L. 90-69). Last year, the Congress enacted P. L. 91-123 that included a Section 512 that authorized "not to exceed $500,000 for the two-fiscal-year period ending June 30, 1971, to the Federal Field Committee for Development Planning in Alaska for the purpose of planning economic development programs and projects in Alaska in cooperation with the Government of the State of Alaska." Against this authorization there has been appropriated $192,500 in the regular appropriations act for 1970, and there is a supplemental request pending for $21,000 to cover increased salary costs.

Executive Order 11386 of December 28, 1967, amended Executive Order 11182 by slightly modifying the mechanisms through which the Federal Field Committee reports through the Executive Branch to the President. As amended, the Executive Order stipulates that the Federal Field Committee shall consist of field representatives of the major Federal agencies in Alaska whose activities affect economic development.

In the 1970 estimates a staff of nine was justified. Late in fiscal 1969 a consultant, formerly paid by contract was brought on the rolls of the Committee. Accordingly, the authorized complement was raised to ten. While increasing the staff level this action did not increase costs. It merely moved them from one category to another. However, the appropriation for 1970, $192,500 plus the $21,000 pay increase supplemental, could not support the ten positions for the full fiscal year. In order to maintain the most effective level of operation within the funds available the consultant was reduced to part-time service and two other positions that became vacant will not be filled for the balance of the year.

The increase requested for 1971 over the adjusted 1970 appropriation of $49,000 includes: $42,000 to provide a full staff of ten; $2000 to allow for the promotion of three employees; another $2000 to cover within-grade salary increases; and $3000 to replace the present office copying machine.

Summary of Requirements
(dollar amounts in thousands)

	Perm. Pos.	Average Number	Amount
Appropriation, 1969	10	10	$ 235
Appropriation, 1970	10	9	193
Anticipated supplemental appropriation for increased salary costs	...	...	+21
Adjusted 1970 Appropriation	10	9	214

Summary of Increases and Decreases for 1971

Personnel compensation	...	+1	+27
Personnel benefits	...	...	+9
Travel and transportation of persons	...	...	+8
Rent, communications, and utilities	...	...	-3
Printing and reproduction	...	...	+3
Other services	...	...	+1
Supplies and materials	...	...	+1
Equipment	...	...	+3
Subtotal, increase and decrease	...	+1	+49
Budget estimate, 1971	10	10	263

Justification of Program and Performance
(dollar amounts in thousands)

	1970 Estimate			1971 Estimate			Inc. (+) or Dec. (-)		
	Perm. Pos.	Avg. No.	Amount	Perm. Pos.	Avg. No.	Amount	Perm. Pos.	Avg. No.	Amount
Direct program...	10	9	$ 214	10	10	$ 263	...	+1	+ $49

Accomplishments

Economic Development in Alaska: A Report to the President, published by the Committee in August, 1966, pointed out the strengths and weaknesses of the Alaskan economy and natural resource management and suggested priority directions for state and Federal planning and programming in the years ahead.

The Federal Field Committee then carried out a series of functional analyses and assessments in priority areas to stimulate the planning and programming activities of concerned Federal and state agencies. Governments at all levels became involved in specific functional policy problem situations and coordination of governmental planning efforts has been achieved in priority sectors such as transportation, recreation, fisheries, timber and Native circumstance.

The direct impact of Field Committee analyses and actions is illustrated by the following improvements in job and training opportunities for Alaska Natives:

1. Native employment in Federal agencies in December, 1969, was 1,651 or 12.5% of the total Federal civilian work force.

2. Federal agencies, supported by the Bureau of Indian Affairs, are providing on-the-job training to 1,000 disadvantaged Natives.

3. Federal contractors have been required by agencies to more fully meet their equal employment opportunity obligations.

4. Union and contractor organizations have established a trades training information center for Alaska Natives and unions have stepped up their programs for minority recruitment.

5. A housing components fabrication plant has been established at Bethel to construct 300 homes and to create 60 training and job openings for Eskimos in the area.

The Field Committee has also coordinated state, Federal, and local programs for health, education, and welfare. These efforts included governmental programs to develop probable growth centers in Native areas and to dispose of Federal properties at the Unalaska site so that community planning can take place without deferring commercial developments.

The Field Committee also assisted:

1. The sale of the Alaska Communications System to private enterprise and the development of satellite communications for Alaska.

2. The Senate Committee on Interior and Insular Affairs in their effort to resolve Alaska Native land claims through publication of a major work, Alaska Natives and the Land--perhaps the most definitive book on Alaska Natives and natural resources now available.

3. Evaluation of the Alaska public land and natural resource law and policy in relation to national economic efficiency, regional economic development, welfare of Alaska Natives, and the maintenance of environmental quality in association with the Public Land Law Review Commission.

4. Development of a rationale for the scope of Federal recovery expenditures connected with the Fairbanks flood disaster.

5. Plans leading to the establishment of a Sea Grant College at the University of Alaska.

6. Coordinated planning between government agencies and the oil industry on environmental impact considerations pertinent to Alaska's North Slope developments and decision making in this area by the Senate Interior and Insular Affairs Committee and the United States Department of the Interior.

The Role of the Federal Government in Alaska

The expenditures of Federal Government agencies attributable to their unit and programs in Alaska in calendar year 1969 exceeded $750 million. While this figure is not identical with the direct Federal contribution to economic activity through contract construction, procurement, payroll, and transfers, it suggests the order of importance of Federal activities in a State economy whose total magnitude was about $1.5 billion (gross domestic product equivalent). Federal civil employment alone averaged 19% of Alaska's civilian employment in 1968; total Federal employment (including military) was more than 40% of total employment. Federal civilian payrolls (not including the 25% cost of living allowance for classified employees) were 20% of all wage and salary payments in the State and were 14% of State personal income. Federal grants and transfers provided 56% of State government general fund receipts and 50% of State and local government revenues. About 97% of Alaska's land area is still in Federal title (94%, when the land tentatively approved for transfer but not yet patented to the State is excluded.)

All the above ratios can be expected to diminish somewhat in response to Alaska's oil boom but none will be reduced radically over the next few years. The Federal Field Committee Economist estimates that Federal outlays account directly or indirectly (through income multipliers and "backward linkages") for about 75% of the total volume of economic activity in the State. (This estimate does not take into account the incomes generated by the extraction and primary processing of resources from Federal lands and waters.)

The national interest in Alaska is large because Alaska contains half the nation's remaining public domain. Americans in general see Alaska as holding the vast bulk of the nation's increasingly precious supply of scenic wilderness. Alaska's oil reserves may dominate the nation's petroleum supply, have a powerful influence on the domestic price of crude oil and of energy, on the nation's strategic self-sufficiency, and on the balance of payments.

The Need for Planning

In the period immediately after statehood, the obvious priority for both Federal and state planning was simply to get the state on its feet economically by assisting private enterprise to create a large enough employment and revenue base to make statehood meaningful. The state's spectacular 1969 oil and gas lease sale was both a symptom and a symbol that this task has generally been accomplished. Planning for general economic development and the problems of industrial promotion will henceforth be mainly the responsibility of the state government, which now has the necessary fiscal and staff capabilities plus an existing industrial core on which to base further efforts. But the areas in which Federal and joint Federal-state planning remain essential are still very large; they are unchanged by, or are even made more critical by, Alaska's oil boom. The most conspicuous sets of planning issues revolve around the following:

1. Existing and projected Federal programs in Alaska --

Federal spending in and on Alaska in fiscal 1970 will amount to an estimated three-quarters of a billion dollars. The activities of different Federal and state agencies interact, and present many opportunities for different programs to complement or strengthen one another, or to generate duplication, conflict, and waste. Only a small fraction of these expenditures have explicit "economic development" objectives, but government activities in their aggregate obviously have an enormous impact on the pace and direction of economic development and on prices and costs in Alaska. Accordingly, the need for planning and coordination within the Federal government, and between it and the state, remains exceptionally great.

2. Communications and transportation --

Of the numerous ways in which Alaska is underdeveloped, the fields of communications and transportation are the most notable. The basic communications system is inadequate, aging, and obsolescent, and, in its present form, is capable of only limited expansion. More than one-third of Alaska's communities--most of them Native villages--are without telephone service or other reliable communications. It is in many of the remote communities where communications are most urgently needed--for information, education, and health purposes. Presently developing industries, as on the North Slope and along the pipeline corridor, require communication facilities immediately; and unless a statewide system exists to serve those needs, the industries will likely seek the establishment of their own systems. The long-lines system should not be fragmented by such action especially since it will be owned by private enterprise. The Department of Defense, the

the Federal Aviation Administration, the Bureau of Indian Affairs, the Public Health Service, and other Federal agencies--as well as state agencies--have a very important stake in an adequate communications system.

The traditional and unique transportation problems facing Alaska are numerous, but the State's transport problems are susceptible to good transport planning. The relatively undeveloped system means that Alaska may generally avoid the long and costly progression of transport technologies necessary in areas developed earlier and, instead, leap directly to the most modern, efficient systems and facilities available. Alaska's proximity to major international markets--the Far East (particularly Japan), Europe, and Canada--merits exploitation. Finally, the fact that transportation is such a major cost factor in almost all economic activity in Alaska means that significant improvements in this sector can have a very substantial and wide-ranging impact on the region's price/cost difficulties and, hence, the pace and character of its economic development.

3. Rural development and native affairs --

Poverty, disadvantaged minorities, discrimination, and endemic economic stagnation have increasingly been set forth as Federal problems and responsibilities. National policy is in part directed at increasing jobs and income levels in regions of the United States where there is large unemployment. There is a special and historic Federal commitment to Indian Affairs. An increasing number of Federal programs have established a Federal interest in poverty and intercultural relations in specifically regional terms, particularly under the Economic Opportunity Act and the Public Works and Economic Development Act. The very success of past economic development efforts in Alaska point up some of the most critical and difficult tasks for development planning in the foreseeable future. Except for a few urban areas, Alaska is characterized by levels of unemployment and underemployment many times national averages; and even the reasonably prosperous cities and the Native peoples particularly still hang precariously between seasonal fishing or traditional subsistence livelihoods and a modern market economy. As a people, Alaska Natives may simply not be participating in or benefiting from the state's spectacular economic growth. Some recent studies have shown that their relative economic position has been worsening since statehood. Despite the state's improved fiscal position, much of the responsibility for rural development and Native health, education, and welfare is still with the Federal government. The state can and must accept a larger responsibility in these areas, but the passing of responsibility will itself require serious intergovernmental and interagency planning and cooperation.

4. Natural resource development, environmental management and land-use planning --

The main issue for joint state-Federal planning in the natural resource area centers on land/resource zoning (or classification). Grossly, the task is to determine what lands (with the resources they contain) are to be primarily planned for economic development of resources; what lands for parks, wilderness, wildlife, recreation, etc.; what lands for Native subsistence harvest; what lands for transportation corridors, and new or expanded community purposes. This effort would have great impact upon state selection, resource agency budgets, Federal withdrawal policy, public land law review, etc.

The following are some major governmental or political issues in need of resolution in the arena of environmental-developmental conflict: petroleum pollution of cold and ice-covered marine waters; disruption of Native subsistence patterns; resource zoning and land-use planning on the North Slope; construction of the trans-Alaska pipeline; urban zoning and community expansion with all ramifications; solid-waste disposal; water supply and sanitation systems for rural Alaska villages and arctic industrial camps; atomic testing and civilian use of atomic energy for construction purposes; park and recreation area development and public access; urban area air pollution; transportation systems and effects on arctic ecosystems; and the degree of known arctic environmental factual information and its dissemination.

Some of these infringe upon or are a part of the land/resource zoning question. Others are a function of science and technology and the application of knowledge to developmental progress within a context of environmental quality. All are of national as well as state interest.

Plan of Work for FY 1971

Because of the low degree of development in Alaska and its remoteness from the other states, the strategy for development is almost certain to be very different from that of other states. Continued development of Alaska will affect the nation and will be affected by the policies of Federal agencies in Alaska. These policies and programs must be coordinated with one another and with those of state agencies. Lack of full coordination is costly in dollars and social consequences.

The Federal Field Committee can assemble information related to development from Federal, state, and private agencies; subject it to analysis; and disseminate it among all interested agencies as an aid to their formulation of policy. The Federal Field Committee can also

coordinate the planning efforts of Federal and state agencies and others on specific development projects such as those previously described in the transportation and communications, resource and environmental matters, and rural development and Native affairs areas.

Specifically, the Committee's fiscal 1971 program is:

1. To foster state-Federal interagency planning for integrated transportation systems and a full-service communications system for Alaska;

2. To join with state planners in an analysis of state and Federal responsibilities regarding Eskimos, Indians, and Aleuts and to develop a rational plan for program realignments or other actions as appropriate;

3. To stimulate Federal-state multiagency planning for the advancement of regional centers in Native areas, following the strategy employed at the Eskimo Village of Bethel, and to cause implementation of such plans;

4. To analyze and evaluate policies relating to government expenditures for their possible inflationary consequences in the Alaskan economy, and to develop policy recommendations for government and business action;

5. To provide the basis for intelligent land-use planning, state land selection and Federal retention, and classification and zoning for development by private enterprise;

6. In concert with the state and the private sector to determine the fiscal and social impact of the Prudhoe Bay oil discovery and to assist in the development of Federal planning to maximize the opportunities presented by this discovery for the economic development of Alaska. In providing for this development planning the problem of environmental quality will be of major importance.

Summary of Requirements by Object Class
(dollar amounts in thousands)

		1970 Adjusted			1971 Estimate			Inc. (+) or Dec.(-)			Emp.
		Pos.	Av. No.	Amount	Pos.	Av. No.	Amount	Pos.	Av. No.	Amount	12/31
11.1	Permanent positions.....	10	9	$ 137	10	10	$ 164	...	+1	+ $27	7
12	Personnel benefits.....			44			53			+ 9	
21	Travel and transportation of persons.....			12			20			+ 8	
23	Rent, communications and utilities.....			12			12			...	
25	Other services.....			8			9			+ 1	
26	Supplies and materials....			1			2			+ 1	
31	Equipment.....			...			3			+ 3	
	Total requirements.....			$ 214			$ 263			+ $49	

GENERAL STATEMENT

Mrs. HANSEN. Please summarize your general statement for us.

Mr. SHARROCK. May I read it please?

Mrs. HANSEN. Surely. Since this is your first appearance before this subcommittee also insert your biography in the record.

(The biography follows:)

GEORGE ORMAND SHARROCK

Vital Statistics:

Born: Muskingum County, Ohio, May 2, 1910.
Married to: Pauline Livesay Sharrock.
Children: Patrick Sharrock, Anchorage.
Diane Smith, Anchorage.

Education:

University of Detroit.
Hamilton Institute.
LaSalle Extension University.

Business Career:

Assistant Superintendent, Motor State Products Corp., Ypsilanti, Mich., 1931–1947.
Pacific Northern Airlines, Anchorage, Alaska, 1947–1966.
Commissioner of Commerce, State of Alaska, 1966–1969.
Chairman, Federal Field Committee for Development Planning in Alaska, July 1969 to present.

Civic and Community Activities:

President, Anchorage Chamber of Commerce, 1954.
Member, Board of Trustees, Alaska Methodist University, 1957 to present.
President, Greater Anchorage, Inc., 1957 and 1958.
President, Alaska State Chamber of Commerce, 1959.
Mayor Anchorage, Alaska, 1961–1964.
Member, Board of Managers, YMCA, Anchorage, 1964–1966.
Vice President, Pacific Northwest Trade Association, 1964–1966.
Chairman, Anchorage Disaster Commission, 1964–1966.
Member, Alaska Centennial Commission, 1967.

Mr. SHARROCK. Before I proceed with my statement, I would like to introduce the people who are with me.

We have Mr. James Hawkins, who is the Special Assistant to the Secretary of Commerce for Regional Economic Coordination; Mr. Warren Kane, who is the Budget Officer who handles our budget matters; and I have with me a man from our staff, Mr. Dave Hickok, whom you probably already know.

Mr. HICKOK. We met last at Lands End, Madam Chairman.

Mr. SHARROCK. May I read my statement?

Mr. REIFEL. Madam Chairman, before Mr. Sharrock reads his statement I would like especially to welcome Jim Hawkins. Jim was in the Bureau of Indian Affairs, and then he was area director up in Alaska before he was in Minnesota, and then out in the Trust Territory.

I think the Field Committee is well-advised to have Jim on the staff assisting Mr. Sharrock. He has done an outstanding job. I have tried to convince the people in the Office of the Secretary of the Interior Department that they ought to utilize his abilities, but they chose otherwise so that they are the losers.

Mrs. HANSEN. Proceed, Mr. Sharrock.

Mr. SHARROCK. Madam Chairman, members of the committee, my name is George Sharrock. I am Chairman of the Federal Field Committee for Development Planning in Alaska. On July 16, 1969, Presi-

dent Nixon appointed me to succeed Joseph H. FitzGerald as Chairman of the Federal Field Committee. For the information of the committee, I have attached to this statement a biographical outline.

I am very pleased to appear before you today to explain the requirements of the Federal Field Committee for fiscal year 1971. Section 512 of Public Law 91–123 extended the life of the Federal Field Committee to June 30, 1971, and at the same time authorized $500,000 for the 2-fiscal-year period ending June 30, 1971. This $500,000 includes the amount appropriated for fiscal 1970—$192,500 plus a pending $21,000 supplemental for increased salary costs—and the $263,000 requested for fiscal year 1971.

You have before you the detailed financial and personnel figures for the fiscal 1971 operations of the Field Committee, so I will confine my remarks to a brief explanation of our work and what we hope to accomplish next year.

At the present time, Alaska is at a very critical stage in development. The discovery of oil on the North Slope will have major impact on the Alaskan economy and will, for the first time, permit the State to participate significantly in public investment and improvement of public facilities. However, unless there is close coordination of State and Federal expenditures, particularly those involving public investments, duplication of effort and waste of public funds will result.

As you know, Alaska has been hit exceptionally hard by inflation. Prices are frequently twice as high as in many other parts of the Nation. Alaska is now faced with another major round of inflation as the construction of the pipeline to the North Slope begins and private interests compete with State and Federal programs for scarce construction skills.

The Federal Field Committee is already providing major leadership by initiating a pipeline impact study which will help to provide recommendations for construction priorities in the Federal, State and private sectors. If priorities can be established, the inflation crunch can be lessened. Less important projects can be deferred and the total construction package spread out over future years.

For many years the Federal Government has dominated planning and programs related to development in Alaska. However, past mechanisms for Federal interagency coordination prior to the establishment of the Federal Field Committee had limited effectiveness. More importantly the State of Alaska has now reached the stage where it can and should play an increasingly important role in planning. The Governor and his staff intend to increase their planning capabilities. However, their planning capabilities could be greatly strengthened and supported with coordinated Federal interagency planning of the sort that can be done through the Federal Field Committee.

In the meantime, the Field Committee (which is composed of the regional heads of 11 Federal agencies) is providing benefits to both the State and Federal agencies as a coordinator of planning and research efforts and as a source of information to both State and Federal agencies. The Federal Government will continue to have a large interest in Alaska for many years—mainly because, even after the State selects the land allocated to it under the Statehood Act, the Federal Government will hold over 70 percent of all land in Alaska and the many resources associated with the land. It is expected that our

work—with a modest budget—can save much in near-term as well as long-term public costs through coordination of programs and the prevention of duplication of effort.

In the past the Field Committee has taken initiative action, or acted in a supportive capacity, on many projects related to planning for economic development and for solving social problems, including the welfare and employment of Alaska natives.

There are many areas of concern in this rapidly growing State in which the Field Committee can be of help in the next year, which are important to the Federal Government and its agencies in Alaska. Work in these areas and in on-going programs reflect the Federal Field Committee staffing for fiscal 1971. Efforts include: (1) providing coordinating leadership for the development of an integrated transportation plan for Alaska with particular reference to remote regions; and (2) a study of regional inflationary pressures generated by costruction booms and the consequent effects on Federal Government costs in Alaska. Hopefully, this study will lead to recommendations for Government policies on both the Federal and State levels that will help lessen the inflationary effects.

A major emphasis in the next year will be to establish a closer liaison and working relationship with the State in planning and development matters. The growth in population, the private sector, and in State revenues give the State a growing role in planning its future development. The Federal Field Committee will act as a focal point for the Federal agency and State coordination and will assist the State in developing long-range plans. Long-range State planning is needed for effective Federal-State coordination and development investment.

Madam Chairman, I have some additional material, some exhibits, and other papers that are available if you would like to have them.

Mrs. HANSEN. The committee would like to have the material.

Mr. SHARROCK. I will certainly be happy to attempt to answer any questions that you do have, Madam Chairman.

AUTHORIZATION

Mrs. HANSEN. Is it not true that your authorization was included in the Appalachian Regional Development Act Amendment of 1969?

Mr. SHARROCK. Yes, the latest authorization that we have, the one I referred to, was section 512 of Public Law 91–123 which was passed last November or December.

Mrs. HANSEN. What are the specific terms of this authorization?

ESTABLISHMENT OF REGIONAL COMMISSION

Mr. SHARROCK. I have copies here of section 512 if I may read it.

Mrs. HANSEN. Please do.

Mr. SHARROCK. It is entitled "Alaska," and it is in Title II, the amendments to Title V of the Public Works and the Economic Development Act of 1965. "Section 512. There is hereby authorized not to exceed $500,000 for the two-fiscal-year period ending June 30, 1971 to the Federal Field Committee for Development Planning in Alaska for the purpose of planning economic development programs and projects in Alaska in cooperation with the Government of the State of Alaska. Nothing contained in this section shall be construed

as precluding the establishment of a regional commission in Alaska."

Mrs. HANSEN. Has there been an attempt to establish a regional commission?

Mr. SHARROCK. Well, as far as I know there has been nothing authorized up to this point.

REASON FOR LARGE INCREASE FOR 1971

Mrs. HANSEN. At the budget hearings last year the committee had an indication that the Federal Field Committee for Development Planning in Alaska was to be phased out. Yet I note this year the budget is $263,000, an increase of $70,000 over the 1970 appropriations to date. Why are you requesting such a large increase?

Mr. SHARROCK. There are several reasons. The first one, of course, is the pay raise which went into effect last year and which increased the total amount. You will note that there was a supplemental appropriation requested for this year to supplement our budget for the raise.

It is probably $21,000 or just a little more, Madam Chairman.

Anyway, we were restricted, as you know, in this year's budget and we had to reduce personnel. We hope to be able to take on the two people that we have had to dispense with for this year and resume next year with the same people that we have authorization for. The program we have in mind will require the number of people we have requested in the budget.

You see, the $192,000 made it necessary for us to reduce the force.

ADDITIONAL POSITIONS REQUESTED

Mrs. HANSEN. You are requesting an additional permanent position, which makes a total of 10. Justify this request.

Mr. SHARROCK. We are requesting that we be permitted to put these people to work, that is, those people that were authorized already. They are not new positions.

Mrs. HANSEN. Are these the same positions you had at the beginning of fiscal year 1970?

Mr. SHARROCK. Yes.

Mr. KANE. The latter part of the year we cut back two people to stay within the amount appropriated, so we are really raising our average number by one.

Mrs. HANSEN. Do you have a personnel ceiling?

Mr. SHARROCK. Yes.

Mrs. HANSEN. What is your ceiling?

Mr. SHARROCK. We have a total of 11. Actually, one is on a reimburseable basis, and 10 for this particular budget. We have 10, so there are no new requests for personnel.

Mrs. HANSEN. You have listed in your justifications the titles of your positions.

What are the functions of your planning officers?

Mr. SHARROCK. We have three planning officers. One of them is Mr. Dave Hickok, whom you know, who is our natural resources planning officer and our specialist on environment.

We have an economist, who is one of the people who is not working full time at the present time. We have reduced him to 32 hours a pay period now.

Mrs. HANSEN. Where does your economist work when he is not working for you?

Mr. SHARROCK. The University of Alaska part time. The other position is now open. We want to fill that with a transportation planning officer because we are very much interested in transportation.

ALASKA RAILROAD

Mrs. HANSEN. To whom is the Federal Government going to sell the Alaskan railroad? Why is it being sold?

Mr. SHARROCK. I can't answer that question. The only thing that I know about that was in a reference to the President's speech that it should be sold to the State of Alaska or to private enterprise, preferably.

Mrs. HANSEN. Has the State of Alaska indicated any desire to operate the railroad?

Mr. SHARROCK. There has been some interest shown. The Governor has asked a transportation commission—and it is part of the State government—to do some investigating to see what impact it would have.

Mrs. HANSEN. With regard to that railroad, how much freight is hauled for the Federal Government?

Mr. SHARROCK. I can't give you the percentage. I would expect up until this time that it has been a considerable portion that has been directly or indirectly for Federal Government activities. Of course, now the situation is changing quite dramatically because of the oil boom. Because of the oil boom much of the traffic to the north slope is routed through Fairbanks.

(The information follows:)

It was subsequently determined that for fiscal year 1969 a total of 1,400,000 tons of freight were shipped on the Alaska Railroad, of which 42 percent was shipped on Government bills of lading with a minimum additional 10 percent for government projects shipped by contractors under commercial bills of lading.

Mrs. HANSEN. Why is the Federal Government going to sell the railroad as it becomes more solvent?

Mr. SHARROCK. I personally feel that this type of operation ought to be under private enterprise. That is my feeling.

Mrs. HANSEN. You mean the railroads of the United States have made such an outstanding contribution in private-enterprise management that they are a symbol of success?

Mr. SHARROCK. It has not been very good the last few years, I will have to admit.

Mrs. HANSEN. What makes you think the Alaska railroad would be any better?

Mr. SHARROCK. I don't know that it would be any better. I think that the railroads in the United States, to go back just a moment, from the standpoint of freight operation are successful.

Mrs. HANSEN. That is what worries me in Alaska. Are you going to say to the people of Alaska, that you are no longer going to provide rail transportation, as had been done to the people of the rest of the United States?

Mr. SHARROCK. The passenger traffic on the Alaska railroad is minimal at the present time.

Mrs. HANSEN. I understand, but this form of transportation is available in Alaska, which is not always true in other parts of the United States. Have you ever tried to buy a railroad ticket from Chicago to Washington?

Mr. SHARROCK. No, I haven't.

Mrs. HANSEN. I recommend you do. Every government employee must take an interest in the railroads because they are a vital part of our transportation system.

Mr. SHARROCK. I am certain the concern is for the passengers, and I really feel that something needs to be done about this. Private enterprise, because of the competition of the airlines and buses, I think has suffered quite drastically.

Mrs. HANSEN. This would not have happened it the railroads had been more competitive. In the first place, to buy a ticket on an American railroad takes a great deal of courage and enterprise. You have got to go and literally assault the ticket office.

Then the next thing is to endure the travel accommodations that they provide.

I am curious, when the Alaska Railroad is starting to become profitable why the Federal Government is selling it?

Mr. SHARROCK. I would not want to offer any explanation because I am not familiar with it. The Alaska Railroad, of course, has been on a sort of industrial fund, I think, for several years now and has been paying its own way. I am not sure exactly how long it has been, but I think it has been the last 5 years that it has been on an industrial fund basis. During this time there have been no appropriations, as far as I know made to the Alaska Railroad. Of course, this is true only in the last few years. I think prior to that time they were not on a paying basis.

Mrs. HANSEN. Isn't this railroad of some benefit to Alaska?

Mr. SHARROCK. Oh, certainly; yes. We will need some more railroads up there. This is a problem and I think one of the concerns that I have is how is it going to be built unless private enterprise does it. I don't think the government can do it and the State of Alaska certainly cannot do it.

Up there we just have one railroad and nothing goes into the north slope at the present time, and if we are going to realize anything from the mineral resources that are up there it is going to require very cheap transportation in order to compete with other sources of supply.

Mrs. HANSEN. You are right; but it is also going to require a lot of protection.

Mr. SHARROCK. Yes, granted.

Mrs. HANSEN. I assume you are interested in protecting this area?

Mr. SHARROCK. We certainly are. This is Mr. Hickok's field.

Mrs. HANSEN. This committee had a hearing on the Trans-Alaska Pipeline in late November, and we have had subsequent hearings with the Bureau of Land Management, Geological Survey, and the Bureau of Sport Fisheries.

It is a necessity, when you are dealing with private enterprise, to make sure that the Government's lands are protected. Now when the Alaska Railroad is in a position to be part of that governmental protection it is going to be sold.

TRANSPORTATION STUDY

Mr. SHARROCK. May I go into just a little more detail on the transportation end, Madam Chairman?

Mrs. HANSEN. Surely.

Mr. SHARROCK. One of our aims for next year is to participate in a transportation study.

Mrs. HANSEN. Why didn't private enterprise conduct a study?

Mr. SHARROCK. I think there is certainly a great need for information just for the Federal agencies.

Mrs. HANSEN. If the Federal Government is going to sell this railroad why doesn't private industry do the study?

Mr. SHARROCK. The only problem is that there needs to be a balanced transportation plan, taking into consideration the different modes, air, highways, railroads, and marine.

Mrs. HANSEN. How many miles of highway are there in Alaska?

Mr. SHARROCK. There are only about 6,000 miles.

Mrs. HANSEN. What is the size of Alaska?

Mr. SHARROCK. It is 586,000 square miles.

Mrs. HANSEN. And there are only 6,000 miles of highways?

Mr. SHARROCK. Yes.

Mrs. HANSEN. Are the airlines in Alaska run by private industry?

Mr. SHARROCK. Yes.

PUBLIC TRANSPORTATION IN ALASKA

Mrs. HANSEN. So your public transportation in Alaska at the present time is confined to 6,000 miles of highway and how many miles of railroad?

Mr. SHARROCK. There is a total of about 470 miles, I believe. And 586,000 square miles.

Mrs. HANSEN. Now you are going to dispose of 470 of those miles?

Mr. SHARROCK. It was our hope, and the State is very much interested in this.

Mrs. HANSEN. If you are going to sell that railroad, one of the stipulations, if there is to be any provision for enlarging the system, should be an agreement that the environment must be protected. Private enterprise is in business for profit.

Therefore, you must make very sure that the maintenance and protection of the environment on the current railroad right-of-way and any enlargements of the system are provided for in the agreement before it is sold.

Mr. SHARROCK. I am pretty sure it will be, Madam Chairman, considering the climate on environment now and the public sentiment and feeling of both the Congress and the administration.

Mrs. HANSEN. If the oil spills had not occurred there might not have been this great concern in Alaska. When I was in Alaska I saw where the gold diggings had been, and nobody seemed to care about the environment then.

Mr. SHARROCK. You are right. They are not very pretty sights, I will have to admit.

Mrs. HANSEN. No, they are not, and there are some pretty ugly scars.

Mr. SHARROCK. I believe that the people in Alaska feel just the same way that you do and the way most of the people in the United States do—that from here on out, particularly on public domain land, there is going to be insistence that the environment be protected.

TERRAIN IN ALASKA

Mrs. HANSEN. Alaska has a special type of terrain. They do not have environmental problems that are easily solved.

For instance, one would assume that in Alaska, being along the Pacific coast like Oregon and Washington, timber would grow equally as fast as in the Northwest. This isn't true at all. The Forest Service told me that it was not a fast-growing forest area. Therefore, when you cut timber, it is not as quickly renewable as it would be in the forests of Oregon and Washington.

NATIVE EMPLOYMENT IN FEDERAL AGENCIES

You say on page 3 of your justifications: "Native employment in Federal agencies in December 1969, was 1,651 or 12.5 percent of the total Federal civilian work force."

What percentage of the population in Alaska is native?

Mr. SHARROCK. About 20 percent, Madam Chairman. It would appear from this that there is still some discrimination there. However, there are a couple of factors that I think would be worth mentioning now.

First of all, the Native population is a much higher proportion of young people, let's say under 16, than the white people. I have those figures someplace. I don't have them right in front of me, but it is a considerable difference, I would say almost 30 percent variation between the two.

Secondly, of course, the unemployed or the employable people in the Native population, many of them live in the remote areas where there are very few employment opportunities. It has been found that to bring these people from the rural areas into the cities, where employment exists, creates problems.

The difference of the culture between the two has created very many problems. This is something that takes a little time to work out.

SAFEGUARDING OF TERRAIN

Mrs. HANSEN. But at the same time you have to safeguard their terrain and the life which they were used to having as part of the basic ingredient of their environment. Have you made sure that these people who remain in the far north or who remain in very remote areas of Alaska have ample food and ample opportunity to sustain themselves in their Native culture?

You have to provide them with an opportunity to pursue a life that is free of starvation.

Mr. SHARROCK. This is a problem, and it is something that is not going to be solved overnight. It will take at least a generation, maybe two generations, to solve that kind of a problem.

Mrs. HANSEN. I understand. But in two generations what is going to happen to life in those areas?

Mr. SHARROCK. The subsistence life of the Natives now is being threatened to some extent by development. There isn't any question about that. On the other hand, many of them would like to get into our economy, our American economy, and earn money and live as we do.

Mrs. HANSEN. Yet, it seems to me that you have to speed up the process of relocation for those who want to move from an environment which can no longer meet their needs into an environment which can. You also have the problems of housing, job training, education, and Indian health.

BETHEL HOUSING PROJECT

Mr. SHARROCK. Madam Chairman, are you familiar with the Bethel housing project?

Mrs. HANSEN. Yes, I am.

Mr. SHARROCK. If I could use this as an example now to bring out some of the problems that exist. Bethel is not the only area that is developing into what we call a regional urban center. Nome is growing. Kotzebue is growing. Barrow is growing. This seems to be the tendency. These people want to get into the communities which are not as large as Anchorage but what we call regional urban centers.

In these centers, Bethel, for example, which is an interagency project, as you know, there are maybe eight or 10 Federal agencies, three State agencies, and the city of Bethel that are involved. This is one of the projects that we are coordinating.

In Bethel they have this housing that is bringing people in there, but they have to have employment in order to stay there. The Native association there, a co-op, is attempting to put in a freezer operation which will provide employment at least during part of the year.

The PHS is going to build a new hospital there now, we understand, or at least the plan is to expand the old one. However, I understand that later they may build a completely new one. The State is going to build a regional high school in Bethel.

Mrs. HANSEN. This committee has been after Alaska, to integrate the public schools. This committee is willing to provide dormitory space for those children in the far north, where they cannot attend the day schools, if the State of Alaska will provide the classrooms.

How many classrooms to date have been provided for these youngsters?

Mr. SHARROCK. I don't have the exact figure. We can supply that for you.

Mrs. HANSEN. Insert in the record a report on your coordination with the BIA on this school problem and also insert in the record the number of classrooms that have been provided.

Mr. SHARROCK. All right, I can give you that. As a matter of fact, I think I have a copy of this last report that I can leave with you if you like.

Mrs. HANSEN. Please do.

(The information and report follows:)

It was subsequently determined that from statehood through June 30, 1970, 29 schools or 61 classrooms will have been transferred from BIA to the State. This includes transfers during fiscal year 1970 of 14 schools and 35 classrooms. Turnover is scheduled to be completed in 5 years with between 10 to 20 schools turned over each year.

STATUS REPORT ON BETHEL HOUSING PROJECT

The Bethel housing project is well advanced in the construction of its physical elements; and the emphasis is turning to problems of project management, social adjustment, and local public policies. Since February 1968, 11 Federal agencies have participated actively in the project along with four State agencies, the city of Bethel, and the rural Alaska community action program. A list of participating agencies and their functions is attached. The Federal Field Committee has provided coordinating service to all parties since June 1968.

The status of construction for the major components of the project is as follows:

1. The multipurpose community center and training facility is completed, with final contract payment of $16,000 from the city awaiting the approval of the sprinkler system by the Pacific Fire Rating Bureau.

2. All 200 housing units are finished, except for a few minor items, and have been purchased by the Alaska State Housing Authority from the contractor.

3. Modifications to the plumbing systems and bathrooms in 66 houses have not as yet been contracted for.

4. The sewer and water distribution systems, well, sewage treatment lagoon, and pumphouse contract is in process and is scheduled for completion in June 1970. This is a Public Health Service contract.

5. The boat harbor and access channel project has been approved by Congress and is awaiting funding. Estimated construction schedule is summer 1971. This is a Corps of Engineers project.

Other elements of the Bethel housing project—or projects relating to it—are progressing well. The State's regional high school (which will share the project area), the sewer and water systems, and the street system are expected to be advertised for bid in April. The dormitory facilities, to be built by the Bureau of Indian Affairs, likewise will be bid this spring. A neighborhood facilities building has been approved by the Department of Housing and Urban Development and will be built this summer near the project. An interdenominational chapel is already in the project, and the city of Bethel is planning a neighborhood shopping center nearby.

The nonconstruction aspects of the Bethel housing project are also developing nicely. The Alaska State Housing Authority has recently completed and published the "Bethel Comprehensive Community Plan." A contract in an amount not to exceed $9,000 is about to be let for a survey of the project area. This is a three-way partnership venture between the Department of Housing and Urban Development, the city of Bethel, and the Alaska Department of Education; and it was arranged by the Federal Field Committee.

The city of Bethel, with help and advice from the Federal Field Committee, is proceeding with a plan to prevent reoccupancy of substandard housing vacated by Bethel housing project tenants. The city is also working on a plan for utilization of the multipurpose building when it is released by the lessee.

In recent weeks the Federal Field Committee has participated in meetings on the renewal of the Office of Economic Opportunity grant for project management and training, negotiations leading to final payment to the contractor on the multipurpose building, the sale of the city's bonds to the Economic Development Administration, and a proposal to convert 50 of the houses to the FHA section 235 program in order to sell them to middle-income persons.

In the past week the Federal Field Committee has received from the Alaska State Housing Authority (who contracted with the Field Committee for the study, which was financed by a technical assistance grant from the Economic Development Administration in the amount of $15,000) the final draft of the Bethel Phase II Report, which deals with the future utilization of the multipurpose building. The finished report will be submitted within 10 days.

Also, the Field Cbmmittee has received the draft of the final report from the Kuskokwim Forest Resources Committee, which investigated the feasibility of

using Kuskokwim white spruce in the project houses. This effort was also funded by a technical assistance grant from the Economic Development Administration.

In addition, work is going ahead on a third study, which is being done by the University of Alaska for the Federal Field Committee, on the impact of the Bethel housing project on the economy of Bethel.

In Bethel, the housing staff is still in process of moving families into the new homes. Nearly half of the homes still have no electrical service due to lack of supplies by the local utility. In the last 6 months the city has improved police protection, street lighting, and rubbish collection services in the project area. A new bus service has been started and telephone service is being improved.

Agencies participating in the BHP are from all levels of government. Some are primary; that is, funding partners, and others are cooperating with land, people, or program services. The participating partners, by type and degree are as follows:

FEDERAL AGENCY

	Type of participation
Housing Assistance Administration (HUD)	200 Turnkey houses, $2,800,000.
Economic Development Administration (Commerce)	Grant and loan, $694,000. Multipurpose community center and training facility.
USPHS, HEW	Sewer and water systems, $1,750,000
OEO, Office of the President	Project coordination and management social training, $85,000 per year.
Alaska District, Corps of Engineers	Access channel and boat harbor, $500,000.
Bureau of Land Management (Interior)	317 acres land for project, 425 acres land for factory, 40 acres land for project.
Department of Education (HEW)	Training program $40,000, first year only.
Department of Labor (Labor)	On-the-job training $40,000, first year only.
Bureau of Indian Affairs (Interior)	Rent supplement, social services to homeowners. Regular budgeted programs. Also dormitory for regional high school.
Farmers Home Administration (USDA)	Sewer and water planning grant $5,000.
Federal Housing Administration (HUD)	Middle income mortgage loans. Offer to guarantee up to 50 mortgages for middle income purchases.

STATE AGENCY

ASHA	Administers contract on houses, supervises turnkey project planning.
State division of lands (Department of Natural Resources)	Transferred land to city.
State department education and State department labor	Administers training programs.
State department of education	Regional high school.
Rural cap	Administers OEO funds.

MUNICIPAL AGENCY

City of Bethel	Bonds sold, $119,000 city pledges repayment. Also access channel local shore, $164,000. Agrees to acquire right-of-way for channel, and transfers land to developer and to State department education.

Mr. SHARROCK. We have this problem of employment which will be partly solved because the hospital will hire Natives, and the school system will hire Natives. They are only doing this in these areas and over a period of time. As I indicated before, if they are given employment opportunities their educational opportunities will be greater in

these urban centers, they will have better health facilities, which is something that is just terrible in some areas. I don't know whether you know of the health situation there in the city of Bethel. The infant death rate is 120 per thousand.

HEALTH CONDITIONS

Mrs. HANSEN. The health conditions of the Native population are very poor in Alaska.

Mr. SHARROCK. Yes; this is true. These are some of the many concerns. I don't think the Federal Government will turn its back on the Natives.

Mrs. HANSEN. It hadn't better.

Mr. SHARROCK. The State is going to have to take over more responsibilities, particularly in the schools. They have taken over 20 now.

(Discussion off the record.)

PARTICIPATION AND ACTIVITIES INVOLVED WITH NATIVES

Mr. SHARROCK. Could I make a statement for the record in regard to our participation and activities involved with the Natives?

Mrs. HANSEN. Please do.

Mr. SHARROCK. Especially on training and education. We have had a staff man who is not presently with us, Bob Arnold, whom you may also know or know about. He is now in business for himself. He has worked almost continuously on this problem and has done a tremendous amount of work which I think is of benefit to the Native people.

We have a staff member who is on the Governor's Cross-Cultural Education Commission, which gets into the problems of the Natives, the difference in culture and what might be required to bring the Natives in to our way of life, which he is going to have to do over a period of time.

We are also involved in this Native hire program and we have attempted at every turn to encourage the Federal agencies to hire people. I think you all have seen some results in our report there, the Federal employment percentage which has increased from a little less than 10, I think, up to 12½. This is also in view of the fact that the total Federal employment has dropped off, so that the Native employment has increased to a considerable number there.

We are also involved, of course, in the housing program. We are presently attempting to coordinate a program for the city of Nome for housing, for low-income housing such as is presently being carried on at Bethel. We hope to be able to bring into fruition in the very near future this housing program. The same agencies would be involved exactly as they are in the Bethel project.

ALASKA COMMUNICATIONS SYSTEM

Mrs. HANSEN. You have a full service communications system in Alaska, how well is it operating?

Mr. SHARROCK. As you know, the Alaska communications system is in the process of being sold to RCA. The Federal Field Committee was involved very extensively in communications a couple of years ago when a conference was held to try to get a picture of what the communications system was in Alaska and what might be required, what the requirements would be for the future. Unfortunately, nothing came of it because we were not able to get into the thing in depth. However,

this year we have been able to generate enough interest in Federal agencies to have the White House appoint an interdepartmental communications study group headed by the Department of Commerce. This study is going on at the present time.

The State is also participating to the amount of $100,000 in the study. It is hoped that this study will come up with recommendations for a communications system that can be incorporated in the certification hearing for RCA, which is coming up in the near future. In this way we can get the very latest in technology, including satellite communications.

We feel this is really the only way we can get good communications throughout Alaska, by satellite. This is because of the tremendous distances involved. If we can get a satellite communications system set up there where we can bring television and good communications to all these villages, I think we will have accomplished a great deal toward bringing them into the American way of life. This will take a little time.

The study is under way now and hopefully will be terminated within the next couple of months.

Mrs. HANSEN. After I met so many of these thoughtful, mannerly Eskimo people I am not sure that bringing them into the American way of life is going to be very salutory.

Mr. SHARROCK. I agree with you there. But the way they live now certainly is not very good either.

Mrs. HANSEN. That is right. However, it could have been improved years ago.

Mr. SHARROCK. I am sure it could have been.

Mrs. HANSEN. There are many things that could have been done.

Mr. HAWKINS. May I add one item to that communications study? One of the big hopes is that through the use of satellite communications there can be in each native village a receiving station where educational television can be a very direct influence on the educational system for the native people. In almost no other way can the children learn both English as a second language and the concept of the broader world. We think that this is a major component. It has to be a major component of this system.

Mrs. HANSEN. It will also assist you in your health programs.

Mr. SHARROCK. This is a point which I wanted to bring out because we now have a sad lack of good communication between the villages. They have had only radio, and sometimes it is 4 or 5 days when they cannot even get through. Most of the villages have just a nurse-type individual who doesn't know too much about medicine, and they have to get in contact with a doctor in one of the hospitals in order to get information and try to diagnose and see what the problem is, and then the doctor can prescribe some kind of treatment.

With better communications, this will solve that problem. But television would go even further in an instructional way for health purposes, also, which these people have a tremendous lack of now.

Mrs. HANSEN. Yes, they need preventive medicine and preventive health work.

Mr. SHARROCK. Yes.

LAND CLAIMS

Mr. REIFEL. Madam Chairman, Jim was in education with the State before he went to the Bureau of Indian Affairs. Is that right?

Mr. HAWKINS. At the time I was a teacher and a principal with the Territory of Alaska, Madam Chairman. I preceded the State by some 8 or 9 years.

Mrs. HANSEN Does your committee participate in handling land claims?

Mr. SHARROCK. The Field Committee has participated to a great degree in the past—this was prior to my having come to this position—in the work that was done over the last couple of years and results in two things. It resulted in the publication called "Alaska Natives and the Land," of which I am sure you have seen copies, and also recommendations for legislation which were generally incorporated in Senate bill 1830 which is being considered now.

Presently Mr. Hickok is down here, and also Dr. Tussing is working with the Senate Committee on Interior and Insular Affairs. Dr. Tussing has been here for a couple of weeks working, and during this week Mr. Hickok has been working with them on this final draft of the bill.

Mr. HICKOK. The objective is to get a bill out.

Mrs. HANSEN. You can't accomplish very much until the land questions are resolved.

Mr. SHARROCK. That is right.

Mrs. HANSEN. The Alaskan natives are not going to be happy if they don't receive their share of the resources.

Mr. SHARROCK. They have a right to share in everything that goes on up there.

Mrs. HANSEN. That is right. They were there first.

Mr. HAWKINS. The Federal Field Committee can play a major part in order to provide a steadying influence to keep them from private exploitation.

LEGAL AID

Mrs. HANSEN. This is an area in which you are going to be called upon to give a lot of legal aid.

Mr. HAWKINS. Yes.

Mrs. HANSEN. My district has many timber contracts that have been signed by Indians who didn't have the vaguest idea of what was in that contract. Then they find themselves today the victims of all kinds of shenanigans. If they had had the advice and counsel of a trained attorney these things would not have happened. But here were people who couldn't read or write who had had no experience in dealing with the problems that landowners deal with. Landowning is no longer a luxury. It is a responsibility. Even today some of the young people, who suddenly find themselves as landowners have discovered all kinds of difficulties that landowning brings. This type of exploitation can happen in Alaska if you don't provide legal assistance.

Are you working with the State to develop an intelligent land-use plan?

Mr. SHARROCK. This is a problem that certainly needs solving in Alaska. There is a great amount of land—of course, most of this lies in the public domain, that has not been classified. As a matter of fact,

at this point, there isn't sufficient information to know how to classify it.

Mrs. HANSEN. The BLM said at their hearing, that it would require about 50 years to finish the land survey programs at the present speed allowed by the Bureau of the Budget.

Mr. SHARROCK. This is something I think the State will have to take a position on, even if it is on public domain lands. But certainly, on their own land which they select they are going to have to get into this Geological Survey, and remote sensing, and whatever they have to do, in order to determine it.

EROS SATELLITE

Mrs. HANSEN. I have news for you. Part of the funds for the Geological Survey EROS satellite program has been placed in reserve by the Bureau of the Budget.

You know you can plan forever but until the necessary funds are provided you won't be able to implement these programs.

Mr. SHARROCK. We are going to work on this. This will be one of our points that will be very much stressed during the next year, to try to get programs for information.

What we are concerned with, Madam Chairman, is that the land be used for some purpose now which perhaps it is not best suited for.

Mrs. HANSEN. I understand, but if the land ownership is in controversy, you will have three elements to consider. You will have the Indian claims, the State claims, and the Federal Government claims. Mr. Rasmussen, of the Bureau of Land Management, testified that they are not going to complete their land survey in Alaska for 50 years.

Mr. SHARROCK. What may be required in the meantime—and this is one of the things I know Mr. Hickok is very much interested in and we are interested in—is getting sufficient information. If it turns out that it would be our recommendation that certain portions of the land be reserved for one reason or another until it is determined what is necessary, what classification it ought to have, how it ought to be zoned, then we would want to make recommendations of this kind to the Federal agencies. It ought to be done before irrevocable things are done on the land that can't be recalled.

Mrs. HANSEN. The committee completely agrees and this is why the committee was so interested in our satellite sensing program, because this program would have given some answers on the amount of the inventory of our natural resources and also on our potentials.

However, that program was curtailed by the Bureau of the Budget.

ENVIRONMENTAL QUALITY

You say on page 9 of your justifications: "In concert with the State and the private sector to determine the fiscal and social impact of the Prudhoe Bay oil discovery and to assist in the development of Federal planning to maximize the opportunities presented by this discovery for the economic development of Alaska. In providing for this development planning the problem of environmental quality will be of major importance."

The committee has discussed the problems of environmental quality in great depth and I would suggest you read the committee hearings of last year, because the committee felt very keenly that any dis-

turbance of the terrain should be carefully evaluated. The committee also felt that the costs that were involved with this should be paid for by the people who were going to receive the profits.

In other words, if a State or an oil company is receiving a royalty they should meet the environmental costs. However, the Federal Government is now faced with the responsibility for protecting a sizable number of miles of terrain across some of the most fragile country, to maintain the environment and to make sure that in an earthquake-prone area that no disaster occurs.

Mr. SHARROCK. Madam Chairman, might I say that Mr. Hickok has been working essentially 80 percent of his time in the past few months with other Federal agencies and the State agencies on these very problems. I think it is contributing a great deal to the outcome.

Mr. HICKOK. Thank you, George.

Madam Chairman, may I make a comment here?

Mrs. HANSEN. Surely.

Mr. HICKOK. Your remarks on the pipeline and the costs I think were very well taken in the earlier testimony of the regular Committee on Interior and Insular Affairs.

There is one major problem that I have been trying to get anyone who would, to listen to me, and this involves the idea that no one is doing anything to plan for the future on either end of the pipeline.

Mrs. HANSEN. This committee is concerned, but apparently nothing can be done unless the State government cooperates.

Mr. HAWKINS. Not completely, Madam Chairman.

Mrs. HANSEN. This committee is deeply concerned that the oil ships be adequately maintained. Secretary Hickel, in his first appearance this year before the committee, warned that one of the most dangerous causes of an oil spill is when the oil is being transported.

Mr. HICKOK. Actually the pipeline is a very safe way of transporting oil, but, as you know, from your fisheries experience over the years, the Valdez area and Prince William Sound is an intertidal zone spawning area and a spill there is going to be disastrous to the fishing industry in that area. We need a great deal of cooperation between Government and all the agencies and industry in that area. On the northern end we are really talking about the roots of the system, if we may liken the pipeline itself to the trunk of a tree. The feeder lines and roads will be all over the north, and there needs to be some planning for the juxtaposition of these so that whole vast habitats are not unnecessarily used.

ANIMAL HABITATS

Mrs. HANSEN. Don't the reindeer and the polar bears inhabit those areas?

Mr. HICKOK. We are quite concerned about these things. I have a number of pictures I can show you off the record.

Mrs. HANSEN. Have you had a favorable response from the State and private industry?

Mr. HICKOK. Yes, but it is generally at the higher levels. You can get accord at the higher levels on these things; it is to get the troops, so to speak, working that is rather difficult.

Mrs. HANSEN. What can be done? A company policy is determined, as you are well aware at a very high level. But this policy has to be

reflected by the workmen who are constructing the road so that a disaster will not occur.

Mr. HICKOK. Yes.

CONFERENCES WITH STATE GOVERNMENT

Mr. SHARROCK. Over the past 6 or 7 months, we have had a number of conferences with the Governor of Alaska for various problems, but mainly to work out an arrangement between the State government and the Federal Field Committee whereby the State planning and the Federal agency planning can be coordinated. First of all, to eliminate any duplication and make sure we are all going in the same direction on the plan, and hopefully this will improve the efficiency of the spending of State and Federal moneys in Alaska.

Mrs. HANSEN. Prior to the discovery of oil in Alaska, the Federal Government had been appropriating funds for Alaska because there was a very deep interest in Alaska and great sympathy. But if the State government fails to spend its funds wisely, and well, you are going to have a difficult time receiving funds from the Federal Government for something that the State government should have done.

Mr. SHARROCK. I think you are right. It is still going to require priorities for many projects of the State. The Governor has requested the legislature to put $500 million in a deep freeze by a constitutional change. Whether this will be done or not, the chances are there will be a large reserve, at least $500 million, set aside and not be spent at all. But there will still be priorities required. It is our aim to attempt to get the State government to dovetail their planning so that as the priorities are developed, the Federal agencies can then make their planning in accordance with what the State has already done. It will require long-range planning. The State, up to this point, has not had the capability of doing long-range planning. This year the Governor has a considerable amount, $686,000, I think, in his budget for planning, which should make it possible for them to get in and do some long-range planning.

Mrs. HANSEN. My guess is that this is only the beginning of resource development. The oil program is only the beginning. Dr. Pecora of the Geological Survey testified last December, that they were taking such care in this initial program because it might very well set a pattern for the management of many pipelines or many other similar resource programs to follow.

Mr. Obey.

Mr. OBEY. I have no questions, Madam Chairman.

Mrs. HANSEN. Mr. Reifel.

Mr. REIFEL. I have no questions, Madam Chairman.

Mrs. HANSEN. Thank you very much.

Mr. Sharrock, the committee is deeply concerned and very sympathetic to Alaska because we are aware of the problems and we would like to make sure that all the planning is done.

Mr. SHARROCK. I certainly appreciate the opportunity of giving you this information.

Mr. REIFEL. I think Mr. Sharrock has made a wonderful presentation here, supported by Mr. Hawkins.

Mr. HAWKINS. It is good to be here.

Mrs. HANSEN. Thank you very much.

WEDNESDAY, APRIL 8, 1970.

NATIONAL CAPITAL PLANNING COMMISSION

WITNESSES

G. FRANKLIN EDWARDS, ACTING CHAIRMAN
CHARLES H. CONRAD, EXECUTIVE DIRECTOR
DANIEL H. SHEAR, GENERAL COUNSEL AND SECRETARY
JOHN R. PRITCHARD, ASSISTANT EXECUTIVE DIRECTOR (ADMINISTRATION)

Mrs. HANSEN. We now will hear the National Capital Planning Commission and the principal witness is G. Franklin Edwards, Acting Chairman. Insert in the record pages 1 through 24 of the justifications.

(The justifications follow:)

NATIONAL CAPITAL PLANNING COMMISSION
ANALYSIS OF INCREASES, FISCAL YEAR 1971

SALARIES & EXPENSES APPROPRIATION FY 1970	$ 992,700
Anticipated pay increase supplemental, for pay increases effective July, 1969	75,000
SALARIES & EXPENSES APPROPRIATION FY 1970 (Adjusted)	1,067,700
Increases proposed for Fiscal Year 1971:	
Refinancing of 4 positions previously funded	50,270
Funds for reallocation of some existing positions in Fiscal Year 1971	10,000
Five new positions (36% of full year salary only)	25,530*
Personnel benefits for new positions and refinanced positions.	9,000
Related expenses for new positions	2,500
Projects and Studies	225,000
Total increase	322,300
TOTAL BUDGET ESTIMATE, SALARIES AND EXPENSES, FISCAL YEAR 1971 .	1,390,000

	Permanent Full-time Positions			
	FY 1969	FY 1970	Increase	FY 1971
National Capital Planning Commission	61	57	9	66

* In addition $25,000 for the new positions will be financed by transfer of $25,000 from Printing and Binding.

INCREASES BY PRIORITY

Program Priority			
I	Refinancing of 4 positions previously funded: Reallocation of a number of permanent positions to higher pay grades and receipt of insufficient funds to fully cover legislative pay increases for 1967, 1968 and 1969 necessitated abolishment of 4 permanent positions because of lack of funds. Refinancing these positions is requested as follows:		
	Urban Planner, Public Information Services, GS-11	$11,233	
	Urban Planner, Comprehensive Planning Division, GS-9	9,320	
	Architect, Area Design Office, GS-9	11,186	
	Dep. Asst. Director, Federal Planning Division, GS-14	18,531	$50,270
	Funds for reallocation of some existing positions in Fiscal Year 1971. It is necessary each year to reallocate some positions upward to conform to Civil Service Commission classification standards, as duties and responsibilities increase. Estimated reallocations in FY 1971 will cost		10,000
II	Regional Air Facilities Study		100,000
III	District Planning		
	Urban Planner, GS-13		15,812
	Transportation Planning		
	Asst. Transportation Planner, GS-12		13,389
IV	Georgetown Development Study		75,000
	Zoning Regulations Revision		50,000
V	Comprehensive Planning		
	Urban Planner, GS-12	13,389	
	Urban Planner, GS-12	13,389	26,778
	Federal Planning		
	Program Planner, GS-12		13,389

Deduct approximately 25% of cost of new positions for Fiscal Year 1971 due to savings in delay in filling at start of Fiscal Year	-18,838
Deduct portion of new positions to be financed by transfer from "Printing and Binding"	-25,000
Personnel benefits for 5 new positions and 4 refinanced positions	9,000
Supplies, materials, etc.	2,500
TOTAL INCREASES, FISCAL YEAR 1971	$ 322,300

NARRATIVE JUSTIFICATION FOR INCREASES

Reestablishing Fiscal Year 1970 Positions

1. Office of Public Information Services

An Urban Planner (GS-11) is required to assist the Chief of this office in writing and editing materials for Commission and community distribution, providing information on the Commission's policies and activities to the community, visitors and other interested groups, and participating in numerous meetings and presentations with other public agencies and community groups.

2. Comprehensive Planning Division

An Urban Planner (GS-9) is required to provide additional technical assistance in the preparation of the various elements of the Comprehensive Plan for the National Capital. In particular, work is required on the refinement of the over-all park and playground system plan, local shopping area analyses, employment within the District by block, and the up-dating of population and employment inventories as related to specific programs specified in the Comprehensive Plan.

3. Office of Area Design

An Architect (GS-9) is required for additional urban design inputs into the Comprehensive Plan and for specific program requirements, including uptown centers at various rail rapid transit station locations, design studies of various portions within the L'Enfant City, and area-wide design studies in connection with detailing of the Comprehensive Plan. In addition, this urban designer would assist the Area Design Office in design review of specific Federal and District projects, the work load for which has considerably increased over the last several years.

4. Federal Planning Division

An Urban Planner (GS-14) is required to serve as the Deputy Assistant Director for this Division which is largely responsible for the day-to-day liaison and coordination between the Commission and the many independent agencies and departments within the Executive Branch of the Federal Government. These contacts involve requests for information and data, requests for technical advice and assistance, review of master plans, project plans, fiscal year budget requests, six-year programs of land acquisition and/or construction, projected changes in the utilization of Federal land and/or changes in Federal employment levels at various sites in the National Capital Region and representation on various interagency committees.

These liaison and coordination activities of the Federal Planning Division are very important to the effectiveness of the Commission as the central physical planning agency of the Federal Government. They cannot be handled entirely by the division chief alone in addition to all his other duties. An experienced, mature, professionally-qualified person is needed as the Deputy Assistant Director to assist the Assistant Director in these liaison activities and in the day-to-day direction and supervision of the Division's staff.

Fiscal Year 1971 Increases

The requested 1971 Fiscal Year increases are based on the following broad program considerations:

I. Refinancing of four positions previously funded (as described above). In the past the Commission has requested increases to cover the expense of past reallocations and pay increases. These requests have not been granted by the Congress. The permanent staff allocation has therefore been reduced from 61 to 57 positions to cover these reallocations and pay increase costs and a new working base has been established to compute present and future budget needs. However, in order to provide adequate personnel for ongoing activities and functions which have already been authorized by the Bureau of the Budget and the Congress, the current budget requests reinstatement of these four positions.

II. Regional Airport Facilities Study. The Commission is currently endeavoring to put together with the cooperation of the Department of Transportation, Baltimore Regional Planning Council, Metropolitan Washington Council of Governments, and other interested agencies the Regional Airport Facilities Study. Such a plan would vitally affect the transportation features within the central city and the future utilization of the Washington National Airport and other air terminal facilities in the Baltimore/Washington area. This study would determine the most efficient system of air terminals in the Washington-Baltimore Regions and relate the required terminals to land use policies and programs.

III. Strengthening the District Planning Program. The proposed increases contemplate strengthening the District Planning Division to aid the District Government in overall municipal, public works and project planning. During the past year, the Commission prepared a Six-Year Public Works Program for the District Government and outlined planning procedures for review of annual public works programs.

The Commission places high priority on the additional planner requested for the District Planning Division. The position is essential to provide the technical services for developing and coordinating master plans for major District installations, for initiating projects and establishing priorities within the six-year capital improvements program, and for insuring the coordination of various District of Columbia projects, programs and proposals with existing and/or proposed Federal projects or programs in the District of Columbia.

Transportation is one of the most critical issues before the District. In strengthening the Commission's capacity to serve the District, therefore, an Assistant Transportation Planner is also requested.

IV. High Priority Projects. There are several projects which should be planned immediately to promote positive social and economic benefits for the District. These include plans and programs for the overall development of the Georgetown Waterfront up to M Street in conjunction with the Potomac River Expressway and the comprehensive re-zoning study of the District.

V. Comprehensive and Federal Planning Programs. As a consequence of the establishment by the District Government of urban progress centers in various locations in the city, the Commission desires to provide at each of these urban progress centers technical planning assistance for the citizens to be served by these centers. Initial priority has been assigned to two additional Urban Planners whose principal assignment would be working in established urban progress centers.

It is also particularly important that the Commission's Federal Employment study and the Federal Employment Plan and Program for the National Capital Region be kept current and systematically extended to provide a basis for current decisions in the Region. In addition, it is important to give further study to the methods and techniques available or that may be needed to carry out Federal Employment plans and policies in the Region in concert with regional development policies.

NATIONAL CAPITAL PLANNING COMMISSION
FISCAL YEAR 1971 BUDGET
ANALYSIS BY OBJECT CLASSIFICATION -- SALARIES & EXPENSES APPROPRIATION
(Obligational Basis)

	Actual F.Y. 1969	Budgeted F.Y. 1969	Budgeted F.Y. 1970	F.Y. 1971 Increases	Est. F.Y. 1971
Activity, National Capital Planning Commission:					
Permanent positions (net of lapses)	$683,747	$690,321	$779,825	$110,800	$890,625
Seasonal and temporary employees	16,090	18,500	16,000		16,000
Part time & WAE	1,763	1,500	4,000		4,000
Overtime & holiday pay	5,549	6,000	6,000		6,000
Total personnel compensation	707,149	716,321	805,825	110,800	916,625
Personnel Benefits	51,784	56,379	64,125	9,000	73,125
Awards to employees	1,800	500	500		500
Travel of Commission members	4,722	6,000	6,000		6,000
Travel of staff	2,474	9,000	9,000		9,000
Vehicle rent	1,613	2,100	2,100		2,100
Transportation of household goods		7,000	7,000		7,000
Rent, communications, and utilities	23,606	27,750	26,350	500	26,850
Duplicating expenses	7,690	5,500	7,000	500	7,500
Printing and binding	12,744	57,500	57,500	-25,000	32,500
Contracts with experts	36,500	35,000	35,000	225,000	260,000
Reporting services	4,798	5,300	5,300		5,300
Other services	11,608	12,500	12,500		12,500
Services of other government agencies	8,591	7,200	7,850		7,850
Supplies and materials	16,769	15,650	15,650	1,500	17,150
Equipment	5,308	6,000	6,000		6,000
Total, National Capital Planning Comm.	897,155	969,700	1,067,700*	322,300	1,390,000
Activity, Temporary Commission on Pennsylvania Avenue:					
Permanent positions	27,117	27,144	10,509		
Seasonal and temporary employees	9,233	14,223	3,651		
Part time & WAE	2,955				
Overtime & holiday pay	199		656		
Total personnel compensation	39,504	41,367	14,816		
Personnel Benefits	2,541	3,100	823		
Benefits for former employees			930		
Travel	4,015	7,800	1,920		
Vehicle rent		100			
Rent, communications, and utilities	2,976	3,960	801		
Printing and reproduction	15,594	3,500	107		
Other services	9,744	15,473	329		
Services of other government agencies	275				
Supplies and materials	2,383	1,500	232		
Equipment	81	500			
Total, Pennsylvania Avenue Commission	77,113	77,300	19,958**		
GRAND TOTAL	974,268	1,047,000	1,087,658*	322,300	1,390,000

* Includes estimated pay increase supplemental of $75,000 for NCPC.
** These funds provided through P. L. 91-33.

ANALYSIS OF OBLIGATIONS BY MAJOR FUNCTIONS
(In thousands of dollars)

Function	Fiscal Year 1970 Permanent Positions		Other Costs*	Printing Costs	Experts & Cons.	F.Y. 1970 Totals	Fiscal Year 1971 Increases		F.Y.1971 Totals
Office of Executive Director	(2)	$43	$12	$	$	$ 55		$	$55
Public Information Serv.	(3)	38	5	57		100	(1)	-13***	87
Administrative Services	(6)	73	16			89		2	91
Legal Services	(3)	44	12			56		2	58
Sub-total	(14)	198	45	57		300	(1)	-9	291
Long Range Planning & Regional Affairs									
Office of Director	(3)	48	7			55			55
Zoning & Development	(1)	25	1			26			26
Historic Preservation	(1)	12	1			13			13
Cartographic Services	(5)	46	12			58			58
Library Services	(1)	7	4			11			11
Area Design Office	(2)	38	12			50	(1)	12	62
Comprehensive Planning	(4)	65	16			81	(3)	40	121
Socio-Economic Research	(5)	55	15			70			70
Regional Affairs	(4)	60	16			76			78
Sub-total	(26)	356	84			440	(4)	54	494
Current Planning & Programming									
Office of Director	(2)	38	7			45			45
Project Coordinator	(1)	14	2			16			16
Transportation Office	(1)	22	2			24	(1)	15	39
District Planning	(5)	72	16			88	(1)	21	109
Federal Planning	(4)	59	16			75	(2)	35	110
Urban Renewal & Housing	(4)	63	16			79			79
Sub-total	(17)	268	59			327	(4)	71	398
Deduct Programmed lapse		-42				-42			-42
Deduct portion of new positions to be financed in F.Y. 1971								-19	-19
Travel Expenses, Commission Members			6			6			6
Special Projects or Studies			35		2	37		225	262
Totals	(57)	780	229	57	2	1,068**	(9)	322	1,390

* General costs prorated. Identifiable major elements included in the functions.
** Includes anticipated supplemental of $75.
*** Net of increase of $12 for restored position, less transfer of $25 from printing costs to personnel costs.
( ) Represents number of permanent positions.

STAFF ORGANIZATION FOR PLANNING
IN THE NATIONAL CAPITAL REGION
SALARIES AND EXPENSES APPROPRIATION

Fiscal Years 1970 and 1971
(Proposed 1971 Positions indicated by *)
(Restoration of Previous Positions Indicated by **)

OFFICE OF EXECUTIVE DIRECTOR
1. Executive Director, GS-17
2. Secretary (Steno.), GS-8

OFFICE OF GENERAL COUNSEL & SECRETARY
3. General Counsel, GS-15
4. Attorney-Adviser, GS-11
5. Secretary (Steno.), GS-6

PUBLIC INFORMATION SERVICES
6. Chief, Public Info. Services, GS-13
7. Urban Planner, GS-11 **
8. Illustrator, GS-11
9. Secretary (Steno.), GS-6

ADMINISTRATIVE SERVICES
10. Asst. Exec. Director (Adm.), GS-15
11. Asst. Adm. Officer, GS-12
12. Fiscal Acctg. Asst., GS-8
13. Personnel Asst., GS-7
14. Clerk-Typing, GS-5
15. Chauffeur, Ungraded

LONG RANGE PLANNING AND REGIONAL AFFAIRS

16. Director, LRP&RA, GS-16
17. Secretary (Steno.), GS-7
18. Special Asst. (Zoning & Develop.), GS-15
19. Writer-Editor, GS-11
20. Library Technician, GS-5
21. Social Science Analyst, GS-7

COMPREHENSIVE PLANNING DIVISION
22. Asst. Director, CP, GS-15
23. Deputy Asst. Director, CP, GS-14
24. Urban Planner, GS-12*
25. Urban Planner, GS-12*
26. Urban Planner, GS-12
27. Urban Planner, GS-9**
28. Clerk-Steno., GS-5

REGIONAL AFFAIRS DIVISION
29. Asst. Director, Reg. Aff., GS-15
30. Dep. Asst. Dir., Reg. Aff., GS-13
31. Urban Planner, GS-12
32. Clerk-Steno., GS-4

SOCIO-ECONOMIC RESEARCH DIVISION
33. Asst. Dir., Socio-Econ. Res., GS-15
34. Soc. Science Analyst, GS-11
35. Soc. Science Analyst, GS-7
36. Statistical Clerk, GS-5
37. Clerk-Steno., GS-5

AREA DESIGN OFFICE
38. Chief, Area Design Office, GS-14
39. Architect, GS-13
40. Architect, GS-9**

CARTOGRAPHIC OFFICE
41. Supv. Carto. Technician, GS-9
42. Cartographic Technician, GS-7
43. Cartographic Technician, GS-7
44. Cartographic Technician, GS-7
45. Architect, GS-5

CURRENT PLANNING AND PROGRAMMING

46. Director, CP&P, GS-16
47. Administrative Asst., GS-12
48. Secretary, GS-7

DISTRICT PLANNING DIVISION
49. Chief, District Plann. Div., GS-15
50. Urban Planner, GS-14
51. Urban Planner, GS-13*
52. Urban Planner, GS-12
53. Architect, GS-7
54. Secretary (Typing), GS-5

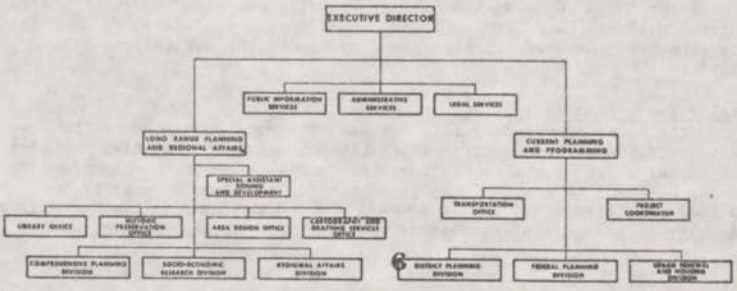
FEDERAL PLANNING DIVISION
55. Asst. Director, Fed. Plann., GS-15
56. Dep. Asst. Dir., Fed. Plann., GS-14**
57. Landscape Architect, GS-12
58. Program Planner, GS-12*
59. Architect, GS-12
60. Clerk-Steno., GS-5

URBAN RENEWAL & HOUSING DIVISION
61. Asst. Director, UR&HD, GS-15
62. Dep. Asst. Director, UR&HD, GS-14
63. Planning Aide, GS-10
64. Secretary, GS-6

TRANSPORTATION PLANNING OFFICE
65. Chief, Transportation Plann., GS-14
66. Asst. Transportation Planner, GS-12*

New positions for National Capital Planning Commission total 5.

Restoration of previous positions for National Capital Planning Commission total 4.



NATIONAL CAPITAL PLANNING COMMISSION
Fiscal Year 1971 Appropriation Estimates
PROGRAM and PERFORMANCE

The National Capital Planning Commission was created by the National Capital Planning Act of 1952 (40 U.S.C. 71-71i; D. C. Code, secs. 1-1001 to 1-1010) as the central planning agency for the Federal and District of Columbia Governments "to plan the appropriate and orderly development and redevelopment of the National Capital and the conservation of the important natural and historical features thereof." The Commission succeeded the National Capital Park and Planning Commission, established in 1926.

The Act has as its purposes the securing of comprehensive planning for the physical development of the National Capital and its environs, providing for the participation of the appropriate planning agencies of the environs in such planning, and establishing "the agency and procedures requisite to the administration of the functions of the Federal and District of Columbia Governments related to such planning." Accordingly, the Commission is "charged with the duty of preparing and adopting a comprehensive, consistent, and coordinated plan for the National Capital * * *" and with reviewing and making recommendations on plans originated by Federal and District agencies for proposed developments and projects in the National Capital Region "in preliminary and successive stages."

Within the environs of the District of Columbia, general plans showing the location, character, extent, and intensity of use for proposed Federal and District developments are required to be reviewed by the Commission and, through the Commission, by the appropriate planning agency having jurisdiction over the affected part of the environs. The National Capital is defined in the Act as "the District of Columbia and territory owned by the United States within the environs" (environs means "the territory surrounding the District of Columbia included within the National Capital Region"); and the National Capital Region consists of the District of Columbia, Montgomery and Prince Georges Counties in Maryland, Arlington, Fairfax, Loudoun and Prince William Counties in Virginia, and all cities in Maryland and Virginia within the outer limits of such counties.

Provisions of other laws--especially the zoning enabling act for the District of Columbia (D. C. Code secs. 5-701 to 5-719) and the District of Columbia Redevelopment Act of 1945, as amended (D. C. Code secs. 5-413 to 5-428)--place significant additional responsibilities upon the Commission. These include (1) making recommendations to the Zoning Commission of the District of Columbia on amendments to the text and maps of the Zoning Regulations and on large scale planned developments under section 7501 of the Regulations and to the Board of Zoning Adjustment on applications for certain uses required to be referred to the Commission under the Regulations; (2) adoption of boundaries of urban renewal areas and the preparation, adoption, and modification of urban renewal plans; (3) approval of the Permanent System of Highways Plan and amendments thereto (D. C. Code, secs. 7-108 7-113, and 7-122); (4) recommendations or proposed street and alley closings (D. C. Code, sec. 7-401); (5) "in lieu of zoning" approval of Federal public buildings in the District of Columbia (D. C. Code, sec. 5-428); (6) approval of transfers of jurisdiction between Federal and District agencies over properties within the District of Columbia owned by the United States or by the District of Columbia (D. C. Code sec. 8-115); (7) approval of the sale of surplus District of Columbia property (D. C. Code sec. 9-301) and surplus park land under the jurisdiction of the National Park Service (D. C. Code, sec. 9-304); and (8) acquisition of land for the park, parkway and playground system of the National Capital (U.S.C. 72).

Organization of Commission

The Commission is composed of five eminent citizens, appointed by the President, who serve without compensation; five ex-officio members from executive agencies (the Chief of Engineers of the U. S. Army, the Commissioner of the District of Columbia, the Director of the National Park Service, the Commissioner of Public Buildings, and the Director of Public Roads), and the Chairman of the Committees on the District of Columbia of the Senate and the House of Representatives.

The Commission meets monthly throughout the year to provide policy guidance for and coordination of the development programs in the District and the Region of District and Federal agencies and to review and adopt, approve, or make recommendations on matters upon which Commission action is required.

There are six standing committees of the Commission which meet regularly prior to Commission meetings. The committees review technical studies receive recommendations of the staff, and prepare committee recommendations to the Commission. In addition, the Executive Committee, consisting of the Chairman, the Vice-Chairman, and one other member, and having authority to act on behalf of the Commission between meetings of the Commission, meets when necessary.

Professional Staff

The Commission employs a highly-trained professional staff to perform technical studies and prepare recommendations to the Commission and its committees, maintain records of its meetings, make general and special urban planning studies, prepare background information on matters which are to come before the Commission, and carry out policies, instructions, and programs of the Commission.

The staff participates actively in many coordinating groups, maintains liaison with numerous official agencies and conducts an active community relations program in order to effectuate the Commission's program.

Outside experts, who have special competence on particularly important problems, are retained on occasion.

Urban renewal planning activities are carried out in part with funds received from District agencies.

Planning and Programming Coordination

The Commission's Coordinating Committee, created under the authority of section 2(d) of the National Capital Planning Act of 1952, meets twice monthly to bring together representatives of many District, Federal and neighboring jurisdiction agencies to coordinate the review, study, and comment on development plans and programs for projects within the District of Columbia. The Committee is composed of representatives from various departments of the District of Columbia Government, National Park Service, Corps of Engineers, Public Buildings Service, National Capital Planning Commission staff, and when necessary, from the Redevelopment Land Agency, Architect of the Capitol, National Capital Housing Authority, Commission of Fine Arts, Maryland-National Capital Park and Planning Commission, and Arlington County Office of Planning.

The Chairman of the Commission is a members of the Land Committee of the Metropolitan Washington Council of Governments, and the Commission is represented on the Board of Directors of the United Planning Organization. The Executive Director of the Commission is a members of the Transportation Planning Board of the Council of Governments.

In addition, the Council of Governments and the Commission have jointly formed a Regional Planning Directors Committee to review Federal and regional proposals and projects in the Washington Metropolitan Area.

PROGRAM BY ORGANIZATIONAL UNIT

I. Office of the Executive Director

The staff activities of the Commission are directed by professional urban planners. An Executive Director and two Directors constitute the supervisory personnel of the Executive Director's office. The Executive Director is responsible for all administrative functions not specifically reserved for the Chairman as head of the agency, and for all professional work of the staff.

This office formulates policy proposals on technical matters to present to the Commission; represents the Commission in carrying out its policies and programs;

and supervises, coordinates, and reviews the work of the staff. The office provides staff leadership and direction to ensure that the professional program offers appropriate guidance to the community in urban planning and urban design.

The Administrative Legal, and Public Information Services are also a part of the Office of the Executive Director.

A. Administrative Services

Since the Commission is an independent agency, all administrative functions required of a Federal agency are carried out by its own staff, including financial management, budget preparation and control, personnel, time and leave records, records and space management, property records and accountability, and general administrative routines.

B. Legal Services, Commission Secretariat

The Office of the General Counsel and Secretary performs the following activities for the Commission:

1. Serves as secretariat and parliamentarian to the Commission and its several committees and to the Coordinating Committee;

2. Provides legal services on matters of agency administration;

3. Advises the Commission and its staff on the statutory powers, duties, and functions of the Commission and on legal questions in the fields of urban planning, urban renewal and housing, transportation and the preservation of open space, and of historic and architectural landmarks;

4. Serves as legislative counsel in review of proposed and pending legislation, in the preparation of Congressional testimony, and in statutory drafting;

5. Provides legal services in the acquisition by the Commission of lands for the park, parkway, and playground system of the National Capital.

C. Public Information Services

The Public Information Services Office performs the following activities for the Commission:

1. Editing and writing publications and reports for the Commission;

2. Providing information on Commission's policies and activities to to the press, community and foreign visitors.

3. Arranging meetings and presentations of Commission plans and programs with other agencies and the public.

II. Planning Divisions

To fulfill the purpose and functions of the Commission, the professional staff is assigned into two basic groupings:

- Long Range Planning and Regional Affairs, and
- Current Planning and Programming

A. Long Range Planning and Regional Affairs

The functions of this portion of the staff are to provide the technical skills in comprehensive planning of the National Capital and its environs and to analyse private and public developments which affect Federal interests in the National Capital Region. Staff for these functions is divided between the Comprehensive Planning Division, the Regional Affairs Division, the Socio-Economic Research Division, and the Office of Area Design.

1. Office of Director for Long Range Planning and Regional Affairs

Within the Office of the Director and directly responsible to him are the Special Assistant for Zoning and Development, the Commission Librarian, and the Landmarks Coordinator.

a. Special Assistant for Zoning and Development

This office is responsible for processing zoning referrals and recommendations. The Special Assistant is a member of the Zoning Advisory Council and the Board of Zoning Adjustment of the District Government and is in charge of the Joint Zoning Study with the District Government.

Pursuant to the Zoning Regulations, certain applications are referred to the Commission for report, either to the Zoning Commission or the Board of Zoning Adjustment, prior to action thereon. During Fiscal Year 1971, in addition to such referrals, there may be proposals to change the zoning maps and regulations as a result of the joint citywide zoning study and the progressive adoption of elements of the Comprehensive Plan.

In addition to his responsibilities as a member of the Zoning Advisory Council representing the Commission and as a member of the Board of Zoning Adjustments, the Special Assistant for Zoning and Development is in charge of work on the zoning study which the Commission staff is performing with the District Zoning Commission. This study includes the examination of all of the provisions of the existing zoning regulations with a view toward recommending changes called for in the Comprehensive Plan, devising new and innovative land development techniques, and preparing specific zoning or other development regulations which would permit "uptown center" developments.

The study will take from 24 to 30 months to complete. The phases underway are preparation of base maps, evaluation of existing land-use data, preparation of procedures for land-use inventory and evaluation of present zoning regulations. During Fiscal Year 1971 there will be a complete land-use survey, further review of both existing and proposed regulations, and preparation of new amendments to the regulations and map changes.

b. Landmarks Coordinator

The National Historic Preservation Act (P.L. 89-665) and the landmarks preservation provisions of P.L. 89-754 have given new stimulus to efforts to preserve architectural and historic landmarks in the District of Columbia. The Joint Committee on Landmarks, with Commission staff support, has issued a revised list of Category I and II Landmarks within the city recommended for inclusions on the expanded National Register under the provisions of P.L. 89-665.

During Fiscal Year 1969 the District Government applied for an Urban Planning Assistance Grant to prepare a Historic Preservation Plan. Federal funding limitations prevented approval of the application. The Commission's Landmarks Coordinator therefore will devote time in Fiscal Year 1970 and Fiscal Year 1971 to documenting landmarks and preparing a revised and expanded list of landmarks of the National Capital.

2. Comprehensive Planning Division

The work of this division is divided between two main elements: developing and maintaining the Comprehensive Plan for the National Capital and the application of general plan concepts to current projects through a continuing referral process.

The responsibilities of this division include preparation of modifications to the Comprehensive Plan and development program for the National Capital, preparation of modifications to the Year 2000 Policies Plan for the National Capital Region, review and evaluation of District and Federal projects and programs to determine their conformance to the Comprehensive Plan, and special planning and design studies related to the preparation of planning district and sub-district plans within the District of Columbia.

Following the Commission's adoption of the Comprehensive Plan, scheduled for Fiscal Year 1970, the five-year period beginning with Fiscal Year 1971 should be one of continuing plan elaboration accompanied by a continuing dialogue with the community which is expected to contribute materially to the process of plan refinement.

It is the Commission's intent to up-date its twenty-year projections every five years. A major assignment of the Comprehensive Planning Division during the five-year period will be the preparation of the next version of the Comprehensive Plan dealing with a time span up to 1995.

Completion of the Comprehensive Plan will be the dominant assignment of the division through the first half of Fiscal Year 1970. Emphasis during the remainder of Fiscal Year 1970 will be placed on initiating the series of area studies and systems which will be central to the plan up-dating process. Attention is to be given to initiating in-depth area studies of Anacostia, Capitol East, Near North, and the Central Employment Area. Among supporting systems and component studies, the priority is to be given to housing within the District.

During Fiscal Year 1971 studies contributing to continued Plan formulation will dominate division work. Area studies in depth will continue to focus on Anacostia, Capitol East, Near North, and the Central Employment Area. New systems studies to be initiated in depth will include a recycling of work on schools, parks and playgrounds, and on prospective employment distribution within the District of Columbia. Also scheduled for initiation in Fiscal Year 1971 is a series of design studies of "uptown center" development potentials identifiable with priority transit station impact areas.

Steps undertaken in Fiscal Year 1970 to implement the adopted general plan (for example, a methodical capital improvements program review process) will continue in Fiscal Year 1971. In addition, the division will identify and make recommendations on the elements in the community environment which contribute to the deterioration of social and economic conditions.

FISCAL YEAR 1971 BUDGET INCREASE

2 Urban Planners (GS-12)

In order to carry out the continuing responsibilities of this division and to undertake the special studies scheduled for Fiscal Year 1971, two additional Urban Planners are requested.

These two planners, at the GS-12 level, together with existing staff, would make up the core of a special Community Planning Group having primary responsibility for in-depth area planning to be undertaken jointly with local citizen planning groups in the refinement of the Comprehensive Plan.

3. Regional Affairs Division

The major activities of this division include:

Regional review and coordination of Federal and District projects located outside of the District of Columbia.

Liaison and coordination of the Federal interest in the planning of the Region with the Metropolitan Washington Council of Governments, local and sub-regional governing bodies and planning agencies.

Preparation of a long-range Federal public improvements program for the Region in coordination with the Federal Planning Division.

Review of local, regional, and sub-regional plans and programs in order to evaluate their impact on Federal establishments in the Region.

Assistance to the Comprehensive Planning and Federal Planning Divisions in preparing long-range Federal employment plans and programs.

a. Metropolitan Development

The wedge and corridor development concept will be re-examined to determine what specific role the Federal Government should play in its effectuation. This re-examination will be conducted in cooperation with the Metropolitan Washington Council of Governments, the agency responsible for general metropolitan planning in the Region.

b. Regional review and coordination

To accomplish the regional review of Federal master development plans and projects, as required by the Planning Act, this division works directly with each of the suburban jurisdictions. As the Metropolitan Washington Council of Governments proceeds on its planning efforts, this division will coordinate the regional Federal planning interests and programs with COG's program, as well as coordinate COG's regional program with the central city's planning work. Continuous close liaison with COG will be essential.

c. Regional Open Space (The National Capital Open Space Program)

The division will continue with its effort of assisting the Metropolitan Washington Council of Governments to plan for open space in the National Capital Region. The division presently has a staff representative on the Recreation and Open Space Technical Advisory Committee which has been designated by COG to advise its Land Committee and staff on open space planning matters within the purview of the National Capital Open Space Program.

d. Federal Capital Improvements Program for the National Capital Region

As the strongest method for effective coordination and plan implementation, a framework for Federal capital improvements programming (on a six-year continuing basis) is being developed to include capital expenditures of all Federal departments and agencies.

In this framework, a total regional capital improvements program started by COG could be more fully developed and could be revised and updated each year for the projected following six years.

The Federal capital improvements program would provide the best single programming device for coordinated growth and development in the Region.

4. Socio-Economic Research Division

The functions and responsibilities of the Socio-Economic Research Division include the research program of the Commission, collection and storage of data and other information and materials pertinent to planning for the District and the Region, liaison with and participation in the research programs for the District and the Region of other Federal and District Government agencies and quasi-public and private organizations, collaboration in research and economic and social studies for and with other Divisions and Offices of the Commission, and special in-depth investigations of and policy studies pertaining to economic and social problems of the District and the Region.

Studies undertaken during Fiscal Year 1970 include:

- Problems of Small Business in the District of Columbia.

- Current Estimates of Housing Needs in Washington, D. C. and Comparisons with Other Cities.
- Population Changes in Washington, D. C. and its Suburbs.
- Public Displacement and Relocation Process in Washington, D.C.
- Ghetto Ecologies in Washington, D. C.
- Housing Programs and Proposals Study.

During Fiscal Year 1971 a series of research monographs will be initiated to present data that has been collected and analyzed during Fiscal Year 1970 and to identify problems and assist in formulating policy regarding the growth and development of the National Capital. These monographs include:

- Recent Trends in the Tax Base of the District of Columbia.
- Residential Construction Cycle in the District of Columbia and the Suburbs of the Washington Metropolitan Area Compared with Other Areas.
- Problems of Full Employment in the District of Columbia.
- Statistical Indicators of the Federal Role in the District of Columbia and the National Capital Region.
- Changes in the Urban Environment in Washington, D. C. in Response to Crime.

5. Cartographic Office

This office performs all the drafting and illustrative work necessary to support all the Divisions and Offices of the Commission. For administrative purposes the Cartographic Office is under the Director for Long Range Planning and Regional Affairs.

6. Office of Area Design

The major functions and responsibilities of this office are to provide advice and technical urban design assistance to all divisions in the review of area-wide programs, prepare special area-wide design studies and/or area-wide plans, as requested by the Commission, participate in the review and evaluation of special area-wide studies undertaken by consultants to the Commission, and supervise or direct such studies where required, and prepare design studies in connection with general plans and with prototype feasibility studies.

Area design studies during Fiscal Year 1970 include:

- Georgetown waterfront in relation to freeway location.
- Uptown center in immediate vicinity of early transit stations.
- 14th and Park Road preliminary site plan.
- Riggs Road uptown center.
- Wheeler Road area design.
- Visitors Center, Transportation Center and Convention Center.

In addition, the office reviewed and coordinated design studies undertaken by consultants on the International Center and Visitor and Transportation Centers.

The continuing process of updating the Comprehensive Plan from the design point of view will dominate the work of the Area Design Office during Fiscal Year 1971. The potential and impact of subway stations on existing neighborhoods and three dimensional aspects of a planning program will be the prime objective of this work. Analysis will be made of highway plans to affected areas, such as residential, commercial, open space, waterfront and industries.

The Office will also evaluate schools, parks, and playground systems, as elements to strengthen distinctive community images, and the design aspects of the capital improvements program components.

B. Current Planning and Programming

Current planning and programming activities of the Commission are carried out by the District Planning, Federal Planning, and Urban Renewal and Housing Divisions and the Office of Transportation Planning. The Director of Current Planning and Programming is responsible for the general direction and supervision of these activities.

To assist in the performance of these duties, the Office of the Director of Current Planning and Programming includes a secretary and a project coordinator.

1. District Planning Division

This Division carries out a major part of the Commission's role as the central planning agency for the District of Columbia Government, as follows:

a. Fiscal Year Capital Budget Estimate

Section 11.5a of Bureau of the Budget Circular A-11 provides that "estimates for construction of public works in the National Capital Area will be submitted only after the agency has consulted with the Commission in the preparation of plans and programs."

Working with the District Government, the Commission reviews the annual budget requests recommended by individual District agencies and departments. Each of the projects requires an examination of its conformance with the Comprehensive Plan, both as to location and timing, the adequacy of the proposal in terms of the needs of the area being served, and its relationship to other District and Federal projects.

During the past several years, the amount of staff time required for an adequate review of these requests has consistently increased. A total of 122 projects in the District's Fiscal Year 1971 Capital Budget Estimates were reviewed. These included such major facilities as the Municipal Center-Judiciary Square, Washington Technical Institute, Federal City College, and the Blue Plains Water Pollution Control Plant.

b. Six-Year Public Works Program for the District of Columbia

Section 7 of the Planning Act provides that "the Commission shall recommend a six-year program of public works projects which it shall review annually with the agencies concerned."

The six-year public works program is one of the principal tools for coordinating current proposals and relating them in a priority system to a program for carrying out the Comprehensive Plan. At the request of the District Government, the Commission's staff works directly with the Executive Office of the Commissioner. Staff members assisted in developing the instructions for reestablishing and improving the Six-Year Capital Improvements Program for the District of Columbia Government. The Deputy Commissioner established a Capital Improvements Program Technical Advisory Committee (CIP-TAC), composed of representatives of the District Budget Office (Chairman), Commission Staff (Executive Secretary), Department of General Services, Redevelopment Land Agency, and Office of Community Renewal, and the Public Works Coordinator of the District of Columbia. This Committee coordinates the various District Departments in preparing a workable six-year program, as outlined in District Budget Office Circular No. 3, Revised.

In the past year, the Commission published its "Recommended Six-Year Capital Improvements Program for the District of Columbia, 1971-1976", which included 372 separate projects at a total estimated capital cost of $1.2 billion.

c. Current District Land Acquisition and Construction Projects

Pursuant to Section 5 of the Planning Act, the Commission reviews the proposed general location, site boundaries, and preliminary and final site and building plans for individual District projects within the National Capital Region, in accordance with a three-step procedure agreed to with the District.

Each proposal is reviewed for consistency with the Comprehensive Plan, appropriateness of the proposed location, relationship to the needs of the area being served, and conformance with urban renewal plans, facilities master plans, and other relevant plans.

The Division works with three District Departments concerning the submission of public improvement projects--the Department of General Services, for all public building construction and general fund projects, and the Departments of Sanitary Engineering and Highways and Traffic for special fund projects. The Commission reviewed and acted upon 29 such projects in Fiscal Year 1969.

d. Master Plans for Major District Installations

The District has a number of large tracts of land, both in the city and in the region, which it uses for various facilities and special installations. Significant capital investment is required for the maintenance, improvement, and expansion of these facilities. These sites include the Municipal Center, D. C. General Hospital, the Blue Plains Pollution Control Plant, D. C. Village, the Lorton Reformatory, and Glenn Dale Hospital. Master plans should be prepared and/or updated for each of these major facilities by the responsible District agencies according to agreed-upon submission criteria. These plans need to be coordinated with the Comprehensive Plan for the National Capital and plans of the various planning jurisdictions outside the District. In the last year, the Commission reviewed the preliminary master plan for the Municipal Center-Judiciary Square area and the master plan for the Blue Plains Water Pollution Control Plant. The District Government is programming the preparation of master plans for its other large land holdings in the next two fiscal years.

e. District Employment Plans and Programs

A long-range District employment plan and program should be prepared by the Commission for all District facilities in the Region. Such a plan should be related to Federal employment plans within the framework of the Comprehensive Plan and to metropolitan employment plans of the Metropolitan Washington Council of Governments. Such a plan and program should include employment projections, recommendations on the future utilization of existing facilities--including employment ceilings--and recommended policies on the allocation of future employment increases and the reallocation of existing District employment.

f. Review of Group Development Plans

The District Planning Division provides technical assistance to the Special Assistant for Zoning and Development in the review of the site development plans referred to the Commission by the Zoning Commission under Article 7501 of the District of Columbia Zoning Regulations. Three such proposals directly related to District public works projects were reviewed in Fiscal Year 1969.

g. Master Plans for Universities in the District of Columbia

The District's Board of Zoning Adjustment requires the major institutions of higher education in the District of Columbia to submit master plans for the development of their campuses to the Board for review and approval. The Board refers these plans to the Commission for review and recommendation. The District Planning Division assists the Special Assistant for Zoning and Development in making a detailed review and evaluation of proposed land uses, circulation and site development aspects of such master plans.

h. Other District Planning Division Functions

(1) Street and Alley Closings

In accordance with D. C. Code, Sec. 7-401, the Commission makes recommendations to the District Government on all proposed street and alley closings. During Fiscal Year 1969, 25 proposed closings were acted upon by the Commission.

(2) Permanent System of Highways Plan

Commission approval is required for all changes in the "Permanent System of Highways Plan." Two such changes were processed in Fiscal Year 1969.

(3) Transfers of Jurisdiction

Pursuant to D. C. Code, Sec. 8-115, the Commission approves all transfers, among and between Federal and District authorities, of jurisdiction over properties owned by the United States or by the District of Columbia within the District. A total of 56 such transfers were acted upon in Fiscal Year 1969, as compared with 25 in Fiscal Year 1968.

(4) Sale of Surplus District Land

Pursuant to D. C. Code, Sec. 9-301, the Commission approves all sales of District-owned land which the District Government and the Commission find to be no longer required for public purposes. One such sale was approved by the Commission in Fiscal Year 1969.

FISCAL YEAR 1971 BUDGET INCREASE

In view of the increase in the Commission's local planning activities and to provide more technical assistance to the District Government, the following position is requested in Fiscal Year 1971:

Urban Planner (GS-13)

In order to assist District agencies in: (1) initiating projects and establishing priorities within the recently reestablished Six-Year Capital Improvements Program in the context of the Comprehensive Plan; (2) developing master plans for major District Government installations in the city, as well as for larger tracts of District-owned land in the Region; and (3) insuring the coordination of various District of Columbia projects, programs, and proposals with existing and/or proposed Federal projects or programs in the District of Columbia, an additional Urban Planner (GS-13) is needed.

2. Federal Planning Division

This Division is responsible for projects and developments of the Executive Branch Departments and independent agencies in the Region, including:

a. Fiscal Year Capital Budget Estimates

Pursuant to Section 7 of the Planning Act and Section 11.5 of Bureau of the Budget Circular A-11, the Commission reviews fiscal year budget requests of Federal agencies for land acquisition and construction projects in the Region for consistency with the Comprehensive Plan, master plans for individual Federal installations, other District and Federal projects, and regional and subregional plans for the Region.

In Fiscal Year 1969, the Commission reviewed the requests of 15 Federal agencies--including the Public Buildings Service (GSA), the Department of Defense, and the National Park Service. Commission recommendations are forwarded to the sponsoring agency and the Bureau of the Budget.

b. Six-Year Public Works Program

Section 7 of the Planning Act provides that "the Commission shall recommend a six-year program of public works projects which it shall review annually with the agencies concerned."

In Fiscal Year 1969, the Commission reviewed two five-year military construction programs submitted by the Departments of the Air Force and Army for proposed facilities in the Region. Ultimately, the Commission anticipates that it will prepare and recommend a Five-Year Public Works Program for all civilian and military land acquisition and construction projects proposed in the Region. Such a program would be a major tool in coordinating and guiding the implementation of long-range Federal employment plans and programs in the Region and, in conjunction with the District's Six-Year Public Improvements Program, would become part of the region-wide program proposed by the Metropolitan Washington Council of Governments.

c. General location and site and building plans

Pursuant to Section 5 of the Planning Act, the Commission reviews proposed land acquisitions and building sites and both preliminary and final site and building plans.

In Fiscal Year 1969, 41 projects were reviewed and acted upon by the Commission, including the Federal Home Loan Bank Board Headquarters, South Portal Building (HEW), and the John E. Fogarty International Center at the National Institutes of Health.

d. Master Plans for major Federal installations in the Region

Within the context of the Comprehensive Plan, the Division reviews master plans for the approximately 50 major Federal installations in the National Capital Region.

In Fiscal Year 1968, the Commission approved 19 master plans and one modified master plan and reviewed site development plans for major portions of eight other Federal installations. In Fiscal Year 1969, the Commission approved six master plans and five modified master plans and reviewed site development plans for major portions of 10 other Federal installations. The review and approval of master plans, and modifications thereto, is a continuing process as the programs, technologies and requirements of the various Federal agencies change.

Included among the master plans approved by the Commission in Fiscal Year 1969 were those for the NIH Animal Center in Poolesville, Maryland, and the Naval Ordnance Laboratory, White Oak, Maryland.

In Fiscal Year 1970, it is anticipated that the Commission will review master plans for the Quantico Marine Base, the Beltsville Agricultural Research Center, National Airport and Suitland Federal Employment Center, among others.

e. Park, parkway and playground system

In Fiscal Year 1968, seven projects were reviewed and acted upon by the Commission. In Fiscal Year 1969, 20 projects were presented to the Commission for action, including master plans for Oxon Cove Park, Anacostia Park and several recreation facilities in the District of Columbia.

f. Site utilization studies of Federal installations and facilities

As a part of the Division's continuing studies, it has been reviewing existing Federal properties within the Region. These studies provide the Commission and the staff with a basis for reviewing master plans and making recommendations on the future use of these sites.

Reports on the National Institutes of Health, Bethesda, Maryland; the Federal Employment Center, Suitland, Maryland; and the Goddard Space Flight Center, Greenbelt, Maryland, have been completed.

g. Long-range Federal employment plan and program

The Division, in conjunction with the Comprehensive Planning Division, has developed a long-range plan and program for Federal employment in the Region. The policy and program recommendations resulting from this study are a part of the Commission's Proposed Comprehensive Plan for the National Capital. In Fiscal Year 1969, as a result of comments on the Proposed Comprehensive Plan and changing circumstances, the Division initiated a review of the 1965-1985 employment forecasts for Federal employment in the Region as a basis for Commission adoption of the Federal employment plan and program elements of the Comprehensive Plan.

The employment studies should be updated, extended and refined in Fiscal Year 1971 in conjunction with the related regional employment studies being carried out by the Council of Governments.

FISCAL YEAR 1971 BUDGET INCREASE

Program Planner (GS-12)

It is particularly important that the Federal Employment Plan and Program for the Region be kept current, updated and extended on a systematic basis in keeping with day-to-day decisions and developments in the Region. At least one full-time permanent staff member is required to establish this function on a minimum basis. The Council of Governments is currently undertaking a regional employment study, and it is anticipated that in Fiscal Year 1971 these studies will reach a critical decisionmaking stage where extensive liaison between the Commission and the Council will be required. Therefore, a new program planner position (GS-12) is requested.

3. Urban Renewal and Housing Division

The principal activities and responsibilities of this Division are the preparation of urban renewal plans and modifications thereto; the review of proposed public housing sites and development plans; participation in the continuing review of and revisions to the District's Community Renewal Program; technical assistance to the Model Cities Program and the District's Six-Year Housing Program; and special related studies. Division staff participate in many meetings in the community on matters relating to urban renewal and housing activities.

a. Redevelopment elements of Comprehensive Plan

The Division assists the Comprehensive Planning Division in preparing those portions of the Comprehensive Plan involving the "orderly development and redevelopment of the National Capital and the conservation of the important natural and historical features thereof." This work is directly related to ongoing and projected urban renewal activities.

b. Urban Renewal Planning

In accordance with the District of Columbia Redevelopment Act of 1945, as amended, the Division prepares urban renewal plans and modifications thereto for adoption by the Commission and approval by the District of Columbia Council.

During Fiscal Years 1969 and 1970, work activity has been concentrated on the preparation of urban renewal plans for the Downtown, Shaw School, Fort Lincoln, H Street, and 14th Street Urban Renewal Areas and of modifications to approved urban renewal plans for the Southwest Urban Renewal Area, Project "C", and the Northwest Urban Renewal Area Project No. 1.

The Neighborhood Development Program under Title V of Public Law 90-448 provides financial assistance for urban renewal undertakings in one or more urban renewal areas on the basis of annual increments. This procedure is an alternate financing to the survey and planning advances and capital grants under Title I of the Housing Act of 1949. It is anticipated that all new undertakings will be financed under the Neighborhood Development Program while projects previously approved will continue to be funded by the loan and grant method.

Preparation of these plans is by special staff personnel in the Division with trust account funds provided by the Redevelopment Land Agency. Permanent staff of the Commission furnishes general supervision and technical and administrative services in the conduct of this work.

(1) Neighborhood Development Program Activities

In Fiscal Year 1969, the Commission completed urban renewal plans for the Shaw School and Downtown Urban Renewal Areas and began detailed planning work on the H Street, 14th Street, and Fort Lincoln Urban Renewal Areas. At the beginning of Fiscal Year 1970 a new agreement with the Redevelopment Land Agency converted financing of planning activities to the NDP process for a nine month period in the amount of $170,000.

(a) Shaw School

An urban renewal plan for the Shaw School Urban Renewal Area was adopted by the Commission on January 9, 1969 and approved by the Council on January 28, 1969. Fiscal Year 1969 work activity included acquisition and/or disposition, rehabilitation of several squares or portions of squares and continuing planning activity--area-wide and on a subarea basis--as well as preparation of proposals for the Second Action Year. This work activity extends into Fiscal Year 1970. The NDP schedule requires preparation of the Second Year Action Program and the approval of related urban renewal plan modifications prior to March 1, 1970.

(b) Downtown

An urban renewal plan for the Downtown Urban Renewal Area was adopted by the Commission on January 9, 1969 and approved by the Council on January 28, 1969.

Fiscal Year 1969 work activity included acquisition of Square 515 for housing, acquisition of portions of Squares 449 and 425 as part of the site for Federal City College, and continuing planning activity--both on an area-wide and subarea basis--as well as preparation of proposals for the Second Action Year. This work activity extends into Fiscal Year 1970 and must be coordinated with the NDP schedule to obtain approval of related urban renewal plan modifications prior to March 1, 1970.

(c) H Street

An urban renewal plan for the H Street Urban Renewal Area was adopted by the Commission on April 18, 1969 and approved by the Council on June 17, 1969. This plan was submitted to the Department of Housing and Urban Development at the end of Fiscal Year 1969 and approval of financing for this project is pending.

Subject to HUD approval, it is anticipated that a wide range of First Year project execution activity and area-wide planning, subarea planning, and development of Second Year Action proposals will occur during Fiscal Year 1970.

(d) 14th Street

An urban renewal plan for the 14th Street Urban Renewal Area was adopted by the Commission on September 11, 1969 and has been submitted to the Council for its approval.

Subject to approval by the Council and the Department of Housing and Urban Development, it is anticipated that a wide range of First Year project execution activity will begin and area-wide planning and subarea planning and study of Second Year Action proposals will continue during Fiscal Year 1970.

(e) Fort Lincoln

On September 11, 1969, the Commission adopted an urban renewal plan for the Fort Lincoln Urban Renewal Area. This plan has been submitted to the Council for its approval.

Subject to approval by the Council and the Department of Housing and Urban Development, it is anticipated that a wide range of First Year project execution activity will begin in addition to the Turnkey project now underway. It is also anticipated that area-wide planning, subarea planning, and the development of Second Year Action proposals will be initiated during Fiscal Year 1970.

(2) Survey and Planning Activities

(a) Anacostia-Bolling

The preliminary draft of an urban renewal plan for the Anacostia-Bolling Urban Renewal Area was completed at the beginning of Fiscal Year 1969. This plan was the subject of extensive review and comment by affected District and Federal agencies and interested citizen organizations. It is anticipated that a final draft plan will be prepared during Fiscal Year 1970. Further planning will be carried out by permanent staff since all trust account funds have been expended.

(3) Urban Renewal Plan Modifications

All approved urban renewal plans require periodic revisions as part of the normal process of accommodating changes that could not be anticipated at the time the plan was initially adopted and approved. Such modifications are ordinarily processed by permanent staff of this Division. In Fiscal Year 1969 the Commission adopted modifications to approved urban renewal plans for the Southwest Urban Renewal Area, Project "C"; Northwest Urban Renewal Area Project No. 1; and the Shaw School Urban Renewal Area.

c. Public Housing

In cooperation with the National Capital Housing Authority, a wide variety of housing proposals were studied in Fiscal Year 1969. One hundred fifty-six units of scattered site housing to be purchased for large-size, low-income families were reviewed and acted upon by the Commission. In addition, three elderly housing sites, containing a total of 515 units in high-rise structures, were approved. Each proposal is reviewed to determine suitability of its location, relationship to the surrounding neighborhood, and adequacy and accessibility of community facilities, e.g., schools, parks, and shops.

It is expected that the workload involved in the review of scattered site public housing will increase significantly in Fiscal Year 1970 and future years.

d. Workable Program

The Division participates in the preparation of portions of the District's periodic report to HUD on the Workable Program.

e. Other Studies

A variety of proposals are developed in the community or by other public agencies that are directly or indirectly related to ongoing urban renewal or housing matters. The Division reviews and comments on such proposals which may range from plans for a community school to a suggestion for a new urban renewal area.

4. Office of Transportation Planning

The major responsibilities of this office are as follows:

a. Liaison on behalf of all divisions on matters concerning traffic and transportation with the District Department of Highways and Traffic, the Washington Metropolitan Area Transit Authority, the Transportation Planning Board of the Council of Governments and other local and subregional planning organizations within the Region.

b. Technical assistance to the District, Federal, and Urban Renewal Planning and Housing Divisions on the transportation elements of proposed master plans, construction projects, housing and urban renewal plans and capital improvement programs.

c. Preparation of modifications to the transportation sections of the Comprehensive Plan in conjunction with the Comprehensive Planning Division and in liaison with the Transportation Planning Board.

d. Assistance to the Executive Director and to the General Counsel on proposed and pending legislation concerning transportation and parking and on special projects such as the major transportation center at Union Station.

In Fiscal Year 1969, the Commission adopted a Mass Transportation Plan and Major Thoroughfare Plan as parts of the Comprehensive Plan for the National Capital. The Commission also reviewed and made recommendations to the Washington Metropolitan Area Transit Authority on plans for four transit stations, an operation control center building, and for the modification of the mid-city route of the Adopted Regional System.

A special study, begun in Fiscal Year 1968 and to be completed in Fiscal Year 1970, is being conducted by the Commission to plan and program a major transportation center at Union Station. Other participants in the study are the

Department of Transportation, the Department of Housing and Urban Development, and the Post Office Department. The study director for this project is the Commission's Transportation Planning Engineer. The Department of Interior is coordinating the design of the National Visitor Center and related facilities through contracts with the owners of Union Station.

In Fiscal Year 1971, construction of the authorized rail rapid transit system and detailed planning design and engineering studies will continue on the extensions contained in the Adopted Regional System. The District freeway system will be progressing in accordance with the 1968 Federal Aid Highway Act. Continuous participation by the Commission and the staff will be required in these projects. Large Federal Employment Center plans will be in execution and will require review and liaison to insure adequate access and six major urban renewal projects will be in detailed planning or execution and require special review of circulation, access and parking.

The Transportation Planning Board has completed its data collection stage and will be in a phase of analysis and policy formulation which will require close liaison.

FISCAL YEAR 1971 BUDGET INCREASE

Assistant Transportation Planner (GS-12)

The increased need for close cooperation between the Commission's technical staff and the Regional Transportation Planning Board and its staff, an adequate technical review of the transportation elements of District and Federal projects--particularly the large urban renewal and Federal Employment Center projects--in planning or execution, and increased participation by the Commission in the development of the freeway system directed by the Congress, requires an Assistant Transportation Planner (GS-12). This would provide a total of only two full-time Commission employees engaged in the important subject area of transportation planning in the National Capital.

III. Experts and Consultants

A. National Capital Planning Commission

1. Fiscal Year 1969 (actual)

Thomas Brereton, Bronx, New York Report on the Planning Review-Implementation Process in the District of Columbia	$ 2,500
Urban Design and Development Corp., Washington, D. C. Study of the Impact of Current Development Proposals on the Design and Program for the Transportation and Visitor Center in the Vicinity of Union Station	25,000
Alan M. Voorhees & Assoc., Washington, D. C. Parking Study	4,000
George Schermer Assoc., Washington, D. C. Housing and Federal Employment Study for the National Capital Region	5,000

2. Fiscal Year 1970 (proposed)

Follow-up Studies on the Transportation Center and Convention Center and Arena in Vicinity of Union Station	25,000
Miscellaneous Projects	10,000

3. Fiscal Year 1971 (requested)

Miscellaneous Projects	35,000

B. Temporary Commission on Pennsylvania Avenue

1. Fiscal Year 1969 (actual)

Real Estate Research Corp., Washington, D. C.....$ 4,000
National Square--Belvedere Economic Feasibility Study

Louise Campbell, Washington, D. C..... 1,500
Writing text of progress report on Pennsylvania Avenue

Frederick Gutheim, Washington, D. C..... 1,499
Consultant (Editorial Services), $75 per day,
WAE, 9/25/68-2/5/69

IV. Publications Program

It is estimated that the cost for printing will be within the $57,500 appropriated for publications in Fiscal Year 1970 and the $32,500 estimated for 1971.

V. Special Projects

A. Regional Airport Facilities Study

The coming "air revolution" will have a profound effect on air travel to and from the Nation's Capital. A study is needed for both the Washington and Baltimore metropolitan areas to determine the most efficient system of air terminals and support facilities to meet future air transportation needs. The Bi-Region airports by 1990, (according to a recent air demand-capacity study) will have to accommodate 6 times as many air passengers, 20 times the freight tonnage, and a general aviation fleet that is five times larger than the 1969 level. Existing facilities cannot absorb the additional load. Profound changes now occurring in the air industry necessitate a detailed study of air facilities for the Bi-Region.

The study should primarily be aimed at establishing a land use policy for the area related to limiting the impact of air facilities. The prime objectives would be to identify need, assess alternative systems of air facilities, identify cost-benefit relationships, evaluate impact on the Bi-Regional development programs and related policy goals, interrelate the air transportation needs to the total transportation network serving the two metropolitan areas, and suggest feasible alternatives for the management and financing the needed facilities.

This study would not concern itself with the design of air terminals or other facilities. It would establish the parameters which could be used in the design stages of the facilities proposed.

FISCAL YEAR 1971 BUDGET REQUEST

The amount requested is $100,000, the Commission's share of the study estimated to cost $250,000. The Baltimore Regional Planning Council, Department of Transportation, and the Metropolitan Washington Council of Governments will also participate in the study.

B. Zoning Revisions

Upon request of the District Government, the Commission has authorized its Special Assistant for Zoning and Development to head up the Zoning Study for the District. Revised zoning will be based for the most part on the Comprehensive Plan and the density and land use policies contained therein. Many of the proposals in the Comprehensive Plan and new developmental approaches in the city create the need for new approaches to zoning.

The present zoning regulations were revised in 1958--12 years ago. Many of its concepts are obsolete. An updating of the regulation is essential to provide expanded development and a viable economic base for the District of Columbia.

FISCAL YEAR 1971 BUDGET REQUEST.....$ 50,000

C. Georgetown Waterfront Development

In order to achieve the fullest development potential for the Georgetown area between M Street and the Potomac River, development must be coordinated with the Potomac River Freeway which will traverse the waterfront.

The Georgetown Waterfront is one of the few remaining waterfronts that can be developed for coordinated public and private uses. Its historic significance, future place in the city, many private and public interests, and relationship to adjacent areas require a high degree of coordination if its full development potential is to be realized.

FISCAL YEAR 1971 BUDGET REQUEST.....$ 75,000

ADVANCES FROM DISTRICT OF COLUMBIA

The National Capital Planning Commission develops urban renewal plans for the District of Columbia on a contract basis with the District of Columbia Redevelopment Land Agency. Please see pages 18 through 21 for narrative regarding this program.

Approximately 18 permanent full-time positions are financed from these funds in addition to the positions financed under the Salaries and Expenses appropriation. It is estimated that approximately $226,000 will be advanced during Fiscal Year 1971 to finance this program.

General Statement

Mrs. Hansen. Please insert your general statement in the record, and highlight it for us.

Mr. Edwards. Thank you very much. It is a very short statement, and I would be pleased to read it.

Madam Chairman and members of the committee, I am pleased to be here today to present the Commission's appropriation estimates for fiscal year 1971. I would like to introduce the members of the Commission staff accompanying me today:

STAFF REPRESENTATIVES

Charles H. Conrad, Executive Director.

Daniel H. Shear, General Counsel.

John R. Pritchard, Assistant Executive Director (Administration).

Unfortunately, two persons who were to accompany me are in attendance at a meeting in New York.

Mrs. Hansen. Why are they in New York when your hearing is in Washington, D.C.?

Mr. Edwards. They are attending the meeting of the American Society of Planning Officials. We were scheduled to come here originally on the 17th. We are pleased to be here.

I just wanted to explain the absence of these two persons.

Mrs. Hansen. We have had difficulty in scheduling our hearings this year. We have had many interruptions of our schedule.

TEMPORARY COMMISSION ON PENNSYLVANIA AVENUE

Mr. Edwards. At the outset I would like to indicate that, consistent with the action of the Congress on the Commission's fiscal 1970 appropriations, the fiscal 1971 appropriation estimates do not include any funds for the President's Temporary Commission on Pennsylvania Avenue.

Since our last appearance before you, the Commission has continued to be very much involved in planning and development issues of enormous importance to the Federal Government and to the community. We have intensified our concern for furthering the Federal interest both in the city and in the very rapidly growing metropolitan area of which our Nation's Capital is the core. Especially important, we believe, is a study, currently underway, of the availability of housing for Federal employees of low and moderate income in the vicinity of their places of employment and the development of policies and programs to provide such housing as may be required by the further deployment of the Federal Establishment in the Maryland and Virginia environs of the District of Columbia.

In the city, the Commission's major efforts during the past year have been directed to planning for the civil disorder areas, urban renewal plans for which have been approved recently by the District of Columbia Council. Work on an updated comprehensive plan for the National Capital has also progressed; and the Commission has adopted various elements of the comprehensive plan, as set forth in the brochure which I submit herewith for the record and for the information of the members of the committee.

The Commission is continually strengthening its function of coordinating the many Federal and local development programs and projects in the National Capital region. The agendas of recent commission meetings illustrate the interrelationships of various proposed developments in the future growth of this metropolitan area.

As we have stated in the past and identified in the comprehensive plan, Washington, D.C. is unique among American cities. This city, first, serves as the Capital City of a great Nation and the seat of the National Government. Continued planning for this role must not only provide for the efficient functioning of the Federal Establishment, but also for an appropriate environment for those who work, visit, and transact business at the seat of Government. Secondly, the city of Washington serves as the home of its resident population. In planning for this role of the city, the Commission must seek to provide a good place in which this population may live, work, and be educated. To do so requires that we work closely with substantially all of the agencies of the District of Columbia government and in particular, with the Mayor's Office and the City Council. Thirdly, Washington, D.C. is the core city of a very rapidly growing metropolitan region. Planning for its central city role must take into account the close interrelationship between and the interdependence of the suburbs and the District of Columbia. Although responsibility for comprehensive regional planning is vested in the Metropolitan Washington Council of Governments, the Commission must oversee regional development policies as they evolve in order to relate these policies to the Federal Establishment's needs and to protect Federal interests from conflicting objectives.

To continue to adequately perform its mission under the National Capital Planning Act of 1952, we are requesting a modest appropriation increase of $322,300 for fiscal year 1971. This increase is primarily for refinancing four positions previously funded, for strengthening the Commission's overall program by the addition of five new positions, and for three special projects as follows:

1. REGIONAL AIRPORT FACILITIES STUDY

As a result of hearings before Senator Tydings' District of Columbia Subcommittee on Business and Commerce on the utilization and the future of major airports in the National Capital region, the Commission has initiated with the Department of Transportation, the Metropolitan Washington Council of Governments, the Baltimore Regional Planning Council, and other interested agencies, a biregional air facilities planning study. Such a study would attempt to coordinate all of the airport facilitity planning in the Baltimore-Washington area—not only of the major air terminals, but also other airport facilities. This study would relate the so-called air revolution to land use and ground transportation implications and would be a major input in policy formulation dealing with future air transportation serving these two regions.

2. ZONING STUDY FOR THE DISTRICT OF COLUMBIA

The progressive adoption of elements of an updated comprehensive plan, the development pressures and potentials resulting from the

start of construction of the Metro rapid rail transit system, and the 12-year interval since the zoning regulations of the District of Columbia were last comprehensively revised, make essential a thorough review and revision of zoning in the District. Although the District government is principally responsible for this study, protection of the Federal interest warrants Commission participation in this study.

3. GEORGETOWN WATERFRONT DEVELOPMENT

The Georgetown waterfront project envisions a detailed plan for the treatment of the waterfront in connection with the Potomac River expressway and the comprehensive rezoning study currently underway by the District government and the Commission. Such a plan is critical at this time, in order to achieve the fullest development potential in the area of Georgetown bounded by M Street and the Potomac River, and to properly coordinate the Potomac River freeway with public and private development consistent with Georgetown's historic significance.

It is my understanding that there is pending a supplemental appropriation request for fiscal year 1970 resulting from pay increase costs under Executive Order No. 11474. These costs amount to $75,000 per year for this Commission. Funds were apportioned by the Bureau of the Budget on a basis that anticipated the availability of this amount.

This concludes my opening statement. We would be pleased to answer any questions that you may have.

MAJOR ACCOMPLISHMENTS IN 1969-70

Mrs. HANSEN. Thank you very much. What have been your major accomplishments in the past year?

Mr. EDWARDS. I will answer some of it and then I will ask the Executive Director to fill in. I think we have moved very rapidly during the past year in planning for the riot-torn areas. We had over the past year many meetings with citizens groups and their planning officials. As of the present time the second year NDP for two of the areas, the 14th Street area and the Shaw area, are about to be submitted to the city council for hearings. I think these two areas are well on the way to achieving many of the objectives which have been set.

They got a late start. The planners in the area and the citizens got a late start under the initial NDP but they have moved very rapidly now, and I think these plans are well on the way. As for the Northeast area, that is not as far along but the plans are in motion. Members of our staff have worked long and assiduously with these citizens.

DOWNTOWN URBAN RENEWAL

At the same time, we have worked very closely with the downtown business groups for renewal of that area.

Mrs. HANSEN. What has been accomplished?

Mr. EDWARDS. I do not think this has moved as rapidly as we would desire. We have, however, in our most recent meeting approved of their developmental program for the next year.

This will entail the acquisition of land around subway stops. In connection with this, we have worked very closely with the Metro, in ap-

proving subway stops and other matters brought before us. I think the Metro plans are moving very rapidly.

As you know, these plans must be submitted to us.

Mrs. HANSEN. I have been on this committee for 8 years and since then no appreciable action has been taken on construction of the subway system.

Mr. EDWARDS. It takes a little time.

Mrs. HANSEN. That is the understatement of the year.

Mr. EDWARDS. The funds were held up for a long time.

Mrs. HANSEN. I know that.

Mr. EDWARDS. I think with some financial support now they are moving.

Mrs. HANSEN. About 3- or 4-years ago, the last time the Metro people were before this committee for funding, there was some discussion on the adequacy of planning relative to access to Dulles Airport. I have been amazed in the last couple of months, as I have gone in and out of Dulles, to see the increase in passenger traffic. What planning, or what work are you doing with the Metro people on providing a speedier access to Dulles Airport?

Mr. EDWARDS. I will ask Mr. Conrad to speak on that. It is true from our studies the number of people using Dulles is on the increase and the projections show there will be a much more rapid increase in the future.

Mrs. HANSEN. I was aboard a 747 Jet the other day and that plane will never be able to land at Washington National. This will be the type of plane that will probably be typical of air flights of the future. If this type of traffic increases you are going to have to provide some kind of mass transportation system to and from the airports to handle the volume of traffic.

This problem is being created by excessive passenger car use. As you move to meet the challenges of this new kind of air transportation, I think you have to build in the ingredients for a rapid transportation system. You will then accomplish two things. You will eliminate the distress to the environment that car exhaust causes and at the same time you will provide a minimum time to move passengers out of the airport and into the area where they desire to go.

Mr. EDWARDS. We are asking for additional money for an airport study. Some work has already been done and I would ask that Mr. Conrad be allowed to speak on that.

Mrs. HANSEN. Please do.

Mr. CONRAD. We are also concerned about what we call the "air revolution". In order to get a study started, and get people thinking we have put out this report called "The Air Revolution and the National Capital Region."

This puts forth the various studies that have been made, plus existing conditions at the various airports, National, Dulles and Friendship, and also takes on some of the characteristics of the 747 and the added ground requirements, transportation requirements, that are going to come out as a result of the use of the 747. We feel very strongly that we have to take an overall look at all our airports in this area if we are really going to cope with this new air revolution which is already upon us.

TRANSPORTATION CENTER STUDY

We have done several things. One, since the airports and most of their passengers are destined towards the center city, we have taken on a transportation center study at Union Station. Here is where the rail lines, the rapid rail lines, the inter city buses come, and there is also the possibility of tying in by air, by V/STOL, Dulles and Friendship, to center city, so that you cut down the traveltime between center city and these outlying airports.

The final report of this study, the transportation center study, will be out in about 2 months, and should throw quite a bit of light on how to coordinate all the forms of transportation that we have in our city. We are getting at the rail, the air, the bus, limousine, automobile, by a composite transportation center at Union Station. We had 19 million visitors last year. I assume over 20 million this year.

Mrs. HANSEN. From the crowds I have seen on the Capitol steps, you are well on your way to 21 million.

Mr. CONRAD. Yes, and with the bicentennial for 1976, with the millions of visitors planning to come here, we will have still more difficulty. Dulles had the foresight to provide a limited access road to Dulles Airport. We have consistently supported the retention of this right of way to Dulles for Dulles Airport. The Commission has also done several other things. The developments around these airports can choke them off. It is natural that the local municipalities and counties from an economic standpoint should zone around the airports for service industry and air related kind of activities. But they should provide their own access to these areas and not take the access which is essential for the proper functioning of Dulles Airport itself. So we are fortunate with Dulles to have this limited access highway, and we are going to try to see that it remains a limited access out to Dulles. We are also working with the counties at this time in reviewing their master plans around the airport to try to cut down on some of the densities and be sure that the circulation to their service and industrial areas around the airport are serviced by their own arterial street and expressway system and would not jeopardize the access to Dulles itself. Friendship is a different story. It does not have a limited access. If you try to get out to Friendship Airport in the evening over the Baltimore-Washington Parkway, you had better leave an hour or an hour and a half ahead of time in order to make your plane.

Mrs. HANSEN. I have used Friendship Airport several times.

Mr. EDWARDS. Madam Chairman, as you know, the rapid rail is in the hands of a special compact authority. We have constantly reviewed the plans as they developed. These are being changed from time to time. But this Commission has always been on record as supporting rapid rail service to Dulles. We hope that Metro will see fit to make sure such a line is built.

Mrs. HANSEN. I think you are going to be faced with the necessity for rapid transportation in all areas. All cities are having great problems with excessive traffic within the city. Then when you add tourist traffic, the cities will be unable to cope with the resulting problems.

Mr. EDWARDS. This Commission has always been a great champion of the rapid rail program.

Mrs. HANSEN. I know you have.

REGIONAL AIRPORT FACILITIES STUDY

Mr. CONRAD. I wonder if I could finish one other statement on the airport, Madam Chairman.

Mrs. HANSEN. Surely.

Mr. CONRAD. In our budget request we have included $100,000 for a study to be carried out jointly by the Baltimore Regional Planning Council, the Department of Transportation, and also the Washington Metropolitan Council of Governments. This study would pool together all the airports in this region, the Washington and Baltimore region, into an overall study as to its usage, rather than having one report on National Airport and what it can do and one report on Dulles and what it can do.

Mrs. HANSEN. Do you discuss with the major airlines the flight plans and the volume of traffic so that certain areas or times are not overcrowded? For example, perhaps some flights that come into Baltimore could be handled better by Dulles Airport.

Mr. CONRAD. This study would get into the flights, the volumes of traffic that come into the airports, the usage of the airports. It will take into account the new characteristics of the 747. If it cannot land at National, what is the future of National? Could National be a VTOL or VSTOL kind of operation rather than a commercial kind of operation? These kinds of questions would go into this kind of a study. Another part of the study which is very important is its connection to center city, its connection to ground transportation, and rapid ground transportation.

Mrs. HANSEN. Or helicopter use?

Mr. CONRAD. Yes, as a part of the transportation center. Instead of studying all of these separately, they should be studied as a unit and tied into ground transportation. This study would take approximately 18 months. We are asking for $100,000 and by the contribution of other agencies mentioned we are hoping to accumulate up to half a million dollars for the study.

Mrs. HANSEN. May I urge that you review these problems with the most knowledgeable people in aviation field.

You cannot solve the problems of air transportation without some review with the FAA. If there is one thing that the United States has not done well, it is a thorough study of the transportation problems in this country.

The transportation system in this country is as near to a state of collapse as I have ever seen it. You have shutdowns which are disastrous from the standpoint of freight and people. There has been less attention given to transportation than any other field. Transportation is what keeps the country moving. You cannot preserve our environment without considering our transportation problems. You cannot move people in time of national crisis without transportation.

URBAN RENEWAL AREAS

Do you think the Washington, D.C. City Council will approve the urban renewal projects?

Mr. EDWARDS. Yes, I think so, Madam Chairman, largely because of the concern of the City Council, as indeed the concern of the Com-

mission, is to be sure that the citizens are involved and the plans reflect not only good planning from the criteria which planners impose, but also then get into the total package some of the things that citizens want. I think this process has been gone through. We have finished our work with them now. The matter will be before the City Council in a matter of a week or two. So I look forward to rather rapid approval of that. The citizens have a target date of getting these to HUD by June 1 or thereabouts, and I think the whole machinery is geared to accomplish—to get over all of the hurdles.

GOVERNMENT PRINTING OFFICE

Mr. REIFEL. I wonder if at this point or before this meeting is over if you would comment on this. The Government Printing Office is to be relocated somewhere in the District. Housing will be required in connection with employees who will be working there. Has that been taken into account in your planning? You may want to comment on it later on someplace where it is more apropriate.

Mr. EDWARDS. We have had numerous sessions with the Public Printer and we have been in on this for the past several years. At one time it was planned to move the GPO to the Fort Lincoln site. We did not see this as a proper use of that land. We thought we had a big land bank; we thought this could be put to other uses.

Mr. Conrad, our staff director, has worked continuously with the former Printer to locate a site within the District. I think it is pretty well agreed there are desirable sites. I will ask Mr. Conrad to say word about that.

Mr. REIFEL. This is a major installation.

Mrs. HANSEN. How many people does the GPO employ?

Mr. CONRAD. There are several shifts. I think the day shift is close to 8,000. The other shifts that come in during the evening are closer to 5,000 or 6,000. It is just an around the clock kind of operation. We have been working with the Government Printer for the last year and a half. You recall they were looking for a location in Prince Georges County.

Mr. REIFEL. They about had it and the city decided they ought to have it here in the city. Is that right?

Mr. CONRAD. Two factions have been in existence since GPO has been mentioned to move. There has been a faction that wanted it out in the suburbs and one to have it in the inner city. There are advantages to both as far as GPO is concerned. Our primary objective was to retain it within the District because of the job opportunities it represented to the people here in the District. Also because of the GPO's linkages to Capitol Hill.

A lot of the work of the Government Printing Office is as a result of Capitol Hill, meetings like this, getting out the Register. They wanted it to be within 20 minutes of Capitol Hill no matter where they were located. One of the big problems that GPO has is the safety of their employees. They do have nightshifts. They do have problems where they are.

Mr. REIFEL. As I understand they have the employees get off down here at the GPO and they take them over by bus to where they park their cars back of the House Office buildings at night in order to provide this additional safety.

Mr. CONRAD. We have found a location which finally the Government Printer—the past Government Printer—agreed to as his own project and he could support before Congress and the Joint Committee on Printing. It is on a rapid rail stop, which is a part of the first development phase of the rapid rail system. All of his employees would be accessible to that rapid rail and would have a direct contact to the GPO. These are very ideal relationships. Also the railroad facilities would be available. They have a whole freight train load of paper a day which is necessary for the operation of the GPO. So they must be close to the railroad facilities, plus, they would be very close to the future New York Avenue expressway connecting the Baltimore-Washington Parkway to the Northeast. There was enough land, and they were agreeable to this site. We have a new Government Printer. I have not had a chance to talk to him and present the proposal to him. When the opportune time comes, I am sure Mr. Harrison will invite us over and we will sit down with the new Government Printer and show him what the plans are and see if we cannot obtain his support for this new location.

Mr. REIFEL. Thank you.

AVAILABILITY OF HOUSING

Mrs. HANSEN. One of your major problems in the District is the availability of housing. This is why I am particularly interested in the urban renewal projects on 7th Street, 14th Street, and the Shaw area. A major segment of housing was destroyed. Are you going to provide sufficient housing to handle the spillover from the other areas?

Mr. EDWARDS. I do not remember the figures, Madam Chairman. We could produce them for you.

Mrs. HANSEN. Insert the information in the record.

(The information follows:)

During the civil disturbances of April 1968, an estimated 112 housing units on 7th Street NW. (in the Shaw School urban renewal area) 207 housing units on 14th Street NW. and 23 housing units on H Street NE. sustained some riot damage.

Since that time, the "H" and 14th Street areas have been designated urban renewal areas and urban renewal plans have been prepared and approved by the Commission and the City Council for all three areas.

In these three areas, more than 90 acres of land have been designated for redevelopment as part of the District of Columbia's federally assisted Neighborhood Development Program. Between 3,000 and 4,000 new housing units, primarily for low- and moderate-income families are to be built on these sites as part of the city's program for rebuilding the civil disorder areas within the context of renewal plans for the inner city.

Mr. EDWARDS. The plan is not only to produce additional housing but to improve the quality of the housing which existed in the area heretofore.

Mrs. HANSEN. The area needs improvement.

Mr. EDWARDS. This has been of great concern. I think the Shaw people are going about it in a very sensible way. They want to stage the housing production in such a way so as not to cause great inconveniences to people who will be displaced. They are starting first with certain vacant land parcels in order to put new housing there so it will act as a kind of decanter for people who will be displaced in other areas.

Mrs. HANSEN. Are you also preserving some open areas?

Mr. EDWARDS. Yes.

Mrs. HANSEN. This has been why I criticized the Shaw area in the past.

For example, when you built those schools, you should have developed a playground complex instead of a schoolyard.

Mr. EDWARDS. Yes. We are very aware of this and there are plans underway, certainly in connection with the schools, to provide more adequate facilities in terms of play and to make those schools more available as community centers.

Mrs. HANSEN. When you provide this type of facilities it lessens the desire for destruction.

Mr. EDWARDS. Exactly.

Mrs. HANSEN. This develops pride in the community. We have found in communities in my own State that those schools in smaller towns which were used as community centers were always the schools that had the least windows broken and the least damage done. But if the schools were locked and no one was admitted, there seemed to be a desire to have a great amount of vandalism.

Mr. CONRAD. Madam Chairman, this is the general plan for the Shaw area. (Pointing to map.) This map, although it is small, represents over a square mile of center city land. In other words, it is over 650 acres within the boundaries.

The green spaces you see here are the junior high schools, senior high schools, elementary schools and playgrounds. Also connecting all of these throughout would be pedestrian ways specially treated so that the children, if they do have to cross streets, they have special devices for their safety. So as a part of the overall planning for the Shaw area, definitely the open space has been considered as a major part of the rebuilding. This green here represents the replacement of what we call the "Shameful Shaw."

Mrs. HANSEN. I visited the area.

Mr. CONRAD. When that is constructed, that will not only provide playgrounds, it will also be a community center, so it is used in the evening by community groups for meeting places, for educational courses for the community. Across the street is already built an elementary school—a beautiful school—which replaces the old Seaton so there has already been a school with adequate playground facilities provided at this location. But this is the heart of the Shaw plan as far as the community is concerned. You can see the open space that is being provided under the plan.

Mr. REIFEL. What avenues and streets are radiating from the circle?

Mr. CONRAD. This is Rhode Island Avenue, and I believe this is 13th Street, and this is 14th Street and this is Vermont, this is New Jersey Avenue, this is Florida Avenue up here and Seventh Street is down this corridor. U Street is right across here.

As a part of the rapid rail system, we suggested that instead of having the rapid rail come up Massachusetts down here and up 13th Street that the rapid rail come up Seventh and provide an economic base for the rebuilding of Seventh Street, which was burned, plus U Street.

As a result we have already a community center started by an office building of relatively high density which would not have been possible

if the rapid rail was not coming up through here. Here is a case of coordination with the transportation system to aid in the rebuilding of our city, which really and truly needs it.

Mrs. HANSEN. As this is completed, I hope you will note your problem areas so that the same mistakes will not occur in the next segment of the rebuilding. Won't you also have to rebuild other segments of Washington?

Mr. CONRAD. We have 4 square miles of our city in urban renewal, and I have a feeling it is going to take the city a little bit of time because of, one, financial limitations, and two, because of the relocating load this represents before it can fully realize the plans for these 4 square miles.

Mrs. HANSEN. This will give you ample time to note your success and failures, so that you can apply this knowledge when you rebuild the next area.

SOUTHWEST URBAN RENEWAL

Mr. CONRAD. I think we have learned many lessons over the years. I think Southwest is a good example. I am not going to downgrade Southwest. It adds a good balance to the community. The tax base needs that kind of development. When that was developed the policies were if a section of the city did not need complete clearance, the Federal Government was not interested in it. This was true in the early days of renewal. Southwest was developed in that kind of context which meant almost complete relocation of all those people. We have found from the results of Southwest that this is not the way to go about urban renewal. So the next urban renewal project was Northwest No. 1 and the Shaw area, where the basic objective was to provide for the people who lived there; improve the neighborhoods, clearance only where necessary, make good rehabilitation and improve the quality of the community and neighborhood rather than complete clearance.

I think we have already learned a lesson from Southwest in relation to what we are trying to do in the Shaw area as well as the H Street area and the 14th Street area.

The same objectives are there, and these plans have been worked out with the citizens who live there now and the citizens who will live there in the future.

Mrs. HANSEN. I do not think a bulldozer is the answer to everything. You have in Washington a great many handsome structures, that need only modern improvements to be useful again.

(Discussion off the record.)

TEMPORARY COMMISSION ON PENNSYLVANIA AVENUE

Mrs. HANSEN. Where is the Temporary Commission on Pennsylvania Avenue being housed, and what is the present status of it?

Mr. SHEAR. Madam Chairman, the Temporary Commission on Pennsylvania Avenue was created by Executive order and to our knowledge the Executive order remains in effect and the Temporary Commission remains in existence. Consistent with the mandate of the Congress last year, however, it is not being funded by or through the National Capital Planning Commission. Perhaps Mr. Pritchard and Mr. Conrad know, but I don't know what, if any, agency of Government is funding it at this time.

Mr. EDWARDS. Mr. Pritchard, do you have something to add?

Mr. PRITCHARD. No, sir.

Mr. EDWARDS. The question was where was this group being housed at the present time.

Mr. CONRAD. They are being housed in the basement of the GSA main building.

INCREASES FOR FISCAL YEAR 1971

Mrs. HANSEN. You are requesting an increase of $322,300 and nine positions for 1971.

Justify your request for additional urban planners.

Mr. EDWARDS. What we have been talking about is a joint venture on the renewal of these areas with the citizens themselves, with some coordination going forward with the city government. We have been somewhat short handed in this general area.

The request here is to get another person to work in this program.

Mrs. HANSEN. Are urban planners readily available?

Mr. CONRAD. Planners are hard to come by. They are in a very scarce category, but I think as illustrated by our total employment of 57, we only had three vacancies. Evidently the planners like to work in Washington. I often ask them why do you want to come to the National Capital Planning Commission, we are always in the newspapers, we always seem to be in between something and they say, this is where the action is.

Mrs. HANSEN. Justify your request for an additional transportation planner.

Mr. CONRAD. Yes. We have one man at the present time and we are asking for two men in this office. The one individual at the present time would work with the consultants on the air transportation study, and is presently the project director of the transportation center study at Union Station. He is the one who works on the transportation plan for the comprehensive plan approved by the Commission as well as the City Council.

He is also our man who works on all the Federal and District projects to be sure they have adequate access, at least as far as possible, and it is just too much for one man. We are asking for another individual to help him.

Mr. EDWARDS. The whole business of transportation touches down on everything.

Mrs. HANSEN. It is a basic ingredient.

Mr. EDWARDS. This particular office is so short handed we certainly need help in that area.

GEORGETOWN DEVELOPMENT STUDY

Mrs. HANSEN. Justify your request of $75,000 for the Georgetown development study.

Mr. CONRAD. This is a study that would coordinate development of the Potomac River Expressway with the Georgetown waterfront. The waterfront is quite obsolete. Its service industry and types of uses will go out of use. A full potential of that waterfront area—I mean from M Street all the way down to the waterfront itself—cannot

be realized unless the Potomac River Expressway is designed properly.

Mrs. HANSEN. What do you plan to do with the Whitehurst Freeway?

Mr. EDWARDS. We would like to take it down.

Mrs. HANSEN. I hope you have the courage to stick by your guns.

Mr. EDWARDS. We have fought this for some time and we thought we made agreements which would result in the Whitehurst Freeway's being taken down. But the plans keep shifting and this has been a terrible kind of hassle. But our objective is to get it down.

Mr. CONRAD. This is the problem. If another freeway elevated would be developed adjacent to this, it will compound the problem and really defeat true development in Georgetown.

This study would coordinate the expressway facilities with the future development in Georgetown.

Mrs. HANSEN. One of your problems is psychological. Many people feel that Georgetown is an enclave set apart from the Washington area. It should not be regarded that way. It should be regarded as an interesting part of the total city.

As Mr. Reifel mentioned earlier today, the Georgetown area lends itself to a total kind of pedestrian pattern that could be used by the average city dweller and the visitor.

Mr. EDWARDS. The amenities in this area could be the best in the city.

Mrs. HANSEN. It is one of the most picturesque areas.

Mr. EDWARDS. I must say we have had very strong support from the Georgetown citizens themselves. They have a planning council. In that area of the city live some of the best architects and very knowledgeable people in this community. We see this as an area which would increase the potential of people to move to the waterfront, to walk, and to enjoy the amenities which are not there now.

It is a hideous mess as it stands. If we can do something with this we think we will have made a real contribution.

Mrs. HANSEN. What are you going to do with the Georgetown Market?

Mr. CONRAD. The Georgetown Market has been retained. Two years ago the District wanted to get out of the market business completely. There were three markets, one on K, one in Southeast, and the other in Georgetown. We felt the Georgetown one was a historic structure. It was related to the historic C. & O. Canal. The District agreed and Congress in 1966 passed legislation to retain the Georgetown market. However, since that time nothing has been done to restore it or put it into a form that the public could really enjoy. The Southern Auto Parts is still in the Old Georgetown Market. We have been looking at this this past week and this is why I am up to date on the detailed history. We are trying now to get interest in the District Building and the Park Service to get at that Georgetown market structure itself and restore it, make it a museum and make it a part of the canal and open it up to the people. If possible, we could operate some kind of old time market there. Once again we are out to try to get something done about it. I think the basic thing is it has been preserved.

(Discussion off the record.)

ZONING REGULATIONS REVISION

Mrs. HANSEN. Why are you requesting funds to study the zoning regulations?

Mr. CONRAD. This is to make a Federal contribution to the revised zoning regulations. As pointed out in the justification it has been 12 years since we have had a revised zoning study. For this $50,000, we go into supporting the Federal interest in regard to zoning regulations which will deal with the height and the densities, like in the old L'Enfant City. We would want to study these zoning proposals along with the District in regard to the private zoning for the city.

Mr. EDWARDS. I might add that with the introduction of the Metro, the land values around these Metro stops will assume added importance from what they have now.

USE OF DOWNTOWN AREA AFTER DARK

Mrs. HANSEN. The committe discussed yesterday the various problems of entertainment in Washington, D.C.

There are many entertainment facilities in Washington, D.C., such as the Kennedy Center, Ford's Theater, the National Theater, and so forth. Yet one of the dismaying things is the apparent lack of people that use these facilities after dark. I think there are some things you have to do in the downtown area at night to again bring people back to use these facilities. Aren't restaurants suffering from a decline in business?

Mr. EDWARDS. Yes; there is no question of it.

Mrs. HANSEN. The lighting downtown at night in Washington is inadequate.

Mr. EDWARDS. I don't think that is so simple. The drop off in persons coming downtown and the volume of business and so on in downtown stores, in the clubs like the National Press Club and so on, suffered seriously as the result of the fear of people going out at night. I think there must be provided other stimulants to get people downtown.

Mrs. HANSEN. Isn't it true that in most cities the downtown section is one of the safest areas?

Mr. EDWARDS. I don't have any records of crime in the center cities. They are quite different from the crimes in other types of neighborhoods.

Mrs. HANSEN. Usually your downtown areas are better policed. The policemen are on the beat. It seems to me as I look at the cities that the inhabitants are unnecessarily fearful of their downtown areas.

What are you doing with the business community of the city to see what ingredients are necessary to bring back some of the city life?

Mr. EDWARDS. We would certainly cooperate with any existing plans and before the plans were finalized, they would have to come to us. I must indicate to you that the mayor is extremely concerned about this. He has an economic committee which is studying it from the viewpoint of the economic base of the city. In our own Commission meetings we talk frequently about the sort of deadliness of downtown after work hours, and something should be done to improve the quality of life and the scale of life downtown.

Mrs. HANSEN. Washington has some excellent restaurants and good theaters, but people do not use them. Why? Is it fear?

Mr. EDWARDS. I can speak only of what I know to be the fact; since the April riots, fear is a part of it.

Mrs. HANSEN. We have not had a riot for 2 years. I find that the average Washington citizen is pretty well behaved.

Mr. EDWARDS. The crime rate is pretty high.

Mrs. HANSEN. The crime rate is high. This is what I want to know, what areas of the city have the highest crime rate? Is it out in the city suburbs, and I don't mean the suburban areas of Maryland and Virginia. You will not be able to solve your problems until you know that.

Mr. EDWARDS. It would be in the areas peripheral to the central city. Those are the areas which are most decayed.

Mrs. HANSEN. This committee is responsible for funding a great many theater programs. The Government has a sizable investment in the Kennedy Center and Ford's Theater. I can foresee a time where there may be additional investments. This committee has encouraged the National Art Gallery and the Smithsonian to open at night. The hope was that in opening these facilities the young people, instead of taking to the streets, would avail themselves of the cultural privileges which are those singularly belonging to Washington. I think there are probably more facilities in Washington, D.C., than in most cities. Yet if fear and the high crime rate are going to deter the public's participation, what is going to be the result in the future?

Night after night I go home by way of Pennsylvania Avenue, and I feel perfectly secure on Pennsylvania Avenue. There are many policemen. It is better lighted than the adjacent suburbs. You should be developing some kind of confidence in our inner city, a confidence in what the city offers and what the police do in the way of protection.

Mr. SHEAR. The news media has not always helped the situation, Madam Chairman.

Mrs. HANSEN. I know there is fear of crime. You can not prosper and live under this eternal shadow of fear.

You must develop good solid facts about where the highest crime rate is located and show what the city is doing to protect the average citizen.

Mr. EDWARDS. I think some efforts along this line are being made. I noticed recently the chairman of the City Council was addressing himself to it, the Mayor has spoken out on it. There has been a slight downturn. I do not think it is very substantial. I think the whole process is ebbing and there are some countermeasures being taken to combat the fear which exists at the present time.

Mrs. HANSEN. I went to a restaurant in the District not too long ago in the evening and there were not a dozen people in it. Yet at the same time a suburban restaurant would have required a reservation, and the food probably would not have been as good as offered in the better Washington restaurants.

But the quality of the food in Washington, D.C. will decline if they continue to have a decline in business. Then you have lost one of the enticements that is necessary to bring people back downtown.

Mr. CONRAD. Madam Chairman, I think from the standpoint of planning, we had to take crime into consideration. One of the things we are aiming at for center city is a higher quality of existing and future development which would create a sense of security. We have been doing several things. For instance, in Southwest this may be a mistake, but in another form it is not a mistake. It provides a 24-hour type of population to support cultural events close-in to the center of the city. One of the problems with our center city has been the fact that you have not had the 24-hour type of population close-in to support it.

Mrs. HANSEN. This is what I am talking about.

Mr. CONRAD. Georgetown plus Foggy Bottom over the past 12 years have definitely contributed to this 24-hour kind of population. I think this trend should be encouraged. South of M Street as part of the downtown project we are saying part of the objectives of the urban renewal plan, high density, 24-hour type of population to support the economic tax base. North of M Street you get into what you are talking about, having good restaurants—colored restaurants that would be acceptable in a good community. There are other things that are being done. For instance, the rapid rail—we do not have the full benefit and impact of rapid rail. When this accessibility comes in you will see downtown, particularly between Union Station and the present downtown, really develop. Land consolidation is going on. As soon as this access becomes available these areas are going to start developing privately and with good solid development. Another factor which contributes to the rebuilding of this section of the city is the center leg of the inner loop which is now billboarding your front yard of Capitol Hill. When this is developed, this will also give terrific access to the center portion of the city.

Mrs. HANSEN. How many times has Independence Avenue been dug up?

Mr. CONRAD. I hope I do not have to supply that for the record, Madam Chairman.

Mrs. HANSEN. It has been done many times in the 10 years I have been in Washington, D.C.

Mr. CONRAD. I could go on and on with the various projects. The GPO is another illustration. We want to keep that economic base in the District. All these add to the relieving of the causes of crime. You can approach crime from the protection standpoint, but if you really want to get rid of crime, you have to approach it from the quality of living, quality of neighborhoods, job opportunities, and this is what we are aiming at in this plan.

Mrs. HANSEN. This is what I was after.

Mr. CONRAD. The comprehensive plan for the National Capital states that the major objective for the next decade in the Nation's Capital should be not only to provide new places for new employment but improving the quality of living places for our present occupants.

Mr. EDWARDS. That is why we are interested in the zoning. If we got the zoning provisions upgraded and brought up to date, we think we can do a great deal more with the downtown.

Mrs. HANSEN. You are going to have to shift this trend of not using the inner-city facilities or you will find yourself without a city. It is a basic ingredient of human living that one lives with people.

ADDITIONAL PLANNERS FOR COMPREHENSIVE PLANNING

You are requesting $26,778 and two additional positions for comprehensive planning. Justify this request.

Mr. CONRAD. These also would be urban planners. They would be in the Comprehensive Planning Division and they would form a core of community participation. The whole planning process has changed since 5 years ago. It is a process truly now with the citizen and it takes time and effort. It takes much more time.

Mrs. HANSEN. It also takes patience.

Mr. CONRAD. And patience, too. These two planners could work with the District in their community centers or service centers, as they call them. I believe the Mayor is getting two or three of those underway. He is asking for around seven. This would be the initial core of urban planners that would work with the District and the people in reference to planning projects of both Federal and District agencies.

REIMBURSEMENTS RECEIVED FROM FEDERAL, STATE, AND LOCAL SOURCES

Mrs. HANSEN. Please insert in the record a listing, by agency, of total funds you have received from other agencies, either by transfer or reimbursement for fiscal year 1969, and what is programed for fiscal 1970.

(The information follows:)

For fiscal year 1969, $92,351 was received from the District of Columbia Redevelopment Land Agency for the planning of urban renewal projects. Of this amount, $12,547 was returned as unobligated at the end of the 1969 fiscal year.

It is estimated that $226,000 will be needed for urban renewal planning for each of fiscal years 1970 and 1971.

A transit stop study is under consideration for fiscal year 1970 to be financed in part by the National Capital Planning Commission (estimated $15,000 for NCPC), and by the Department of Housing and Urban Development, District of Columbia government, and the Washington Metropolitan Area Transit Authority.

Separate contracts will be involved and funds will not be transferred to the National Capital Planning Commission.

No other funds were received in fiscal years 1969 and 1970.

CONTRACTS WITH EXPERTS

Mrs. HANSEN. You have budgeted $225,000 for "Contracts with experts." Justify this request.

Mr. CONRAD. That is the regional airport study, the zoning study, and the Georgetown development study.

SERVICES OF CHAUFFEUR

Mrs. HANSEN. In the list of personnel under administrative services you have a "Chauffeur ungraded." Please justify the need for this position.

Mr. EDWARDS. He brought us to this meeting among other things, and I hope he will be able to take us home. He does various jobs for the agency, but we will supply that for the record.

(The information follows:)

The position involves dual functions of a chauffeur and a messenger. As chauffeur, the employee drives the Chairman and Executive Director to various meetings, conferences and hearings. He also drives other employees or groups of employees when circumstances warrant.

He serves as messenger within and without the office, collecting and delivering mail, correspondence, etc. He makes purchases of supplies from the General Services Administration stores and elsewhere as directed, hauling them in the Commission's sedan to the Administrative Office. He performs related duties as assigned, including straightening up of conference rooms, hauling material and supplies to and from both conference rooms, etc.

LAND ACQUISITION FUNDS

Mrs. HANSEN. As of your latest reporting date, what was the unobligated balance under the appropriation title "Land acquisition, National Capital park, parkway, and playground system"?

Mr. PRITCHARD. That is $686.09. All under section 4, District of Columbia.

Mrs. HANSEN. What do you consider as "an obligation" in this connection?

Mr. SHEAR. An obligation, Madam Chairman, is any legally enforceable commitment for the expenditure of Federal funds. I do not know whether that is the General Accounting Office definition, but for land acquisition purposes, we obligate funds whenever we enter into a contract with a property owner for the acquisition of land, or whenever, as in the case of sections 1(a) and 1(b) of the Capper-Cramton Act—the George Washington Memorial Parkway and the Stream Valley Park program, respectively—we enter into a contract with a State or local political subdivision which obligates that State or local political subdivision to match federally appropriated funds, as is required under the Capper-Cramton Act. For example, section 1(a) authorizes the appropriation of funds for the acquisition of lands for the George Washington Memorial Parkway in Maryland and Virginia. The act also requires that before those federally appropriated funds may be used, they must be matched by the State of Maryland or Virginia or local political subdivisions thereof. When the federally appropriated funds have been matched pursuant to a contract entered into, and the funds, State or local are received, the Federal funds are obligated, and the United States, having entered into a contract providing for the acquisition of land, has a legally binding obligation with respect to those funds. We treat those funds as having been obligated at that point.

Mrs. HANSEN. What was the last fiscal year in which funds were appropriated for this appropriation account?

Mr. PRITCHARD. $100,000 was appropriated in fiscal year 1963 for the George Washington Memorial Parkway in Maryland. It was subsequently withdrawn in fiscal 1970.

Mrs. HANSEN. These funds have been available for several years now without being expended. Is there any reason why this appropriation account should not be closed out in one way or another?

Mr. SHEAR. Madam Chairman, you will recall that last year the Congress in its appropriation to the National Capital Planning Commission provided that substantially all of the appropriated but unobligated funds were to be used as a source for the appropriations to the Commission. Mr. Pritchard can indicate what that figure was.

Mr. PRITCHARD. $770,000 was withdrawn.

Mr. SHEAR. The only unobligated funds remaining are $686.09, which I think remains as a rounding-off figure. There are obligated but unliquidated funds.

Mrs. HANSEN. Please insert in the record, by item and individual amount, those items which you consider as bona fide obligations under this account. In those instances where obligation of these funds would depend on matching funds from the neighboring State, and the funds have not been matched for these past several years, I would seriously question your including these amounts as obligations.

Mr. SHEAR. Yes.

Under those circumstances the funds should not be indicated as obligated funds. We will supply a complete statement for the record.

(The information follows:)

LAND ACQUISITION FUND—STATUS OF UNLIQUIDATED OBLIGATIONS, MAR. 31, 1970

Name of account	Amount of obligations		Date of obligation	Reason for non-expenditure	Estimated date of expenditure
	Federal	Matching			
George Washington Memorial Parkway:					
Arlington County, Va., units 3 and 4.	$10,291.71	$10,291.71	June 17, 1950	Unit completed; remaining balance.	Obligation to be canceled.
Fairfax County, Va.:					
1954 contract	2,551.17	2,551.18	Mar. 9, 1955	do	Do.
1955 contract	947.45		Oct. 1, 1955	do	Do.
Montgomery County, Md.:					
1939 contract	1,242.75	1,242.74	Sept. 15, 1939	do	Do.
Agreements "V" and "W".	24,858.46	24,858.47	Dec. 4, 1958	(1)	(1).
Prince Georges County, Md.:					
1961 contract	18,442.41	18,442.40	June 30, 1961	Unit completed; remaining balance.	Obligation to be canceled.
1962 contract	154,104.16	154,104.17	Oct. 8, 1963	(2)	May 15, 1970.
District of Columbia:					
Klingle Valley rights-in-land.	48,000.00		Jan. 16, 1959	Pending administration of Davies estate (Tregaron) and resolution of title problems.	Unknown.
Miscellaneous	16,680.87		(3)	(4)	(4).

[1] These funds are reserved for the acquisition of portions of the so-called Cabin John right-of-way in Maryland, title to which is the subject of litigation in condemantion proceedings instituted by the Department of Justice on behalf of the Department of the Army for a portion of the right-of-way needed for the Dalecarlia Reservoir (U.S. v. 1.44 acres of land in Montgomery County, Maryland, 304 F. Supp. 1063). The U.S. District Court for the District of Maryland held that the right-of-way has been abandoned and, with respect to certain portions—including portions to be used for the George Washington Memorial Parkway—title reverted to the United States. A petition for appeal is pending in the U.S. Court of Appeals for the 4th Circuit and until the title question is finally determined, it is not possible to estimate the date or probable amount of expenditure of these funds.

[2] These funds—the balance of $1,000,000 appropriated and matched—are reserved for the acquisition of remaining lands in units Nos. 2, 3, and 4 of the parkway in Prince Georges County. Acquisition has been withheld pending presentation by the National Park Service of a revised program related to the Fort Washington Parkway authorized by the Federal Aid Housing Act of 1968.

[3] Various.

[4] These are largely unliquidated obligations for acquistion expenses, such as title examinations and conveyancing, appraisals, and surveys. It is anticipated that they will be substantially expended by the end of fiscal year 1970.

MEMBERS OF NATIONAL CAPITAL PLANNING COMMISSION

Mrs. HANSEN. Insert in the record the names of the members of the National Capital Planning Commission and Mr. Edwards' biography. Are you going to stay on as Chairman, Mr. Edwards?

Mr. EDWARDS. I just don't know. We have a very distinguished member of the Commission from your State who is still very active with us. We will do whatever you ask, Madam Chairman.

(The information follows:)

MEMBERS OF NATIONAL CAPITAL PLANNING COMMISSION

G. Franklin Edwards, Acting Chairman, District of Columbia; Term expires 4/30/71.

Conrad L. Wirth, Acting Vice-Chairman, Maryland; Term expires 4/30/72.

Vacant; Term expires 4/30/73.
Vacant; Term expires 4/30/74.
Paul Thiry, Washington; Term expires 4/30/75.
Hon. Joseph D. Tydings, Chairman, Committee on the District of Columbia, U.S. Senate.
Hon. John L. McMillan, Chairman, Committee on the District of Columbia, House of Representatives.
Hon. Walter E. Washington, Commissioner of the District of Columbia.
George B. Hartzog, Jr., Director, National Park Service, Department of the Interior.
Arthur F. Sampson, Acting Commissioner, Public Buildings Service, General Services Administration.
Lt. General Frederick J. Clarke, Chief of Engineers, United States Army.
R. R. Bartelsmeyer, Director of Public Roads, Bureau of Public Roads, Department of Transportation.

G. FRANKLIN EDWARDS, ACTING CHAIRMAN, NATIONAL CAPITAL PLANNING COMMISSION

Ph. D., University of Chicago (Sociology)
Professor of Sociology, Howard University, Washington, D.C.
Phi Beta Kappa
Ad Hoc Advisory Committee, Center for Urban Education, New York City
American Sociological Society (Fellow)
Eastern Sociological Society
District of Columbia Sociological Society (Past President)
Population Association of America
Sociological Research Association
South African Institute for the Study of Race Relations
Research Advisory Council for the Cooperative Research Branch, U.S. Office of Education, 1962–65
Advisory Committee on the Education of the Deaf, Department of Health, Education and Welfare, 1964–65
Panel, President's Committee on Juvenile Delinquency and Youth Problems, 1961–66
Advisory Board, National Capital Transportation Agency, 1961–67
Board of Directors, Washington Planning and Housing Association, 1961–68
Advisory Committee to the Director, National Institutes of Health, 1966–present
Steering Committee on Model School Sub-system, District of Columbia Public Schools
Board of Directors, Washington Home Rule Committee
Author: The Negro Professional Class (Glencoe, Illinois; The Free Press, 1959) and articles in professional journals
Appointed to NCPC by President Johnson in 1965

Mrs. HANSEN. Mr. Reifel.

Mr. REIFEL. Madam Chairman, I want to join you in commending Mr. Edwards on an excellent presentation. It has been a delightful afternoon with you and also the other members of your staff. You have done a very effective job of presenting your case and I want to commend you for it.

Mrs. HANSEN. I also want to thank the staff. I think Mr. Conrad, you have done a particularly able job this afternoon. The committee will be interested in the results of your transportation study because you are not going to solve the transportation problems in the cities until you understand the basic ingredients of these problems.

Mr. CONRAD. Yes.

Mrs. HANSEN. Several years ago, coming across the Memorial Bridge I counted the cars that morning which were coming into Washington with one person in them, and there was not a single car in that entire line that had more than one person in the car.

Mr. EDWARDS. Our study shows that all the cars entering the center city have an average of 1.2 passengers.

Mrs. HANSEN. Thank you.

Mr. EDWARDS. We want to thank you, Madam Chairman, and the members of the committee.

FRIDAY, APRIL 10, 1970.

NATIONAL GALLERY OF ART

WITNESSES

J. CARTER BROWN, DIRECTOR
E. JAMES ADAMS, ADMINISTRATOR
LLOYD D. HAYES, TREASURER

SALARIES AND EXPENSES

Mrs. HANSEN. The committee will come to order.

This morning we have the pleasure of having the National Gallery of Art, and our principal witness is Mr. Brown, the Director. Because this is your first official appearance before us, please insert in the record your biography.

(The biography follows:)

J. CARTER BROWN

Born October 8, 1934, Providence, R.I., son of John Nicholas and Anne (Kinsolving) Brown.

Graduated from Groton School, Groton, Mass., 1951. Exchange year at Stowe School, Buckingham, England.

A.B., summa cum laude, Harvard, 1956. Phi Beta Kappa.

M.B.A., Harvard Graduate School of Business Administration, 1958.

1958–59, studied in Europe (in Munich, in Florence with Bernard Berenson, in Paris in the Museum Training Course at the Louvre).

M.A., Institute of Fine Arts, New York University, museum program with training at the Metropolitan Museum of Art, 1962. Thesis in Dutch, 17th century painting. Summer course, 1960, the Netherlands Institute for Art History, The Hague.

1961–63: Assistant to the Director, National Gallery of Art, Washington, D.C.
1964: Appointed Assistant Director, National Gallery. Elected a Director, Associated Harvard Alumni (to 1967).
1965: Trustee and chairman of the National Exhibition Committee of the American Federation of Arts.
1966: Wrote and directed award-winning film, The American Vision. Member Washington Film Council, committee to visit the music department at Harvard (to 1969), education committee for the Rhode Island School of Design (to 1969).
1967: Member of the board of directors of CINE (Council for International Nontheatrical Events.)
1968: Appointed Deputy Director, National Gallery of Art. Member of the board of the national humanities faculty, board of advisors to the President of the Naval War College, committee to visit the library at Harvard.
1969: July 1, appointed Director, National Gallery of Art. Treasurer and member, Executive Committee of the District of Columbia Commission on the Arts; member, President's Council of the Institute of Fine Arts of New York University, White House Historical Association, Committee for the Preservation of the White House, Board of Trustees of the National Trust for Historic Preservation, Federal Council on the Arts and Humanities, National Portrait Gallery Commission, President's Temporary Commission on Pennsylvania Avenue, Citizens Stamp Advisory Committee.
Member, Associated Councils of the Arts, College Art Association, International Council of Museums, Associates of the John Carter Brown Library, Society of Architectural Historians.

JUSTIFICATION OF ESTIMATES

Mrs. HANSEN. Also insert pages 1 through 9 of the justifications in the record.
(The justifications follow:)

HIGHLIGHT STATEMENT

1970 Requirement and 1971 Request

The Congress appropriated $3,390,000 for "Salaries and Expenses, National Gallery of Art, 1970." Due to pay increases granted by Executive Order No. 11474, and wage increases for employees paid at prevailing rates, a supplemental appropriation will be needed to increase the 1970 obligating authority to $3,581,000. The 1971 request of $3,716,000 exceeds this current-year requirement by $135,000.

1971 Program

Our primary objectives related to the 1971 increases are: (1) to restore the evening hours for visitors from July 1 through Labor Day, and (2) to form the basic library staff required to acquire and catalogue books for the new Advanced Study Center.

The Gallery was not open on weekday evenings during the past spring and summer. However, evening hours are planned for the spring and summer of calendar year 1970. Funds for the extended hours from April 1 through June 30, 1970, are included in the 1970 requirement. An additional $67,000 is required in fiscal year 1971 to continue the evening hours from July 1 through Labor Day, 1970.

The nucleus of the Advanced Study Center planned for the new Gallery building will be a fine arts library comparable to those of other museums and universities which attract the more capable art scholars. Such a library will need upwards of 50,000 volumes. As of June 30, 1969, the Gallery library numbered 26,481 books. Approximately $46,000 is included in the 1971 budget to cover the part-year (9 months) costs for six new library positions. This new staff will acquire and catalogue over the next three years the some 25,000 additional books needed by the time the Advanced Study Center is opened.

In addition to the six new positions for the Advanced Study Center library, one new docent position is required due to an increase in the workload of the Education Office.

All other operations and functions for fiscal year 1971 are planned at the 1970 level.

Authorizing Legislation

This request for an appropriation is based on the premises contained in section 4(a) of the Joint Resolution of Congress, March 24, 1937, (20 U.S.C. 71-75) in which:

> "The faith of the United States is pledged that...the United States will provide such funds as may be necessary for the upkeep of the National Gallery of Art and the administrative expenses and costs of operation thereof, including the protection and care of works of art acquired

by the Board, so that the National Gallery of Art shall be at all times properly maintained and the works of art contained therein shall be exhibited regularly to the general public free of charge."

NATIONAL GALLERY OF ART

Salaries and Expenses

Appropriation, 1969, including supplemental of $30,000	$3,230,000
Appropriation, 1970, including anticipated supplemental of $191,000	3,581,000

Summary of Increases and Decreases

1. To pay, on a full-year basis, wage and salary increases effective for only a portion of the current year	+20,187
2. To pay increase in accident compensation	+4,500
3. To pay increase in annual contract for restoration of works of art	+2,000
4. To pay for the restoration of evening visiting hours during July and August	+67,207
5. To pay part-year costs of 6 new position for fine arts library	+45,879
6. To pay full-year costs of 1 new docent position	+8,627
7. Reduction due to non-recurring equipment purchases in 1970	-12,000
8. Other reductions	-1,400
Net change, 1971	+135,000
Budget estimate, 1971	$3,716,000

EXPLANATION OF INCREASES AND DECREASES

1. Additional cost of current-year pay act and wage-board increases, $20,187

The pay act increase granted by Executive Order No. 11474 will cost $169,234 for the 25.2 bi-weekly pay periods during which the rates are effective in the current year. For the full-year in 1971 (26.1 pay periods) the additional cost is $6,439.

Laborers and employees in crafts and trades were granted a wage increase effective November 2, 1969, which will cost $22,030 for the remaining 17.2 bi-weekly pay periods in fiscal year 1970. For the additional 8.9 pay periods in 1971, the added cost will be $13,748.

2. Accident compensation payments, $4,500

Accident compensation payments, based on the annual billing from the Bureau of Employees' Compensation, U. S. Department of Labor, amount to $4,600 for 1969. This amount is payable in 1971 and exceeds the current-year payment by $4,500.

3. Increase in annual contract for restoration of works of art, $2,000

Although the restoration of works of art is done under an annual contract with a private individual, the fixed annual payment has been

adjusted from time to time by increases comparable to pay act raises. Under this policy, the annual amount of the contract should be increased from $16,000 to $18,000, effective July 1, 1970. This will be the first increase in the contract since July 1, 1968.

4. Restoration of evening visiting hours during July and August, $67,207

Evening visiting hours, daily during the spring and summer, were first instituted at the Gallery in 1966. Attendance during the extra hours, from April 1 through Labor Day 1966, was 121,984. In June of 1968, the evening hours were dropped due to poor attendance during both the day and evening. The 1970 budget includes funds to re-establish the extra hours on April 1, 1970. To continue this evening schedule during the remaining summer months of July and August will require additional funds totaling $67,000 in fiscal year 1971. The upsurge in attendance for the past spring and summer appear to justify a return to the full evening schedule next year. In the five months, April through August, 1969, attendance was 834,616 compared to 682,108 in the same 1968 period--an increase of 22.4 percent.

Eighty-four employees are required on duty when the building is open--73 guards and 11 others engaged in public service type duties. The $67,000 increase in 1971 is derived as follows:

	Personnel Compensation	Benefits	Other
Part-time and intermittent service (14,691 man-hours).....	$39,845	$1,687	....
Overtime services (4,235 man-hours).....	18,675	....	....
Electric current for air-conditioning and lighting.....	....	....	7,000
	$58,520	$1,687	$7,000

Total..... $67,207

5. Staff for acquisition and cataloguing of books and photographs preparatory to opening of Advanced Study Center

Public Law 90-376, approved July 5, 1968, authorizes the Trustees of the National Gallery of Art to construct a new building within the area between Fourth and Third Streets, directly east of the present building. In testimony before the Subcommittee on Public Buildings and Grounds, Committee on Public Works, House of Representatives, the director of the Gallery spoke in part as follows on one of the primary uses to be made of the new building:

"The second use of the new building to which I should like to give special emphasis is the housing of a great center for advanced study in the visual arts, a center and institution that woul io for art history and related disciplines what the famed Institut. for Advance

Study at Princeton has done for the physical sciences and the humanities. It will provide a meeting ground for teachers and scholars from all over the world."

The nucleus of such a center for advanced study is a fine arts library comparable to those of other museums and universities which attract the more capable art scholars. At the present time, the Gallery's library with only a total of some 26,000 books, cannot be ranked with those of centers supporting scholarly studies in the visual arts. For example: the Victoria and Albert Museum serving as the British National Art Library, contains over 400,000 volumes; the Warburg Institute at London has about 250,000 volumes; the Harvard art holdings number over 200,000; and the Metropolitan Museum has about 165,000 volumes.

Our goal is to have a minimum of 50,000 volumes when the first scholars report to the new Advanced Study Center in 1975. Many of the books needed are rare and expensive. Donated funds will be used for the purchase of these books, but appropriated funds are requested in fiscal year 1971 to employ the professional staff needed to acquire and catalogue them. The proposed staff and annual cost is as follows:

No.	Position	Grade	Annual Rates Compensation	Benefits
1	Librarian	11	$11,233	$ 865
2	Librarians	9	18,640	1,435
2	Librarians	7	15,278	1,176
1	Library Assistant	5	6,176	476
6	Positions		$51,327	$3,952

The $45,879 request will pay the above costs for 9 months in 1971 and provide $2,600 for office furniture and equipment for the six positions.

6. One new docent position due to increased workload in Education Office

The educational program for the benefit of Gallery visitors is presented in the following forms:

a. Information services available at both public entrances,
b. Regularly scheduled tours,
c. Scheduled tours by appointment,
d. Leaflets relating to works of art in some exhibition rooms,
e. Taped talks on works of art for recorded tours,
f. Printed texts on a different work of art each week,
g. Weekly Sunday program in auditorium on some aspect of art, and
h. Preparation of printed material and training of volunteers who conduct tours for area school children.

In addition, except for the summer, weekly radio talks are presented at the intermission of Sunday concerts.

The professional staff presently authorized for the program consists of these positions:

1 curator	GS-14
1 docent	GS-11
2 docents	GS-9
2 docents	GS-7
5 art information specialists	GS-5

One additional docent, grade GS-7, is proposed for 1971.

Educational Program Workload
(actual 1967-69, estimated 1970-71)

	1967	1968	1969	1970	1971	1971 over 1969
Number of visitors served by tours and lectures	156,843	147,245	164,911	177,000	194,000	18%
Number of tours	637	759	871	950	1,050	21%
a. Number of visitors (thousands annually)	1,511	1,267	1,283	1,375	1,500	
b. Average number assigned to program	11	11	11	11	12	
c. Ratio (in thousands) of visitors to staff (a ÷ b)	137	115	117	125	125	

The total cost in 1971 for this new position is $8,627, consisting of $7,639 in compensation, $588 in benefits, and $400 for office furniture and equipment.

7. Non-recurring equipment, $12,000

The 1971 budget includes $12,000 for the replacement of an accounting machine.

STATUS OF PROGRAM

Changes in Management Requirement:

An average employment of 317 (including the full-time equivalent of part-time and intermittent employment) was maintained during fiscal year 1969. This was 11 man-years under the estimate of 328 indicated in the 1970 budget. This reduction (all in part-time employment) was possible due to the cancellation of the planned evening hours from

April 1 to June 30, 1969. Overtime services and part-time employment to the extent of 13 man-years, and at a cost of some $95,000, were utilized to offset in part the understaffing in full-time positions resulting from employment ceilings under P.L. 90-364. Including a pay act supplemental of $30,000, the 1969 estimate for personnel costs, as shown in the 1970 budget, totaled $2,619,000. Actual 1969 obligations for personnel compensation and benefits were $2,576,908. The some $42,000 savings from the estimate was used to cover increased costs of utility services, communications, and rehabilitation of sofas provided in exhibition areas for the comfort of visitors.

The Gallery's 1970 appropriation is $3,390,000. Pay increases authorized by Executive Order No. 11474 will cost $169,000 in 1970, and a wage increase granted to employees paid at prevailing rates will cost an additional $22,000 in the current year. A supplemental appropriation is being requested to cover the full amount of these salary increases. Non-controllable increases of over $41,000 in the cost of retirement contributions, travel per diem, utilities, and communications services are being absorbed. Average employment in 1970 is estimated at 347 (including the full-time equivalent of part-time and intermittent employment).

Funds are requested in 1971 to support an average employment of 361--an increase of 14 over the current year. This increase will provide the additional staff required to:

(a) reinstate the evening visiting hours in July and August;
(b) begin the acquisition and cataloguing of books for Gallery's library preparatory to the opening of an advanced study center for the fine arts; and
(c) meet the growing demands for art educational services made available to Gallery visitors.

Accessions:

During the 1969 fiscal year 180 works of art were acquired.

Special Exhibitions:

The following exhibitions were held at the National Gallery of Art during the fiscal year 1969:

Paintings from the Albright-Knox Art Gallery--continued from the previous fiscal year through July 1, 1968.

Prints of the Danube School--continued from the previous fiscal year through October 10, 1968.

Photographs by Alfred Stieglitz from the Alfred Stieglitz Collection--August 16 through December 3, 1968.

Prints by Lucas van Leyden--October 11 through November 26, 1968.

Modern British Prints--August 3, 1968 through October 21, 1968 (with a portion on view until November 17, 1968.)

J.M.W. Turner, A Selection of Paintings from the Collection of Mr. and Mrs. Paul Mellon--October 31, 1968 through April 21, 1969.

Painter of Rural America: William Sidney Mount--November 23, 1968 through January 5, 1969.

An Exhibition of Christmas Prints from the Rosenwald Collection--November 26, 1968 through February 5, 1969.

17th Century Landscape Prints from the Collection of the National Gallery of Art--December 4, 1968 through April 8, 1969.

The Birds of America by John James Audubon--January 25 through February 16, 1969.

Prints and Drawings by Alphonse Legros--February 6 through April 17, 1969.

Rembrandt in the National Gallery of Art--March 9 through May 11, 1969.

Festivals and Fairs, Prints from the Collection of the National Gallery of Art--April 9, 1969 to continue into next fiscal year.

Lithographs by Henri de Toulouse-Lautrec from the National Gallery of Art Rosenwald Collection--April 18 through June 24, 1969.

John Constable, A Selection of Paintings from the Collection of Mr. and Mrs. Paul Mellon--April 30, 1969 to continue into next fiscal year.

111 Masterpieces of American Naive Painting from the Collection of Edgar William and Bernice Chrysler Garbisch--June 12, 1969, to continue into next fiscal year.

Bandboxes and Wallpaper from the Index of American Design--June 25, 1969, to continue into next fiscal year.

Exhibitions of recent accessions: Mrs. Metcalf Bowler by Copley (July 16 through August 9, 1968); Pumpkins by Walt Kuhn (September 3 through December 12, 1968); An Architectural Fantasy by Jan van der Heyden (December 13, 1968 through April 10, 1969); The Judgment of Paris by Claude Lorrain (April 11 through June 5, 1969); Portrait of a Man by Jordaens (June 20, 1969 to continue into next fiscal year).

Curatorial Services:

Advice was given regarding 1,431 works of art brought to the Gallery for expert opinion, and 40 visits to collections were made by members of the staff in connection with offers of gifts. About 4,000 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 232 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 film strips. Traveling exhibitions are lent free of charge except for shipping expenses. Two hundred ten exhibits were circulated in 1,342 bookings. It is estimated that 1,073,000 persons viewed these exhibitions. Two hundred nineteen prints of three films on the National Gallery and its collections were circulated in 2,088 bookings and were seen by approximately 230,000 viewers. This represents an increase of 789 bookings (approximately 87,110 viewers) over last year when 144 prints of films were circulated. A total of 2,425 slide-lecture sets were circulated in 10,390 bookings, an increase of 903 bookings over last year. These were seen by an estimated 779,075 viewers. The special project of placing slide lecture sets on long-term loans with school systems was continued with a total of 385 slide sets distributed in 61 school systems. These slide sets were used in approximately 9,000 bookings with an estimated 675,000 viewers. This represents an increase of 4,877 bookings (approximately 365,775 viewers) over last year. Total bookings for all items numbered 22,820 compared with 16,303 in 1968--an increase of 40 percent. The estimated number of persons served in fiscal year 1969 was 2,757,000, an increase of about 575,000 over last year. In addition,

Index of American Design traveling exhibits were booked 71 times, and sets of color slides of Index materials were booked 183 times.

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 77,672. Lectures, conferences and tours given by special appointment served 28,437 visitors. There were 51 Sunday auditorium lectures illustrated with art films or slides, attended by 13,389 persons. Members of the Education Office prepared and recorded 38 radio broadcasts during the year.

Library Acquisitions:

During the year the Gallery Library acquired 1,103 books, 1,075 pamphlets, and 3,578 periodicals. The Library now has 26,481 books, 23,349 pamphlets, and 2,422 bound volumes of periodicals.

Photographic Laboratory:

The Photographic Laboratory of the Gallery made 1,451 color slides, 348 black and white slides, 2,346 negatives, 1,081 color transparencies, and 30 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 1,283,398 visitors to the Gallery during fiscal year 1969. This represents an increase of 16,370 over the 1968 attendance. The average daily attendance for the year was 3,536. The Gallery as a whole was maintained at a standard in keeping with the conditions of the gift of the building and the initial collection of works of art.

SALARIES AND EXPENSES

Object Classification (in thousands of dollars)

		1969 actual	1970 estimate	1971 estimate
	Personnel compensation:			
11.1	Permanent positions	2,197	2,531	2,600
11.3	Positions other than permanent	29	63	99
11.5	Other personnel compensation	181	138	157
	Total personnel compensation	2,407	2,732	2,856
12.1	Personnel benefits: Civilian employees	170	201	212
21.0	Travel and transportation of persons	5	8	8
23.0	Rent, communications, and utilities	189	193	200
24.0	Printing and reproduction	17	33	35
25.0	Other services	66	62	56
26.0	Supplies and materials	98	90	91
31.0	Equipment	29	124	72
32.0	Lands and structures	144	240	243
	Total costs, funded	3,124	3,685	3,773
94.0	Change in selected resources	105	-104	-57
99.0	Total obligations	3,229	3,581	3,716

Personnel Summary

Total number of permanent positions	359	359	366
Full-time equivalent of other positions	6	13	20
Average number of all employees	317	347	361
Average GS grade	5.6	5.6	5.7
Average GS salary	$7,093	$7,740	$7,732
Average salary of ungraded positions	$6,786	$7,149	$7,126

Mrs. HANSEN. The committee always enjoys having the National Gallery of Art appear before us. Your hearings have always been most interesting and educational. The committee feels that the National Gallery of Arts is something that our Government can be very proud of.

Mr. BROWN. Thank you, Madam Chairman.

Mrs. HANSEN. Mr. Brown, please insert your general statement in the record and summarize it for us.

GENERAL STATEMENT

Mr. BROWN. Madam Chairman, I will place it in the record and perhaps summarize it briefly.

(Mr. Brown's statement follows:)

The 17th day of last month marked the 29th anniversary of the opening of the National Gallery of Art. Over this relatively short period the National Gallery of Art has achieved top rank among the great art museums of the world. With the support of the Congress, the gallery has been maintained and administered continuously at a high standard, one that has helped attract gifts to the Nation of princely proportions. Mr. Andrew Mellon's basic idea, as expressed in a letter to President Franklin D. Roosevelt, was that the building and its masterpieces should "become the property of the people of the United States," and that the gallery be administered for their use and benefit.

Today, we are more concerned than ever with the greater fulfillment of that fundamental purpose—that the gallery be for the use and benefit of the people. Our attendance during the first 8 months of the current year indicates some success from our recent efforts. More visitors have come to the gallery thus far this fiscal year than came during the full 12 months last year. Through February compared to the same period a year ago, our attendance is up by some 64 percent—almost a half million visitors.

1971 REQUEST

The major increases in our 1971 budget request are related to making the National Gallery of Art of greater benefit and use to the general public. In total, we are requesting $135,000 above the $3,581,000 estimate for the current year. The current-year figure consists of the 1970 appropriation of $3,390,000 and an anticipated supplemental appropriation of $191,000 for mandatory pay increases. Of the 1971 increase, $67,000 is for the restoration of evening visiting hours during July and August, $54,000 is for seven new positions, and the remaining net amount of $14,000 is for nondiscretionary increases in pay costs, accident compensation, and art restoration.

EVENING HOURS RE-ESTABLISHED

Evening visiting hours, daily during the spring and summer, were first instituted at the gallery in 1966. Attendance during the extra hours, from April 1 through Labor Day 1966, was 121,984. In June of 1968, the evening hours were dropped due to poor attendance during both the day and evening. The extra hours were reestablished beginning last Wednesday, and our Trustees have approved a closing time of 9 p.m. weekdays, and 10 p.m. on Sundays during the spring and summer. To continue this evening schedule during the remaining summer months of July and August will require additional funds totaling $67,000 in fiscal year 1971. The recent upsurge in attendance, as well as the 22 percent increase in daytime attendance last spring and summer compared with the same 1968 period, justifies, we believe, a return to the full evening schedule.

FINE ARTS LIBRARY FOR NEW ADVANCED STUDY CENTER

Public Law 90–376, approved July 5, 1968, authorizes the Trustees of the National Gallery of Art to construct a new building within the area between Fourth and Third Streets, directly east of the present building. One of the pri-

mary functions to be housed in this addition to the Gallery is a center for advanced study in the visual arts. The nucleus of such a center for advanced study is a fine arts library comparable to those of other museums and universities which attract the more capable art scholars. At the present time, the gallery's library with only a total of some 26,000 books, cannot be ranked with those of centers supporting scholarly studies in the visual arts. For example: the Victoria and Albert Museum serving as the British National Art Library, contains over 400,000 volumes; the Warburg Institute at London has about 250,000 volumes; the Harvard art holdings number over 200,000; and the Metropolitan Museum has about 165,000 volumes.

Our goal is to have a minimum of 50,000 volumes when the first scholars report to the new Advanced Study Center in 1975. Many of the books needed are rare and expensive. Donated funds will be used for the purchase of these books, but appropriated funds are requested in fiscal year 1971 to employ the professional staff needed to acquire and catalog them. Six new positions are requested for this purpose.

In addition, one other new position is needed to meet the increased demands from the public for educational services relating to the collections.

Summarizing, except for the extended hours this summer and the seven new positions just mentioned, it is our intention to serve a greater portion of the general public in 1971 at no increase in resources (manpower and materials) over those available this year.

INCREASES

Mr. BROWN. I will summarize by simply saying our request that we have this year is based primarily on a budget which continues the present level of funding with the exception of mandatory increases and with the further exception of two things primarily: one, a desire to continue our evening opening hours and a request for sufficient funds to be able to do that; and, second, a request for seven new positions, one of them in the Education Department and the others building towards the staff necessary to man our new building and our new Center for Advanced Study, and its library.

EVENING HOURS

The evening hours are primarily the initiation of this committee and we are delighted that as of a few days ago we are able to be open until 9 o'clock at night. Our current authorization will carry us until the end of the fiscal year, but the attendance at the gallery has been so spectacular this year that we know that there will be a demand to use it in the evening for the rest of the summer, and this is why we are requesting $67,000 toward that end.

The response to our "Civilization" film series this fall has taken us all by storm. We were going to show it once in our 300-seat auditorium and some 20,000 people showed up to the gallery that day and it was chaos, and so we immediately started showing it all day, every day, and when we were through the whole series some 150,000 people had come. The White House had requested a special showing there and it then became necessary for us to make plans to show it all over again, so we have gone out to the public to raise money by public subscription to buy a set of prints that we can now have permanently. As of today close to 4,000 people have contributed to that effort, and so we are now in possession of our own print of the 13-part series which has just started again to draw great crowds. Again, we have to show it all day,

everyday, and if we have funds to open in the evening, in July and August, we hope very much to show it in the evenings then and have it available for people then.

Mrs. HANSEN. The committee is very interested in evening openings. As you are well aware, the evening opening of the Smithsonian, was a dream of Congressman Kirwan. This committee has also encouraged the opening of other similar facilities. It was Congressman Kirwan's hope, and I think this is a tribute to his vision, that through evening openings we could interest young people to attend the Smithsonian and the National Gallery of Art rather than spending the evenings on the street with nothing constructive to occupy their time. Has your attendance in the evening been good?

Mr. BROWN. Yes, so far. We have only been open a few days but we have had a good response. It never is quite at the same level as during the day, but that has its plus side, which is that then you don't have people having to jostle with other people to see the pictures. They have a more leisurely mood and atmosphere in among the paintings and, in a sense it is a quality visit that you can't get in any other way. We have had an average weekly night attendance through this first week, where the word isn't really out and the tourists are just coming, of 525 a night, so I think in general we can expect from 3,000 to 5,000 a week.

Mrs. HANSEN. What age levels are you reaching with your evening openings?

Mr. BROWN. I think it is all ages. We have innovated this year a new program which we have done in connection with the American Film Institute of having masterpieces of the history of film shown in our auditorium to members of the Institute. I went just last night. We are having a Japanese film retrospective at the moment and I am fascinated by the young age level that that brings in. This is just the kind of audience we want to reach.

Mrs. HANSEN. We hope the tourists will realize that there are evening hours because it is an ideal way to spend a pleasant evening.

EDUCATIONAL SERVICES

Mr. BROWN. Just to summarize the rest of the highlight statement, we have a request for an additional person on our educational staff. This is a question of trying to keep up with the demand for educational service. The African sculpture show that we had, which closed a few weeks ago, was one of the most successful in the history of the gallery and there was more demand for our educational services in connection with that show than there ever has been in any show at the National Gallery, to the extent that we were forced to open in the mornings from 9 to 10, an extra hour, just for that show to try to take care of the demand from schools and groups to have special tours, and finally we were unable to take care of all the people that requested it, but we ran special orientation sessions in the auditorium.

I recorded an electronic tour device which people could take through and we had trouble keeping up with the demand for that and the docent staff was really worked to the bone, but I think we were all very gratified. We brought you a catalog of that show for the members of the committee to see. Also some material on the civilization program.

STATUS OF NEW BUILDING

The final request that we have has to do with our long-range plans for our new building. As a matter of information, I would like to say that that is the most exciting project we are faced with at the moment, in that the plans for the new building were approved by the Commission of Fine Arts and the National Capital Planning Commission in February, and we are moving ahead into the working-drawing phase. This building will be constructed entirely by private donations, and our dream is that the same principle which has worked so well with the present building will be equally successful with the new one; namely, a combination of private funding of the physical plant, with Federal support of the staffing. This is our great hope. I brought you some photographs of a model of the new building.

BETTER UNDERSTANDING THROUGH ART

Mrs. HANSEN. I am intrigued with your catalog. There are many figures in the catalog that are similar to the Alaska totem poles and to the figures on Easter Island. I had the good fortune to be in Chile, one of the nights of their 3-day festival, and they had quite an exhibit from Easter Island.

It is necessary that we have mutual understanding between the hemispheres. One of the things that I sensed in South America was the fact that their culture, art, and literature was not reaching the North Americans. They felt we were remiss in not knowing their better poetry and paintings. So when I went to Bogota the second time, instead of going to the formal affairs. I took a morning and an afternoon to visit some of their art shows and some of their exhibitions.

I am hoping that one of our institutions will take the time and the opportunity to contact the South Americans to plan a Hemisphere Day of Art because they had some very interesting scultpures and paintings. I think it might be something that we would want to do with South America to develop a better understanding between our Nations. I think we must show the South Americans that we appreciate and understand their art and culture.

Mr. BROWN. Marvelous. That happens to be a subject very close to my own heart. I have been in very close touch in the last few years with the cultural division of the Pan-American Union and have very good personal contacts there and have watched their activities, and hope very much that we will be able to do something in this direction.

Mrs. HANSEN. I am delighted to hear this because I sensed all through South America the feeling that we thought they were "underdeveloped." They have some very magnificent poetry. I am not very good in speaking Spanish, but I can read it. I read some of their poetry and it was magnificent.

Mr. REIFEL. Madam Chairman, if I might comment at this point——

Mrs. HANSEN. Please do.

Mr. REIFEL. I am delighted that Mr. Brown is interested in this aspect. There could be a valuable byproduct of this if carried far enough. As I understand it, as the Indians of the Americas came across

the Bering Strait, which seems to be the best information we have, each wave pushed the one preceding it further south, therefore—I mean the theory—the Incas being one of the oldest developed one of the highest levels of civilization amongst these earliest immigrants. It would be a tremendous source of encouragement to the contemporary Indians of the Americas, whether South America, Central America or North America, with this marvelous history if the art forms, and other cultural information would be thus documented. It would become a great source of historical pride; certainly it would be much more meaningful than some of the trash—and I say that advisedly—we are getting about Indians today.

I had an interesting reaction the other day from friends of ours, a young family, that had been down in the Navajo country. The wife was discouraged and distressed at the fact that the Navajos were going to be losing the art of making rugs. She was surprised to learn that this was an introduced craft. I said it was introduced by the Padres some 500 years ago when they introduced sheep and taught them how to weave. I said, "That is not a native art. It is just a recent development." But I think that something like this, if it were developed, would not only make our relationships between the Americas much closer, but I think it would have a very profound effect on the attitude of the many, many tribes in North America, Canada and the United States, if they had some idea of the tracing of their history and the art forms that were here long before Columbus arrived on our shores.

Mrs. HANSEN. I saw some perfectly lovely Indian art on the Navajo reservation. But the AID people were not fostering their better art. I remember seeing hundreds of pieces of pottery that couldn't be used and yet some of the lovely pieces of pottery were being ignored. The Indian work and the native work was beautiful. I saw a very exciting show on TV recently. It was about a man who was hunting in the mountains of Peru for native art forms. Why doesn't television carry more programs about the art of other nations?

Mr. BROWN. We are hopeful the National Gallery can help with that. For example, in the African show we had an exhibition, an exhibit, prepared that we will circulate through our extension service all over the country, particularly in the ghetto areas, urban schools, that are interested in this question at the moment. This will be a fallout from the show, so that it will have taken place not only here in Washington; we will be able to serve the country as a whole.

Mrs. HANSEN. Tremendous.

ART LIBRARY

Mr. BROWN. The final request for people has to do with the staff of a great National Art Library and photographic resource that we want to build up in our new building. Part of the problem in educating people and making works of art meaningful to them is that so many of the great works of art are concentrated in places like the National Gallery, and art history and the way it relates to environment and architecture and so many things that are so important at this moment are greatly hampered by the fact that the professors who teach these subjects have to rely completely on reproductions and books. Our dream is to build for really the first time since the ancient

days of Alexandria a community of scholars connected with the great art collections here, so then these people will go and recirculate out into the whole educational enterprise across the country and bring the vision that they have been able to acquire here out to their students. For this we have to develop a really major library and photographic resource to supplement the great objects we already have. This is the dream that we are working on now and will be able to put in our new building.

NEW BUILDING AND CENTER FOR ADVANCED STUDY

Mrs. HANSEN. Thank you, Mr. Brown.

What is the present status of plans for the new Gallery building?

Mr. BROWN. Well, we have the approval of the preliminary designs from the National Capital Planning Commission and the Commission of Fine Arts, which was written into our enabling legislation as a prerequisite to moving ahead, so that we are now in a position to start on the working drawings, and our hope is that we will be in a position to start excavation by about this time next year.

Mrs. HANSEN. Do you have any additional comments on the plans for the new Center for Advanced Study in the Visual Arts?

Mr. BROWN. The concept of it will be rather like the Center for Advanced Study in the Behavioral Sciences at Palo Alto, although on a smaller scale, where people will be able to come from their regular institutions, whether it is a university or an art gallery, or whatever, and be given peace and freedom from the administrative exigencies of their day-to-day life there, so that they can have an opportunity to do productive scholarship and advance their own knowledge in a way that they can't under the pressures under which they so often have to cooperate, so that we will have flowing through Washington a constantly changing mix of people, hopefully from all around the world, interacting with each other.

I hope it will be construed rather broadly; it won't just narrowly be one field of art history but if people are interested in anthropology or Indian studies or environment or architecture, or whatever, they will come and be able to interact and this will make Washington, I think, the great center in this country for the study of visual things.

ART RESTORATION CONTRACT

Mrs. HANSEN. Please give us the details on the increase of $2,000 you are requesting for the annual contracts for restoration of works of art.

Mr. HAYES. Madam Chairman, our criterion for paying the individual that is under contract for this service has been to keep him at level 13, GS–13 under the Classification Act schedule, and this $2,000 will bring him to, I think, step 5 of that level. It is just a matter of——

Mr. BROWN. Keeping abreast of the pay raises.

Mr. HAYES. Increase in prices generally.

PROBLEMS FROM EVENING HOURS

Mrs. HANSEN. What are your evening visiting hours?

Mr. BROWN. They are from 5 until 9 during the week, and we are open until 10 normally on Sundays.

Mrs. HANSEN. Do you have additional security problems because of the evening openings?

Mr. BROWN. Yes we have. I think that it is only fair to say that we have two kinds of problems. The rest is that we have an administrative problem in recruiting people for those odd hunks of year, and this is difficult. Secondly, there is no question but that people, police people, and that if you have a crowded gallery you are less apt to have people take liberties with your pictures than if they have the great luxury of being relatively quiet and not molested by a lot of other people around watching them. So I think the security dimensions are quite grave.

Mrs. HANSEN. What type of people do you employ as security guards during the evening hours?

Mr. BROWN. Well, we try to get young people. Students become available at the end of the academic year, but this makes it difficult, then, to find people from April until the end of the academic year. Mr. Hayes may have more comments, or Mr. Adams.

Mr. ADAMS. We have, Madam Chairman, because it seems to fit best, recruited primarily from the local colleges. Our summer force this year is virtually entirely from the local colleges. They are young people. The captain of the guard force tells me they are the best young people that we have had so far and he is very encouraged.

Mrs. HANSEN. Good.

Mr. HAYES. I would like to add this, Madam Chairman: In addition to these part-time young men that we bring in, we work on overtime about 18 to 20, which would be about a third of the night guard staff, of our regular guards that are trained. We just could not take the risk of putting these inexperienced people out on their own.

COST OF EVENING HOURS

Mrs. HANSEN. What is the cost of the overtime?

Mr. HAYES. It is around $48,000, I believe, for the 5 months.

Mrs. HANSEN. What is your total overtime cost?

Mr. HAYES. In total, I think the cost would run around $140,000 a year for the 5 months.

Mr. BROWN. It fits into 2 fiscal years.

Mrs. HANSEN. Yes, I understand. Please insert in the record the number of evening visits you had in 1966, 1967, and 1968 during the spring and summer months.

Mr. HAYES. Yes.

Mr. BROWN. We will give you a rundown on that.

Mrs. HANSEN. Please do.

(The information follows:)

ATTENDANCE FIGURES FOR EXTENDED HOURS, APR. 1 THROUGH LABOR DAY

Month	1966, Monday to Saturday, 5 to 10 p.m.	1967, Monday to Saturday, 5 to 10 p.m.	1968, Monday to Saturday, 5 to 9 p.m.
April	40,059	15,512	8,828
May	12,139	17,483	8,942
June	19,384	19,711	2,079
July	21,900	25,397	----------
August	25,018	25,913	----------
September	3,484	2,757	----------
Total	121,984	106,773	19,849

VANDALISM IN MUSEUMS

Mrs. HANSEN. How does vandalism compare in an institution like the National Art Gallery with the British Museum or some of the other similar places in Europe?

Mr. BROWN. I wish I knew the answer to that question. I am not entirely sure that we will ever know because of the problems of reporting these matters, but it is certainly, I think, fairly sure that we have the best guarding of any museum I know and that vandalism is still a problem. I know a lot of museums in other countries have great budgetary hardships and the fact that they don't have greater vandalism or a greater vandalism problem than they do is probably simply a function of not having that many visitors.

Mr. REIFEL. Maybe they are more drastic in their control measures.

Mr. HAYES. I think, as a general statement, we can say that certainly they have more thefts. We have subscribed to a press clipping service, for I guess about the last 8 years, on thefts and vandalism in museums, and the general impression that I have gotten over the years, and our Administrator can speak to this, too, is that there are a great many more thefts abroad than there are in this country. Vandalism probably doesn't usually get into the paper unless it is very damaging.

Mrs. HANSEN. Is vandalism on an upward trend in the gallery?

Mr. ADAMS. Yes, unfortunately. From reading these press clippings and talking to other museum people who come to see us from around this country and from abroad, everyone is universally concerned about vandalism, and most are having more vandalism now than they had 5 years ago.

Mrs. HANSEN. What are your principal types of vandalism in the gallery?

Mr. ADAMS. There is no pattern, Madam Chairman. Our two or three principal cases have been of people who appear to be disturbed. It almost seems to me prima facie that anybody who is going to attack a painting or work of art is disturbed, and that has proved to be the case. There is a certain amount of continuing damage from thoughtless people, people who have no intention to damage a painting but who touch it because they are attracted to touch it or are careless.

Mrs. HANSEN. Thank you.

NEW POSITIONS

You are requesting $45,879 for six positions in the new Advanced Study Center. Please give us the details on this request.

Mr. BROWN. Madam Chairman, this will be primarily for the administration of our new library and photographic archive. We have been able to secure assurance from a foundation that we will be able to begin, hopefully, on September 1 with a very vigorous program of acquisition of photographs of works of art from around the world. We have marvelous opportunities come up. One that I just learned about a couple of days ago is a photographic archive of early Mexican art which a woman has been working on as her life work. There is a possibility this would be able to come to Washington but if and when it comes it will require people to mount the photographs, to catalog them, to provide all the administrative and clerical services. And so, the positions we are requesting at this point are basically for a librarian at GS–11, two GS–9's, two GS–7's, and one to do a lot of physical work, at GS–5.

Mrs. HANSEN. Thank you.

Mr. BROWN. We learned, Madam Chairman, to our sorrow at the time of the floods in Florence that it is terribly important to have a photographic record of these objects.

Mrs. HANSEN. That is right. What is your requirement for one new docent position?

Mr. BROWN. This is in response to the greatly increased workload in the Education Department as a result of the increased attendance and the increased demand for educational services. We have a variety of services now and our problem is one of taking care of the demand for them, and one more person is going to be extremely necessary.

VISITATIONS

Mrs. HANSEN. Please insert in the record the number of visitations to the gallery for the last 5 years. Hasn't the number of visitors increased each year?

Mr. BROWN. Well, this year may be the highest in history. We may hit the 2 million mark for the first time, which is a whole new threshold. When you add to that the fact that we are probably reaching through the rapidly expanding extension service another 2 million at least, the total service is one of fairly sizable proportion.

Mrs. HANSEN. Also insert in the record the number of people who were served by your extension service.

Mr. BROWN. I would be delighted to.

(The information follows:)

PERSONS REACHED BY THE NATIONAL GALLERY OF ART

Fiscal year	Visitations to gallery	Persons (estimated) served by Extension Service	Total persons reached by gallery
1965	1,253,102	971,000	2,224,102
1966	1,577,108	1,170,434	2,747,542
1967	1,510,967	1,780,361	3,291,328
1968	1,267,028	2,182,000	3,449,028
1969	1,283,398	2,757,000	4,040,398

SECURITY

Mrs. HANSEN. Please insert in the record any additional comments you may have on your security provisions.

Mr. ADAMS. We would like to, very much, Madam Chairman.

(The information follows:)

PROTECTION OF EXHIBITIONS

The officials of the National Gallery of Art believe that never before in the gallery's history have the risks to great masterpieces on public exhibition been greater. We believe this dangerous situation results from: (*a*) the general increase in the rate of crime throughout the society, (*b*) the shortage of competent men who will accept work as museum guards, and (*c*) the increase in the number of museum visitors.

There are 124 exhibition areas to be protected in the gallery building. Our standard of protection when the building is open to the public provides that all works of art and all visitors will be within the view of a guard at all times. In general, this means that one guard post is required for every two areas or rooms. On but one day in 1969 were there enough guards on duty to man all established guard posts; yet almost 25,000 man-hours of overtime was worked at a cost of almost $100,000. The total cost of protection at the National Gallery of Art last fiscal year was some $900,000.

While authorization for more guard positions might improve the situation over a short period in the future, we believe that over the long run better protection of art exhibitions can be achieved only through the development and application of electronic protective devices. The gallery is actively working toward this end at the present time.

Mrs. HANSEN. I think Congress should realize that the costs of protecting art objects will continue to rise as long as vandalism and destruction are prevalent.

Off the record.

(Discussion off the record.)

Mr. BROWN. Our problem is if you have to put paintings behind bars or great hunks of bulletproof glass and so forth, it ruins the whole experience.

CONTRIBUTIONS IN ART TREASURES

Mrs. HANSEN. You lose the sense of the art itself.

Isn't the National Gallery also financed by private contributions?

Mr. BROWN. The acquisitions of objects are totally financed by private contributions.

Mrs. HANSEN. The Government's participation is to fund only the protection and administrative costs?

Mr. BROWN. Yes.

Mrs. HANSEN. What has been the value of the private contributions in art treasures for the last 6 years?

Mr. BROWN. I would like to put in the record what the figure was last year, but it was quite impressive.

Mrs. HANSEN. Please do.

(The information follows:)

Private contributions in art treasures

(Acquisition values of works of art received as gifts or purchased with donated funds)

Fiscal year:	*Acquisition values*
1965	$1,481,200
1966	4,853,250
1967	6,853,414
1968	1,233,802
1969	1,322,229
1970 through March 31	2,160,000

Mrs. HANSEN. I want to express my appreciation for your very excellent presentation. I would also like to pay tribute to Dr. Walker who was your former Director. He appeared before this committee for many years and we give him our very best wishes.

Mr. BROWN. I was his assistant for 9 years and got to be very fond and very admiring of him.

Mrs. HANSEN. Mr. Walker was a tremendous person and he did so much to improve the relationship of the gallery with people and Congress. The committee wishes you the same kind of experience, Mr. Brown, and I think the country can be very proud that you are the Director of the National Art Gallery.

Mr. Reifel?

Mr. REIFEL. Thank you, Madam Chairman.

Director Brown, I want to say that the first impression you have made in your appearance before this committee as the Director of the wonderful National Gallery of Art is one that in my judgment, indicates outstanding leadership in the years ahead for that great institution, and I am sure you will be a credit to the position and a great satisfaction to our dear friend, Dr. Walker, whom you succeeded. With the fine staff that you have here and down there at the gallery, I know it is going to continue to grow and be a really meaningful institution to our Nation.

I can't conclude without asking you to extend the appreciation of the wives of the Members of Congress and others who are continually being served by Dr. Stites who, while retired, comes back and tells the ladies about some of the art treasures that are there. They thoroughly enjoy his great courtesy and his wonderful understanding of the arts. They learn a great deal and look forward to his sessions down there whenever they are scheduled. Dr. Stites is retired now. I believe he retired last year, didn't he?

Mr. BROWN. Yes.

Mr. REIFEL. But he still does come back because the wives of the Members of Congress have a group that go down there periodically.

Mrs. HANSEN. I think Members of Congress miss a lot because we don't have the time to visit the various exhibits.

Mr. REIFEL. We certainly do.

That is one of the things I am looking forward to with great pleasure. Mrs. Reifel and I are going to spend a year here in Washington after my retirement at the close of this session. Going to the National Gallery of Art and Smithsonian Institution at a leisurely pace are two of the pleasures which we are looking forward. Tell us about the times of the showing of "Civilization."

Mr. BROWN. It will be the end of June, I think, when the first series——

Mr. REIFEL. Do they run one day following another?

Mr. BROWN. No; they run a week each, so we are now on No. 3 out of the 13, and, if you got in now, you really would have missed very little because they are not interdependent. They are designed so they stand each one on its own. If you would like, we would be happy to reserve a seat for you any time you call in. Just let us know.

Mr. REIFEL. That is very nice of you. I think maybe if I don't get to it this year, you are going to have them there next year, are you not?

Mr. BROWN. Hopefully.

Mr. REIFEL. So I will have plenty of time and can stand in line. Thank you so very much for your leadership.

Mr. BROWN. Thank you.

Mr. REIFEL. I was interested in seeing Pietà—if that is the way you pronounce it—not the painting but the sculpture at the New York World's Fair, but it was behind a bulletproof glass. There is quite a difference to see it without any obstruction.

Mrs. HANSEN. When my mother was living, she was an amateur artist. She and my son went every Sunday to the gallery. They did a certain part of the gallery every Sunday.

Mr. BROWN. That is the way to do it.

Mr. REIFEL. This is off the record.

(Discussion off the record.)

Mrs. HANSEN. Thank you so much.

Mr. BROWN. Thank you, Madam Chairman.

FRIDAY, APRIL 10, 1970.

SMITHSONIAN INSTITUTION

WITNESSES

S. DILLON RIPLEY, SECRETARY
JAMES BRADLEY, ASSISTANT SECRETARY
SIDNEY R. GALLER, ASSISTANT SECRETARY (SCIENCE)
CHARLES BLITZER, ASSISTANT SECRETARY (HISTORY AND ART)
WILLIAM W. WARNER, ACTING ASSISTANT SECRETARY (PUBLIC SERVICE)
THEODORE H. REED, DIRECTOR, NATIONAL ZOOLOGICAL PARK

Mrs. HANSEN. The committee will come to order. We now have the Smithsonian Institution. We are very happy to welcome the principal witness, Dr. S. Dillon Ripley, Secretary. Please insert your general statement in the record and summarize it for us.

Dr. RIPLEY. Thank you very much, Madam Chairman.

GENERAL STATEMENT

I will place my statement in the record, and I will briefly highlight it.

(The statement follows:)

STATEMENT OF DR. S. DILLON RIPLEY

Mr. Chairman and members of the committee. Once again, I welcome the opportunity to appear before this committee. This is the sixth time that I have been privileged to present the Smithsonian Institution's program. I have come to view these presentations as a sharing of information and accomplishments with a committee whose interest, involvement, and support has been of primary importance to the Smithsonian. I realize, however, that our concerns are only a part of your committee's larger responsibilities to the American public, to many of the goals and aspirations of the Nation itself, and to a measured assessment of funding in proportion to available fiscal resources.

NOTABLE EVENTS

During this past year, there have been a number of notable Smithsonian events and developments which I would like to share with you.

Visitor attendance climbed to almost 12,500,000 in calendar year 1969 reflecting a return to more orderly conditions in the Washington, D.C., area. About 750,000 of these persons came to see the lunar rock sample from Apollo 11, first displayed in September. An additional 75,000 persons visited the Anacostia Neighborhood Museum and 5 million came to the National Zoological Park, a larger figure by far than any other zoo in this country. There is every reason to believe that this participation in our activities will continue to climb, especially as the period of the Bicentennial of the American Revolution approaches. The Institution will be provided with an unrivaled opportunity to play a major role in public education and the assessment of national objectives. An important corollary is a pattern of increased public and scholarly visitors as many programs enacted by the Congress come into being. This trend is apparent over the past 5 years and will continue as the Smithsonian brings to the public the tremendous heritage of our Nation in a variety of educational forms. In this connection, the National Museum of History and Technology (where we hope to center our bicentennial activities) has just had its 30 millionth visitor since opening in 1964, surely a world's record for museum attendance.

I am pleased to report that the construction of the Joseph H. Hirshhorn Museum and Sculpture Garden is about to begin. Groundbreaking will take place in late March or early April. The committee will share our pleasure and pride that the American public is now assured access to this important collection of paintings and sculpture in a major new museum taking its place on the Mall along with the greatest collections of national treasures assembled by any country.

The Radiation Biology Laboratory has substantially completed its relocation from the basement of the original Smithsonian building to a modern laboratory building in Rockville, Md. It is anticipated that by midsummer the Laboratory's research activities can be substantially resumed.

The Renwick Gallery of Art has been turned over to the Smithsonian by the contractor. While considerable basic restoration and renovation work still remains to be done and must be funded, the Institution has proceeded with the development of plans for the building's use as a showcase of important Americana. We are aiming for a partial opening of the building early in calendar year 1971, with a full opening sometime thereafter when restoration work is completed.

The President has requested that the Smithsonian assume responsibility for the operating budget of the National Zoological Park, previously funded in the District of Columbia budget. Although we are very much aware of the potential financial impact on this committee's Appropriation Act, we believe this transfer reflects the fact that the zoo is a national zoo, established by an Act of Congress in 1890. Approximately 85 percent of its visitors come from outside the District of Columbia. As such, the operations of the National Zoo should be budgeted and presented as are the other national museums under the jurisdiction of the Smithsonian and this committee.

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Throughout the Smithsonian's scientific activities there is an intensified involvement in basic studies and research support of direct relevance to man's relationship to and dependence on his natural surroundings. These efforts include the Astrophysical Observatory's investigations of the upper atmosphere and its relationship to atmospheric events. Its Orbiting Astronomical Observatory continues to provide scientific data heretofore never obtained. The National Museum of Natural History's capability to identify biological indicators of environmental change is of increased significance. The Radiation Biology Laboratory's unique determination of an apparent 16-percent decrease in the solar energy reaching the earth here in Washington, if representative of a worldwide condition, may have considerable importance to studies of crop and food production and to man's life in cities. Environmental studies at the Chesapeake Bay Center are beginning to establish baselines for biological prediction. Comparative evolutionary biology and behavioral relationships as well as oil-spill research are being emphasized by the Smithsonian Tropical Research Institute. The coordinated study of the physical and cultural development of man is underway in a number of our museum and research groups in the National Museum of History and Technology, the Center for the Study of Man, and elsewhere.

In this regard, let me mention our third international symposium, this one on recent advances in the understanding of social behavior of higher animals with the goal of improving our understanding of man's behavior. This seminar revealed an important characteristic of the Institution. A meeting such as this, assaying relations between human social behavior and principles drawn from the scientific study of animal behavior, seems instantly to knit together so many common concerns from within the Institution's seemingly disparate bureaus. Our symposia thus serve as points of focus for a wide range of associated institution activities, from research projects to seminar series to exhibits, from productions for the media to special publications.

Although ecology has now become a popular theme, the committee is well aware of the Institution's traditional and historical role of investigating and collecting data on man and his natural surroundings. Increasingly, national and international organizations, both private and governmental, are recognizing the Smithsonian's competence in this area and are coming to us for advice, consultation, and research assistance on ecological problems. For instance, the Smithsonian's expertise in assessing the environmental consequences of a Panama sea level canal was recognized by the appointment of a staff member to the National Academy of Science's Special Committee on Ecological Research for the Inter-Oceanic Canal. Other Smithsonian staff and research bureaus are actively involved in advising this committee.

Let me also mention that more and more of our research is of an interdisciplinary nature. For example, new information on determining special characteristics and age of volcanic activity has been developed by the joint efforts of our anthropology and mineral sciences staff.

The National Portrait Gallery had its first show under its new director. This exhibition of the portrait reliefs of Augustus St. Gaudens was unanimously praised by the critics. John Canady of the New York Times wrote, "The Saint Gaudens show is, in one word, beautiful, whether you are talking about the sculpture, the installation, or the combination of the two with the handsomest intimate exhibition galleries in Washington or perhaps in this country." The Washington Post stated, "This is an exquisite show. With this, his first show here, Marvin Sadik has demonstrated his museum's ability to meet the highest standards of scholarship and taste." The National Portrait Gallery is preparing to play its part in the celebration of the Bicentennial of the American Revolution.

The distinguished new director of the National Collection of Fine Arts, Joshua Taylor, took up his duties on January 2 of this year. He has already undertaken a careful survey of the holdings of this museum, many of which have long been on loan to various Government offices, and has begun to reorganize the exhibition of the museum's permanent collection. Improved administrative procedures and a renewed emphasis on scholarship under Dr. Taylor's direction will strengthen the ability of the National Collection of Fine Arts to perform its important mission as a center for American art.

A number of other notable events should be mentioned under the collective heading of public services. The Festival of American Folklife attracted over 600,000 persons to a program of craft demonstrations, concerts, and other performances. An educational radio service, "Radio Smithsonian," was established and began the continuing process of producing and making available to stations

across the country recorded material covering the full range of the Smithsonian's enlightening and exciting activities. Through the Smithsonian Magazine and planned additional efforts in traveling exhibits, television and films, we hope to create more educational channels from our vast academic-cultural reservoir to people in their homes throughout the Nation.

These varied extensions of a central theme, to "increase and diffuse knowledge," are part of the Smithsonian. They form a core of the knowledge, which we are attempting both to reinforce and to disseminate. It is imperative that in years to come young people, and their parents, keep up with the changing world but not at the expense of losing their ties with the past. This cannot be done by traditional pedagogical means. It must be done by a variety of skillfully selected techniques. It is our hope and intention that the Smithsonian will help to provide this illumination.

GOALS AND OBJECTIVES

This mandate provides us with our continuing goal for the future. Let me speak more specifically to a number of closely related program objectives and to our plans and requirements that will help us realize these objectives.

We are entering the decade of the 1970's, a period in which the Nation will seek solutions to problems concerning the environmental consequences of technological advances and to problems of man's social and cultural relationships to one another. After much deliberate thought and discussion within the Smithsonian, we see three major objectives that will enable us to focus traditional kinds of careful and deliberate research, collections of multidisciplinary data, reference systems management, and public educational services on these national needs of the new decade. These are:

To study and attempt to explain areas of science and the humanities which can increase man's knowledge and understanding of his surroundings as well as of himself;

To achieve integration and mutual reinforcement within our arrays of reference collections, books, and other information resources, in order that these resources can be applied more effectively to research needs; and

To devote an increasing measure of time and effort to studies of cultural and technological development and change, and to improved educational programs bearing upon this theme.

REQUESTS FOR FISCAL YEAR 1971

Turning now to our request for fiscal year 1971, let me say that we are well aware of the strong fiscal responsibilities and pressures placed on the Congress by national and international needs, not the least of which is the absolute necessity to slow inflation. I plan to say more about the effects of inflation on the Smithsonian Institution, but I believe the requested appropriations provide a proper balance between the need for program growth and the need to hold down all but essential Government spending. Although we can see clearly how the contributions of each of our museums, laboratories, and support activities fits into the attainment of long-range Smithsonian objectives, we are not seeking additional program funding for some 15 of these activities.

In examining our appropriation requests, the committee should consider several specific aspects of what initially may appear to be unusually large amounts.

An amount of $3,125,000 represents the total requested appropriation for the National Zoological Park, an "increase" only because the zoo's operating budget is new to our "Salaries and Expenses" appropriation.

Appropriations of $10,227,000 are requested to continue construction, restoration, and renovation projects, most of which have been previously authorized and partially funded by the Congress. Of this total, the sum of $8,897,000 is to meet contractor payments resulting from what we believe will be the speedy construction and completion of the Hirshhorn Museum.

An increase of $3,777,000 on our estimated "Salaries and Expenses" base of $29,465,000 is requested for Smithsonian programs designed to serve those who visit and participate in institutional activities for services, studies, information, education, and recreation.

The requested appropriation of $4,500,000 for the special foreign currency program, an increase of $2,184,000, does not represent a new assessment against the American taxpayer and should not be considered as being in competition with our dollar requests.

I would like to discuss each of our appropriation requests in some greater detail, showing relationships to our objectives.

SALARIES AND EXPENSES

Environmental assessment, monitoring, and prediction for fiscal year 1971, the Smithsonian Institution is requesting a "Salaries and expenses" increase of $6,902,000 on an estimated base of $29,465,000. This increase includes the transfer of the proposed zoo operating budget of $3,125,000. An amount of $400,000 is for necessary pay purposes. The balance of $3,377,000 is distributed in the following categories of activity.

An amount of $1,350,000 is for improved basic research, documentation, and education related to environmental assessment, monitoring, and prediction. We will give particular emphasis to building on work that the Institution has been doing for over 100 years. Selected research projects in the National Museum of Natural History in biology, geology, and anthropology, chosen because of their importance to the scientific community and their relevance to current national problems, would be funded. Capitalizing on 40 years of project research, the Smithsonian Tropical Research Institute will establish an environmental monitoring program on Barro Colorado Island and conduct an expanded series of comparative marine ecological studies. Related information pertaining to the temperate zone will be provided at the strategically located Chesapeake Bay Center. In the budget year, we will work to establish the Radiation Biology Laboratory firmly in its new building in order that a fully productive basic research program on the effects of radiation on living organisms can be developed. Its extraordinary measurements, started in 1907, now represent a unique series not performed elsewhere.

As additional items under this group of related activities, the resources of the seas can be more fully identified if corrective funding action can be taken to meet a steadily worsening backlog in sorting of marine biological and geological collections and requests for samples at the Smithsonian Oceanographic Sorting Center. Continued funding of our Center for Short-Lived Phenomena will provide a global information network speedily locating and reporting on natural events of tremendous interest to environmental scientists, geologists, and government officials. With regard to the study of man as part of the total environment, we are ready to begin actual work on the revision of the Handbook of North American Indians. Increased funding for our higher education and research training program will provide additional opportunities for outstanding individuals from colleges and universities to share in and contribute to our investigative efforts.

And, lastly, the Institution is seeking special program funding for the environmental sciences aimed at stepping up our inherent capabilities for identifying biological benchmarks, monitoring rates and processes of change, undertaking research in man's social adaptations to his surroundings, communicating environmental knowledge to the public through exhibits and other means, and developing a national referral center for biological data.

REFERENCE RESOURCES

An increase of $455,000 is to help achieve reinforcement within our arrays of reference resources. A curator's expertise and personal knowledge, built up over a lifetime of study, represents an information resource as do the books and reprints he requires and the ordered materials of a collection. We are purposefully seeking ways to coordinate these resources so that each reinforces the others to the maximum practical extent. Not books separate from objects; not specialized information services separate from either; but rather integrated reference systems which can unite all three. The Smithsonian's uniqueness and value depend upon our success in being a different kind of marshaling center where recorded knowledge can give wide access to pertinent inquiry.

In fiscal year 1971, we feel that it is most important to seek your support in applying electronic data processing techniques to handling the complex data associated with our vast art, history, and science collections; to strengthening library staff and materials critical to productive research and education efforts; and to improving our photographic laboratories which provide visual information of a very important kind.

CULTURAL AND TECHNOLOGICAL DEVELOPMENT AND CHANGE

We are requesting an increase of $1,125,000 to be used for studies and displays of cultural and technological development and change, so closely tied-in with man's own physical evolution and to his relationships to his natural sur-

roundings. Much more needs to be done to develop exciting and stimulating displays of these themes, not only for our use but also to benefit other museums in their education efforts. We are seeking funds, therefore, to develop experimental exhibits and to provide opportunities for museum training under the National Museum Act. To meet the accelerated public interest in man's aeronautical and astronautical achievements, funds are requested to meet the Institution's commitments under our space artifacts program.

The Anacostia Neighborhood Museum has demonstrated its ability to meet the practical needs of the community. Building upon this public acceptance and involvement, we are anxious to increase the educational role of this museum in analyzing and interpreting the history of the community and its peoples. The award of the Hirshhorn construction contract now clears away all major road blocks to providing the museum building. Companion steps must now be taken to assure that the collections and exhibits will be ready for display. We are also very enthusiastic about our other new museum—the Renwick Gallery of Art—and are requesting funds to prepare for a fiscal year 1971 public opening. One of the most popular activities in which the Smithsonian has engaged continues to be its Folklife Festival and similar presentations. To bring the tools and musical instruments out of glass cases, to evoke the magic of folk crafts and music, all of this is to communicate directly to the people. We are seeking a small increase in funding for these activities.

The 200th anniversary of the United States is a momentous occasion for all of us. The Bicentennial of the American Revolution presents an extraordinary opportunity to review national accomplishments and goals, and to renew public hope and confidence in the future. The Institution can play an important role in this observance, as we did in 1876, drawing upon our scholarly staff, collections documenting the history and development of the United States, effective working relationships with museums and other organizations across the Nation, and strong attraction for the visiting public. The American Revolution Bicentennial Commission has already reached two vital conclusions. First, the Bicentennial should be national in scope and not confined to the original 13 colonies, and second, that the event is an opportunity to review and assess the first 200 years of the United States, not merely to commemorate the events of the last quarter of the 18th century. These two policy decisions establish the framework within which the Smithsonian plans its participation. It is our intention to draw on all the elements of the Institution to form a coordinated program of activities which are festive in nature, as well as those which capture the ideas and ideals of the American Revolution period. We are proposing to develop a comprehensive array of exhibitions, both for Washington in planned pavilions on the National Museum of History and Technology and for circulation to other communities. Also planned are publications, seminars, and advisory and technical services to assist other museums and State and local history organizations in their commemorative activities. In order to mount any significant program at all, we must begin to phase into these activities now.

ADMINISTRATIVE AND CENTRAL SUPPORT

An additional amount of $447,000 is sought for administrative and central support services and for the maintenance, operation, and protection of buildings. Cohesive programs must be given concentrated management and technical support and assistance. These requested funds will be used to strengthen our financial and personnel management capabilities and for the Buildings Management Department. Included in this latter request are the costs of serving the Renwick Gallery as it is being prepared for opening and for operations afterwards, and funding the higher costs of utilities, communications, the repair and preventive maintenance of security and fire detection systems, elevators, and escalators. These higher costs are brought about by additional building spaces provided by congressional authorization, increased public use, and inflation in the price of goods and services. Our present level of funding is placing us farther behind annually in our ability to service our present assigned responsibilities.

SPECIAL FOREIGN CURRENCY PROGRAM

The requested increase for fiscal year 1971 for the special foreign currency program is $2,184,000 for a total appropriation of $4,500,000. The increase is essential to support urgent field studies by American museums, universities, and other institutions of higher learning in the Smithsonian's traditional fields of

systematic and environmental biology, astrophysics, anthropology, and museum programs. These studies increasingly are recognized as basic to an understanding of immediate national and world problems of environmental quality and cultural change. There are a number of very important points about this program. Let me mention several of these. During fiscal year 1970, funds are sufficient only to cover on-going project activity which has increased from nine grants in fiscal year 1966 to 140 at the end of fiscal year 1969. There are no funds to support new investigations this year, yet new inquiries continue to average about one a day. These funds are an advantageous source of research moneys because they are not new appropriations of tax dollars and because delay in their use means continuing loss to the U.S. Treasury through inflation and devaluation. Use of these funds does not contribute to a balance of payments deficit. Smithsonian foreign currency program grants have benefited more than 200 institutions in 25 States. Accomplishments include over 40 research publications, 150 postdoctoral research opportunities for Americans, 110 training opportunities for American Ph. D. candidates who obtained essential field work experience, and valuable additions to research collections of the National Museum of Natural History and of other grantee institutions in the form of archeological, ethnographic, and biological specimens. This program has had solid accomplishments and offers a great potential for additional contributions. I would like to reemphasize that an increased appropriation should not be considered as being in competition with our other budget requests.

CONSTRUCTION AND RESTORATION AND RENOVATION OF BUILDINGS—NATIONAL ZOOLOGICAL PARK

For fiscal year 1971, the Smithsonian must again defer a request for funds to resume progress toward completion of the improvement program. This will be the fourth consecutive year of the holding action, with approximately $2 million of work, planned in connection with the approved 10-year construction program initiated in 1963, being deferred. This deferral includes the much-needed public service building containing visitor orientation and restaurant facilites. An appropration of $200,000 is requested for repairs and continued maintenance to keep those buildings and exhibits, which eventually will be replaced, in usable condition. Included in the necessary projects are waterproofing buildings, painting of buildings and cages to prevent structural damages, and repair of outside cages.

RESTORATION AND RENOVATION OF BUILDINGS

Our total request for restoration and renovation of existing buildings amounts to $1,130,000. Included in this request is an amount of $300,000 to complete a several year program of restoration of the Renwick Gallery of Art on Pennsylvania Avenue. These funds will make this historically important and centrally located building fully available for use and enjoyment by the public. An appropriation of $500,000 is sought to begin to implement the plans, funded in fiscal year 1967, for the renovation of the 90-year-old Arts and Industries building. We are seeking to construct second floor decks in this building to provide much needed space for administrative, classroom, and other public service purposes. An additional $25,000 are sought to continue emergency repairs to badly deteriorating facilities used by our Smithsonian Tropical Research Institute for biological research. The care and preservation of many of the organic specimens in the natural history collections, as well as the safety of the staff in handling toxic fumigants, requires that we obtain $75,000 for the construction of a modern fumigation facility in the Natural History building. Improved space utility and the need to house properly our library collections including rare and valuable books prompts our request for $50,000 to construct a mezzanine level in space now used by the Smithsonian Libraries in the Natural History building. We are still exploring ways to provide improved management of our collections by developing an off-Mall central museum storage and study facility. An appropriation of $80,000 is requested for the preparation of plans and specifications for the first increment of a long-range development program. And, lastly, we are seeking $100,000 to prepare feasibility studies for the future building needs of the Smithsonian Institution, including research facilities and museum space to improve and expand our exhibits and educational programs for the benefit of the people of the United States.

JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Construction work on this new museum building and its associated sculpture garden will be in full progress during fiscal year 1971. An appropriation of $8,897,000 is requested to liquidate the balance of the contract authority of $14,197,000 provided in the 1969 appropriation. This appropriation will be used to complete funding of construction contracts, to finance supervision and related construction management costs, and to provide some necessary equipment and facilities to install the Hirshhorn Collection in the completed building.

INFLATION

I would like to return to the damaging effects of inflation that I mentioned earlier. Inflation is severly affecting the growth and performance of the Institution. It can be shown that over two-thirds of the appropriation increases experienced since 1968 have been directed to nondiscretionary costs associated with new building space and to offsetting inflationary pressures. Only about one-third of these increases represents a real strengthening of program operations.

In fact, scientific research and curatorial activities in some museums may not be faring as well now as they were in 1968. A good example would be the National Museum of Natural History. The number of professional research staff at the Museum has remained at approximately 100 since 1968. The salary levels have increased about 20 to 25 percent; the total operating budget has increased only about 16 percent, or $500,000. To meet this faster rate of growth in professional salaries not fully offset by pay supplementals, the Museum has had to reduce support spending in other areas. The portion of total Museum funding devoted to scientific staff support in the form of equipment, travel, and the like, has decreased from 13 to 11 percent over the past 2 years. This trend has created hardships in the Museum's day-to-day scientific research and collections operations where prices for supplies and equipment also have continued to increase. For example, there is an annual need for several thousands of dollars for storage cases to accommodate newly acquired natural history collections. These cases represent a major museum expenditure. They are ordered in varying sizes—from 2" drawer depth to 8" depth. They are labor-intensive in their construction. For several years now, the prices of these items have been rising. The Institution has shopped the various supply outlets and now purchases the cases from a manufacturer in western Maryland. Still, the unit prices have increased 30 to 40 percent since 1968. Because of these and other inflationary pressures, the National Museum of Natural History may be operating in real terms with $100,000 less than in 1968.

The same kind of situation prevails across the entire Institution. The Smithsonian's operating appropriation in 1970 will be about $29,600,000 (assuming the 1970 requested pay supplemental is approved), or $5,300,000 above the 1968 level. This is a 21-percent increase over 1968, a sizable gain on the surface. It must be kept in mind, however, that the Institution's employment during this time has remained relatively stable. Current employment is only approximately 4 percent above 1968 levels, and roughly the same proportions continue to be devoted to guards, laborers, clerical, and professional research and curatorial staff. Of this $5,300,000 increased funding, roughly 64 percent can be associated with higher prices and the necessity of improving the competitive salary situation in Government. Another 4 percent reflects nonpersonnel costs associated with new building space. About one-third of the $5,300,000 can be directly related to strengthening and developing the base of institutional programs. Thus, the apparent increase reduces to a real annual growth in the Smithsonian Federal base of about 4 to 5 percent.

For illustration, a competent scientist to conduct research or curatorial investigations in one of the dozen or so areas of Smithsonian responsibility could have been employed for approximately $17,000 in 1968. Today, this figure is closer to $21,000 in order to obtain quality performance in a talent-oriented economy such as ours. Some examples of price increases in other areas which have affected the Smithsonian operations are in the areas of general maintenance and improvement of facilities, and the construction of exhibits. The Institution annually uses a large quantity of lumber, particularly plywood and sugar pine, for these purposes, and the market prices of these commodities have increased 17 percent and 21 percent since 1968. We estimate that prices for utilities are about

11 percent higher than in 1968. The price of laboratory coats increased 9 percent between 1969 and 1970; guards' uniforms increased about 7 percent between 1969 and 1970; a roll of film now costs us about 8 percent more than in 1968. The list could be lengthened indefinitely.

Inflationary pressures, along with related aspects of continuing controls and curbing of Government employment, will steadily diminish effective performance in all operational areas. We are regularly reviewing our use of current manpower and dollar resources. It is by no means certain that we will be able to sustain our current level of public services including the present and planned schedule of public visiting hours to our buildings. This is a matter we are watching closely.

SELECTIVITY AND PRIORITY IDENTIFICATION

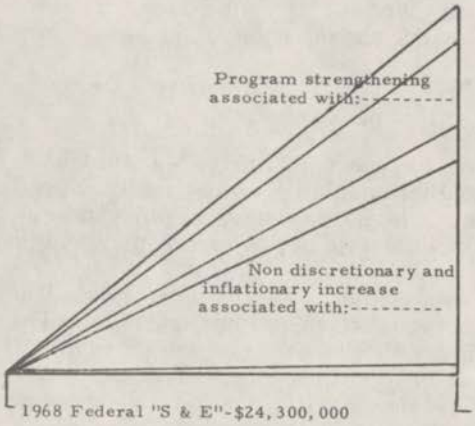
The 1971 budget request has been constructed in a manner to offset some of the effects of inflation and to spur the growth of selected institutional activities. The budget request reflects a moderate expansion in personnel while focusing on providing some additional program support funds.

These requested increases are the result of difficult choices and the identification of priorities at each stage of our analysis and review of the use of current resources and our essential requirements for the budget year. As the Congress will realize, executive pressures exercised through the Bureau of the Budget have been very strictly levied upon us this year.

All but our highest priority funding needs have been temporarily set aside. We are concentrating our requested increases on meeting existing and traditional institutional obligations and lines of endeavor that seem particularly timely and applicable in the 1970's. For 124 years, with roots that extend back even further, the Institution has gathered and applied its resources to the task of providing the American people with greater knowledge and appreciation of their common environmental, cultural, and technological heritage. With the continued support of the Congress, we will improve upon our performance. This support is deeply appreciated.

SMITHSONIAN INSTITUTION

Estimated Distribution of Increases in
Federal "S & E" Operations
1968-1970



--Support to staff[1/]	$500,000	9%
--Staff growth and quality improvement[2/]	1,200,000	23%
--Higher prices[3/]	400,000	8%
--Higher government salaries[4/]	3,000,000	56%
-- New space[5/]	200,000	4%
	$5,300,000	100%

1. This $500,000 represents the real increase after allowing about 4 percent per year for inflationary price increases (a conservative rate).

2. This includes an estimated $900,000 related to a 4 percent employment growth and approximately $300,000 of expenditures for increasing the quality of staff 1968-1970.

3. Conservatively reflects a 4 percent annual increase above 1968 levels for inflation in non personnel costs.

4. Includes an estimated $2,500,000 to cover costs of higher governmental salary levels, and $500,000 for cost-of-living increases.

5. Includes additional building costs (non personnel) over 1968 levels related to Fine Arts and Portrait Gallery and the Renwick Gallery.

Dr. RIPLEY. May I begin by introducing some of the Smithsonian colleagues who have joined me this morning?

Mrs. HANSEN. Please do.

Dr. RIPLEY. You know, of course, Mr. Bradley.

Mrs. HANSEN. Very well. We are very happy to have you here, Mr. Bradley.

Dr. RIPLEY. Mr. Blitzer, Assistant Secretary for History and Art; Dr. Galler, Assistant Secretary for Science; Mr. Warner, concerned with our Public Affairs; Dr. Reed, the Director of the National Zoological Park, who is a newcomer to this committee; Mr. Wheeler, our Treasurer; and Mr. Jameson, our budget officer.

Mrs. HANSEN. I sat next to the Director of your Natural History Museum on the plane going to Seattle the other day, and he is a very delightful person.

RECENT SMITHSONIAN DEVELOPMENTS

Dr. RIPLEY. Thank you. I want to report, if I may, Madam Chairman, in the beginning that the Smithsonian has had really a good year this year. We have some notable developments in our gifts and activities. I brought one or two of our acquisitions along. I just thought that they would interest you.

These, for example, are two coins which were given to the Smithsonian by Mr. Willis du Pont, part of the Du Pont collection. The gold coin is dated February, 1702, an extremely literary ducat piece, and the platinum coin is one of only two 12-ruble platinum pieces struck in 1845. The value of this collection, as a whole, is very great, and I might just point out that those two coins themselves are worth about $80,000.

We have, in addition, as an example, performed a number of interesting scientific tasks. You may have heard that this last year we completed an experiment begun in 1907 in the middle of the Mall with the sad news for the population of Washington that there has been a decrease of 16 percent in the amount of solar radiation penetrating to Washington during that time.

Mrs. HANSEN. To what do you attribute that decrease?

Dr. RIPLEY. We can only attribute it at the moment to the presence of smog in the atmosphere, because there is a change on certain kinds of days, but the net decrease is 16 percent, which could have quite critical effects, of course, on agriculture.

Now, it sounds like pessimistic news. We don't really know what the effect will be, for example, on photosynthesis of plants.

Mrs. HANSEN. Isn't this also true of other areas in the country?

Dr. RIPLEY. Undoubtedly, but it is interesting that the Smithsonian, and I don't want to sound too much as if I was blowing our horn——

Mrs. HANSEN. Since when have you been reluctant to do that?

Dr. RIPLEY. I feel it is extraordinarily interesting that somebody has bothered to do this.

NEED FOR INCREASED AWARENESS OF ENVIRONMENTAL DETERIORATION

Mrs. HANSEN. What will happen in the future if certain nuclear developments continue to pollute our environment?

Dr. RIPLEY. We are very much concerned at the moment. Again I hate to sound like a Cassandra or something of this sort. We are concerned about the fact that some of the things thrown out are not even being currently measured by the Atomic Energy Commission, and elements such as tritium, which are getting into the atmosphere and into the water may be more critical than anybody has so far developed experimental proof concerning.

Mrs. HANSEN. Have you talked with the Atomic Energy Commission to urge that they give more attention to the environmental problems? This committee, as you know, has been increasingly concerned about our environment. We have been interested in this problem for many years. We have seen an increasing number of problems that have resulted from man's misuse of his environment, and we have warned against them.

Yet, at the same time we see a decrease in the Government's funding for these necessary preventive measures. For example, last year this committee appropriated $200,000 for a water research project in the Northwest. These funds were to be used to study the effects of radiation on fish.

But the $200,000 was placed in reserve by the Bureau of the Budget. Those funds have not yet been released. We still don't know exactly what effect thermal pollution will have on fish.

I made a statement last week in Vancouver, that we did not have available the information to explain to the public what the necessary steps are to safeguard our fishing resources.

Dr. RIPLEY. Yes.

RELATION OF ECOLOGICAL ASSESSMENT TO THE AMERICAN ETHIC

Mr. HANSEN. Do you feel that the Atomic Energy Commission has done its share of contributing to this basic research, which is going to touch every segment of the country?

Dr. RIPLEY. I feel that they are beginning to understand the difficulties involved, and I mean this very seriously, the difficulties involved of trying to develop an ecological assessment program along with the American ethic of the present, which is more value for the dollar, more assets for everybody in the way of standards of living, and the American assumption that because you can have more machines, and you can have more powerplants and you can have more power, all houses should be heated, lighted, et cetera, exclusively by power, things of this sort, that that is the way to operate.

I am very sorry to say I think it is probably not the way to operate, but it has been so much an assumption of ours for the past 150 years that it may take almost a generation, short of some catastrophe, to reeducate people, people of my age from the beginning and younger people as well, to understand that that isn't the way to live, and that we can't afford to. This is tied up with the ability of someone like the

Atomic Energy Commission to be able to grasp the magnitude of its own responsibility.

Mrs. HANSEN. They also have to take the responsibility for developing adequate solutions. If we have the capability to go to the moon, we certainly should be able to develop some answers to some of the problems in the thermonuclear field.

Dr. RIPLEY. I think this is very true, Madam Chairman, but I think that it is a matter of education. I am sure that the AEC has been prudently requesting funds from the Government and expending them, but they have been requesting those funds and expending them in relation to what they assume to be the American ethic.

If it is determined now by the people and by our Government that the American ethic is wrong, then all these agencies will have to get into an area of research, all the education institutions in this country will have to get into an area of education, which may take as long as a generation.

NEED FOR PUBLIC EDUCATION ON THE ENVIRONMENT

Mrs. HANSEN. For example, I don't think that adequate solutions have been developed to solve the adverse effects of a warm stream on fish. We have a number of pollution problems and at the same time we have an ever increasing need for energy. Therefore, there are two processes that must be accomplished. We must educate this generation to control it's own pollution and increase our knowledge so that technology will be developed to solve these problems.

Dr. RIPLEY. This, of course, is an international problem, because Americans are the greatest polluters in the world. There are 200 million of us and the amount of pollution that we expend into the atmosphere and the water is equivalent to a population in India of 6,400 million. In other words, about 8 times the present population of India. One American can pollute and does pollute at the rate of about 32 Indians today. India is still in a rather impoverished, underdeveloped state compared to the United States. Think what would happen if there were 6,400 million Indians polluting at the same rate that we do at present.

Mr. REIFEL. Madam Chairman, it seems to me with all of the intelligence and intellect that is part of this development, that under the present circumstances from what you have just said, they would be able to crank into the American ethic a livable environment. It seems so elemental.

Mrs. HANSEN. The American people must understand that they will have to pay for pollution control.

Dr. RIPLEY. Well, it is contrary, Madam Chairman, to everything that we have been brought up to believe in.

DETERIORATION OF RESPECT FOR PROPERTY

Mrs. HANSEN. No; it isn't, Dr. Ripley. In my childhood I was told that you did not go into the woods with a lighted match because we could see all around us the results of fire. We were raised with a tremendous respect for fire because there was no modern fire-fighting equipment. We had a tremendous respect for other people's property.

If our parents or anybody caught us destroying anybody else's property, the consequences were severe.

School grounds were never littered, because anyone that littered school grounds stayed after school to pick up the litter.

There was no vandalism in cemeteries. People had respect for other people's property. When I was home recently, a group of young motorcycle riders went through a small town cemetery, destroying the tombstones. As I told a group of students when I was home, "You people are the leaders in destruction and you are also the leaders in wanting a change. Now is the time to do what you are advocating. You must individually work to correct the environmental problems."

Dr. RIPLEY. I quite agree with you in that. There has been a signal deterioration in our sense of conservation and preservation of objects and things.

Mrs. HANSEN. Our sense of responsibility to our fellow man has also deteriorated.

(Discussion off the record.)

Mrs. HANSEN. Please continue with your statement.

CROWN OF THORNS STARFISH

Dr. RIPLEY. I wanted to mention one or two other interesting things of the year. One is the crown of thorns starfish, which I know you have already heard about.

Mrs. HANSEN. Yes; and we are deeply interested in these problems.

Dr. RIPLEY. We have a crown of thorns on exhibit here. It is one of our own specimens. We have been asked in legislation that has been introduced if we would participate in a research project on attempts to cut down this exploding population in the Pacific. That project would be jointly with the Department of the Interior, under legislation introduced by Senators Fong, Inouye, and Jackson. We have participated during the past summer in crown of thorns research, and we have an article about it in our new Smithsonian magazine, which I am sure Madam Chairman has seen.

Mrs. HANSEN. Yes, I have seen a copy of that article.

Dr. RIPLEY. There is an article on the crown of thorns starfish.

Mrs. HANSEN. The Samoans, when they testified before this committee about the crown of thorns problem, said that the problem had always existed, but that some ingredient had stirred renewed activity. This committee wondered that day if the AEC had conducted research to determine what were the causes of this increased activity. As you know, the atomic explosions that occurred in the South Pacific have generated a lot of fallout, and perhaps that was an ingredient in the increase of the crown of thorns starfish.

Dr. RIPLEY. We have participated with the Geological Survey since Bikini, in the followup study of the reefs there, and I do not believe so far as I know that there has been any effect causing the unusual population of the crown of thorns starfish at Bikini. It has also occured farther west around Guam and in the Barrier Reef and down into the Central Pacific. But I do believe that one of the interesting things about the whole occurrence is the fact that it proves how important these environmental studies are, because, in fact, we know so little about what the crown of thorns was doing before. It shows where

you do have information, as in certain areas we have with food fishes along the New Jersey coast, for example, the importance of having made that study before vital changes have taken place in the environment, as they are taking place every day now. We only wish that we had known more about the crown of thorns, and that there had been more information on what essentially has been considered to be a very rare starfish. It is a good example of lack of backup information, in contrast to other areas where we have much more.

LOST CITY, OKLA., METEORITE

Our astrophysicists found a meteorite this year within 6 days of its falling. This is always a signal event in astrophysics. By quickly finding the metetorite, which was tracked out in the prairies, we were able to get it back into the laboratory within one day of the find, and test for some of these rare elements which are in the atmosphere, and which are otherwise only produced by atom smashing instruments.

Mrs. HANSEN. Is the Smithsonian Institution part of the group that is studying the impact of the moon dust?

Dr. RIPLEY. We have samples of moon soil, but not from that particular core. It is true that there has been a rather provocative little discovery that one piece of soil from a core in the ground killed off three common bacteria. Of course we don't know anything more than that at the moment, but we were not part of that particular experiment. We have been analyzing surface soil, and will continue to have a part in the general program, a small part.

Mr. REIFEL. You started to talk about the metetorite and its analysis. Would you continue?

Dr. RIPLEY. Yes, this meteorite was found in Oklahoma. Its path was traced by the Prairie Network of the Smithsonian Astrophysical Observatory that maintains this camera network. They were able to trace the approximate area where it fell, go out there in a station wagon, and find a chunk of it and get it back within 1 day of finding it to the laboratory for testing of these rare gases. They were able to ascertain that the meteorite probably comes from the asteroid belt beyond the orbit of Mars, which is a particularly interesting area. It is thought by some astrophysicists that within this asteroid belt there is the presence of certain elements related to carbon and oxygen, for example, which may presage a kind of formation of life within the asteroid belt itself. This is a very speculative area of astrophysics but one is always looking for meteorites that may have some clues to the origin of life. In many ways once you get one it is just as fascinating as if you had really gone all the way to the moon.

We are pleased to have further very generous donations from Mr. Hirshhorn. We are very pleased with his donations.

SOUTHEAST ASIA WILDLIFE STUDY CARDS

We have also been working on a variety of things which are worthwhile, and show our expertise, and I proffer these cards which you might like to have in the record. These cards were made up for identification of useful and poisonous animals or plants in the

general area of Southeast Asia, and they are very interesting. They can be dropped by parachute. They can be given to troops in the field or used by other persons in the area. We did this on contract as an extra dividend. It is helping the war indirectly, shall I say. It is a useful thing for educational purposes for troops, so that when they are out in the field, they have a handguide to things which may be harmful as well as things which may be helpful.

We are also preparing a comprehensive flora of North America, which we would be glad to supply you with.

CENTER FOR SHORT-LIVED PHENOMENA

This meteorite record was produced partly with the help of our Center for Short-Lived Phenomena that is located in the Astrophysical Observatory. This Center now has 1,200 people around the world participating in sending in key bits of information about everything from volcanic eruptions to lava flows to other extraordinary biological events. It has been very active in connection with oil spills. We have been able to get very rapid observations of effects on animals from oil spills through this network of informants who wire into our service in Cambridge, Mass.

ENCOUNTER SERIES

As part of our public information activities during the year, we have had a very good panel discussion series in the Smithsonian called "Encounter." A number of Members of the Congress have participated with us in these biweekly or monthly panel discussions. As you know, Madam Chairman, it was the hope, from the very beginning of the Smithsonian, of Joseph Henry and others, that we could perform a valuable service as a kind of public platform in Washington, where members of the Government, the Congress, people of influence in the country would be in touch with scholars and other people who had important information to give them. The Smithsonian would serve as a kind of lyceum.

We were through the 19th century a kind of chautauqua, as it were. Discussion groups were then perhaps more powerful and more important than they have been recently. But I sense a return of great interest in this kind of forum. We hope to continue this, continuing a classic Smithsonian tradition, and to have an important effect in Washington by doing so.

Our next "Encounter" series lecture or discussion is the 16th of April, next week indeed. There will be a number of people including Members of the Congress on this panel. After each participant has made a short statement the session is thrown open to public questions. They have been very lively, very useful and very well attended, standing room only.

RESTORATION WORK DONE BY THE NATIONAL COLLECTION OF FINE ARTS

I wanted to just show you some pictures of some of the restoration and conservation work done by the National Collection of Fine Arts. These photographs show you quite graphically what restoration and conservation will do to a painting. Here is a "before" photograph and

an "after" on the same painting. These are American paintings by important American artists.

Mrs. HANSEN. Are the paintings in your gallery collection?

Dr. RIPLEY. Yes, in our own gallery collection. This is an early 18th century painting in terrible shape, and this is it after treatment. I think it is very important for us, as administrator of collections which have come to us in so many different ways, to be able to do the right thing. We help the Nation through our facilities in learning how to do the right thing, because this service is then available to museums right across the country. This is a tremendous kind of central service facility.

SMITHSONIAN STUDIES OF INDIAN AND OTHER CULTURAL GROUPS

The recent Subcommittee on Economy in Government of the Joint Economic Committee of the Congress, in its publication in 1969 on development prospects and problems among the Indians had a very important contribution from our Center for the Study of Man on Indian Problems in this country. This was a very highly valued and significant contribution. As I have so often said to the committee, we are particularly anxious to develop the documentation, the cultural history, and information for the future on possibilities for cultural development of the Indians of this country, as well as all ethnic minorities and ethnic subcultures and subgroups. I have felt that this capability was a widely recognized asset of the Smithsonian, but one which should be cultivated more, because the ethnic minorities in this country deserve not only to have a place in the sun economically and for a better life, but they also deserve to know and understand and admire their contributions.

Mrs. HANSEN. They also need to understand their own heritage.

Dr. RIPLEY. Yes, their cultural heritage. We have felt that our Center for the Study of Man should assure that our history as an institution is preparing us for the ability to do this with younger generations of ethnic subcultures and troubled youth.

PROBLEMS OF MUSEUMS THROUGHOUT THE COUNTRY

Mrs. HANSEN. There are some very excellent museums in various parts of the country that have tremendous collections, particularly on Indian art, and yet I sense that there is a lack of funding to sufficiently keep their exhibits in the best condition.

(Discussion off the record.)

IMPORTANCE OF OBJECTS IN UNDERSTANDING HISTORY

Dr. RIPLEY. The creation by the Congress of the National Museum of History and Technology of the Smithsonian has given a tremendous interest to the field of historical preservation. I might say that within the past 20 years the average teaching in history, the departmental work in universities in history, was sadly deficient in any understanding of objects and the care of objects. The history books were enough, and the objects go out the window.

Since the creation, I really think, and the opening in 1964 of that Museum of History and Technology, a new wave of understanding has gone across this country.

Mrs. HANSEN. You need to work with the universities to include the human element of history in their history courses.

Dr. RIPLEY. Yes.

Mrs. HANSEN. Some of our universities are lamentably lacking in an understanding and an appreciation of the total import of history.

Dr. RIPLEY. I quite agree with you, Madam Chairman. This is something we are trying to address ourselves to in two ways. One is to bring historians to work in the Smithsonian, who will then gain this kind of understanding, and then go back to the field.

Mrs. HANSEN. History is one of the most vital studies we have.

Dr. RIPLEY. Yes.

Mrs. HANSEN. It should be presented not only in a book, but also as a visual experience.

SERVICES UNDER THE NATIONAL MUSEUM ACT

Dr. RIPLEY. Right, absolutely, and tactile. A contact experience absolutely. The other thing is that through the establishment of the National Museum Act, and the idea that the Smithsonian had services to perform to the museums in the field, we have found where these needs and where these gaps are. We are now getting over 1,000 requests a year for help to go out to the museums, to help them plan, to help teach them the conservation techniques that they need to help them with their exhibits. Of course we can't do it because we don't have the money, but it shows that there is a tremendous ground swell of this sort of need. We are trying at the moment to get our National Museum Act reauthorized, because that particular Act requires reauthorization, and trying keenly to evoke the interest of the government in supporting that program, which is a supportive program for museums in the field. This program is not for our benefit. It is simply giving us the tools to help the people who are asking us for help.

REVISION OF THE HISTORICAL MUSEUM IN WASHINGTON STATE

Mrs. HANSEN. At the present time my own State is involved in the contemplation of revising their own historical museum. They have a fine start but the housing, management, and funding all have to be further considered. It would seem to me that this is a great opportunity for the State to begin to provide matching funds for some of their students to inaugurate a creative imaginative program.

If the State doesn't take this opportunity, they have lost a golden opportunity. I would hope that somebody from my State is in contact with you to discuss their museum future.

Dr. RIPLEY. And I would expect they would be, because this Museum Act has been quite widely advertised in the museum field. Our sole problem is how to react when we get the appeal, because as I say we lack the funds and we lack the reauthorization at the moment to continue with the work.

BELMONT REPORT

You know that the American Association of Museums had a survey and a study of the needs of the museum field, which was initiated by a letter from President Johnson asking them to state what their

needs were. This report is called the Belmont Report. One of its points, among others of great importance, was to urge the Congress to support this National Museum Act, so that the Smithsonian could enlarge its ability to help the museums across the country in these special technical problems, which we are studying all the time, and for which we believe that we have some of the answers.

BICENTENNIAL OF THE AMERICAN REVOLUTION

There is a close relationship to this, Madam Chairman, and the Bicentennial of the American Revolution. I should point out that we think our History and Technology Museum will be one of the focal points for the celebration of the Bicentennial in 1976. Consequently, we are continually attempting to plan for this involvement. We have been encouraged by the Congress in the past to consider this and also, this year, by President Nixon's budget program. I have a statement on our hopes for the Bicentennial, which I would like very much to add to the record if I may.

Mrs. HANSEN. Please do.

(The information follows:)

THE NATION'S BICENTENNIAL

I. A SMITHSONIAN PLAN

The Bicentennial of the American Revolution offers the Smithsonian Institution a unique opportunity, and an urgent duty, to pursue its mission to the Nation and to the world. The assignment from our founder, James Smithson, was to insure "the increase and diffusion of knowledge among men." Our vocation, declared by our first Secretary, Joseph Henry, the American pioneer and prophet of the electronic age, was to remind men that "knowledge should not be viewed as existing in isolated parts, but as a whole. Every portion throws light on all the others." To enlarge, to unify, and to communicate knowledge is the Smithsonian tradition.

The Nation's approaching 200th birthday—like other national celebrations—gives the whole Nation an occasion to recall its achievements and to renew its self-confidence. The Smithsonian Institution will use its vast resources, and enlist the resources of others, to help rediscover our national achievements. The Smithsonian Institution will also use its resources to draw together the numerous and varied celebrations of the Bicentennial into a coherent rediscovery of the meaning of the American experience. But all national celebrations are temptations to a preening chauvinism and to a sterile and antiquarian introspection. Our purpose will be not only to help the Nation resist temptations to complacency and to the wasteful dispersion of its celebrating energies, but to help give the national celebration a grandeur of movement and a direction worthy of the occasion.

We aim to help Americans and the world see the American experience as a grand experiment of man. We aim to explore and assess the ways in which the life of man here has been shaped by the peculiar resources of our continent, and so help us see how we have shaped (and misshaped) the landscape of a New World. We aim to help Americans discover the meanings of the American experience for the world. We aim to help the world discover the meanings of the American Revolution and the American experience for man everywhere. We aim to draw on the whole American experience to illuminate the unfolding problems and promises of late 20th century—and to help us draw hopeful prospectuses for the 21st century. We aim to help set new knowledge in the context of history.

For this effort the Smithsonian Institution is providentially prepared. The Smithsonian Institution is a uniquely comprehensive group of enterprises surveying, exploring and studying every aspect of man's life and work—his political and military institutions, his science and technology, his fine arts, his graphic arts, his performing arts, his use of natural resources, and his adven-

tures of exploration on this planet and into outer space. We have a long and rich tradition of free interchange of ideas with the world of learning. The Smithsonian has been a center for study of the resources, natural and human, of the whole continent. The Smithsonian incorporates the National Museum, the repository for myriad objects sacred to our history and illustrative of the American experience since the beginning.

In the Nation's Capital, the Smithsonian offers a uniquely effective and appropriate site for dramatizing and interpreting the American experience. Now some 13 million people each year visit our museums in Washington. By 1976 this figure is likely to reach 20 million, and interest in the Bicentennial, with the many visitors from abroad, may bring the number to 30 million. The Smithsonian, therefore, can substantially assist the American Revolution Bicentennial Commission in making the Nation's 200th birthday an occasion of national rededication and of festive celebration.

The theme of the Smithsonian's Bicentennial celebration is the American experience.

We propose that on January 1, 1976, each of the Smithsonian's 10 museums as a culmination of research and exhibitions begun in 1970, open a major exhibition commemorating the bicentennial. At the same time a guide will be published showing the coherence of the Smithsonian's many activities in exploring and illustrating the American experience.

We propose a coordinated multimuseum exhibit approximately as follows:

At the National Museum of Natural History the visitor will learn about the land and its original inhabitants, and he will see what has happened to these people and the effects wrought upon the land by the changing nature of our society since the first Europeans arrived;

At the National Museum of History and Technology he will see an exhibition about the cultural, industrial, and political development of the United States;

In two special Bicentennial pavilions he will see the contributions other nations have made to this Nation, and in turn, the impact this Nation has had upon other nations;

In the National Portrait Gallery the visitor will see the likenesses of the diverse men and women who have made America;

In the National Collection of Fine Arts he will see a historical survey of art in America, emphasizing those qualities which are distinctly American, from the days when this country was artistically a province of Europe to the time when it became a leader in artistic creativity;

In the National Gallery of Art[1] the visitor will see a magnificent panorama of the artistic world of 1776, while across the Mall the Hirshhorn Museum will show a similar panorama of the artistic world of 1976;

In the National Air and Space Museum he will see an exhibit of what is perhaps America's greatest technological achievement, the conquest of outer space, and of the Nation's future in the space age;

In Bicentennial Park, on the banks of the Potomac, he will see a recreation of the life of the citizen-soldier who won our freedom two centuries ago;

On the Mall during the summertime, and in the Kennedy Center for the Performing Arts, he will see performances of American music, dance and drama, and demonstrations of American folk arts and crafts.

Our Bicentennial exhibition—The American Experience—will be the first occasion when so many of the resources of the Smithsonian will be devoted to a single theme. The exhibits outlined above, plus others that we will develop in the Renwick Gallery, the Freer Gallery, the Anacostia Neighborhood Museum, the Arts and Industries Building, and on the Mall, will be conceived as part of the large thematic pattern. Each of our museums will use its resources, its collections, its scholarly staff, its designers, its educational experts, to fulfill its part of the overall plan. The Smithsonian Office of Academic Programs, the Office of Exhibits, the Smithsonian Institution Press, the Division of Performing Arts, and other Institution-wide organizations will support this common purpose.

The observance of the Bicentennial, while focused on 1976, neither begins with the anniversary of the signing of the Declaration of Independence on July 4 nor stops after 1976. Rather, July 4, 1976 will be a climax in commemoration of a series of events that began in the 1760's and went on until the Treaty of Paris in 1783. There are many events in that time span which will produce local cele-

[1] We intend to coordinate our plans with those of the National Gallery and the Kennedy Center, which are separately administered affiliates of the Smithsonian.

brations throughout the United States. The Smithsonian itself hopes to commemorate many of them and to participate in the commemoration of others, both here and abroad.

To serve the millions of Americans who cannot visit Washington, the Smithsonian will assist museums throughout the country. Our performing arts program cooperating with the Kennedy Center for the Performing Arts, will offer plays, song and dance festivals, and other dramatic presentations from our national past at major centers throughout the United States. In addition, we intend to make available to scholars everywhere the results of the research we will be undertaking for the preparation of our exhibits, and to make available to other museums the designs and techniques we will be developing.

Our Bicentennial plans will be developed in connection with those of other institutions in the Nation's Capital—such as the National Capital Parks, the National Archives, the Library of Congress. In this way we can hope to create here in Washington an experience that will be richer and deeper, but not less festive than that of a conventional exposition. All these efforts will help the Nation toward a celebration worthy of the 200th anniversary of our independence.

II. POPULAR PROGRAMS FOR THE BICENTENNIAL CELEBRATION

A. The American experience: The era of the Revolution

1. The continent and its people.—A major bicentennial exhibition depicting the American continent at the time of the coming of the Europeans—the early settlers and their impressions, the Indian tribes who inhabited the greater part of the territory, the animals, birds and aquatic life, the forests and the prairie land, the rivers and bays and life of the oceans of the East, South, and West. This will present a land, still in harmony between nature and man, before the benefits and detriments of a more industrialized society occurred to alter the landscape.

2. First encounter.—An exhibition showing the interaction of the European and Indian cultures: for example, in agriculture, the arts of war, in crafts, textiles, pottery, wood, and shelter needs.

3. Everyday life on the eve of the Revolution.—A number of exhibitions designed to project the viewer into the life of colonial America. These will be constructed so that they may be loaned to museums, colleges, and other similar institutions by SITES. Topics to be illustrated are: (*a*) *Three meals a day.*—The 18th-century American menu, food sources and preparation. (*b*) *The colonial community.*—The physical and governmental structure of towns, the services provided and the restraints imposed, and how they varied from colony to colony illustrated by artifacts and graphics. (*c*) *Building America.*—The tools, the architectural styles, including borrowed techniques and their New World modifications the colonists brought to public buildings and private homes. (*d*) *Colonial schooling.*—The development of the concept of public-supported education and how education and educational levels differed from colony to colony.

4. Colonial communications.—An exhibition on the significance of the colonial printer; colonial, British, and foreign newspapers; and their dissemination of news. Since printers were also postmasters this exhibition will feature both the isolation of the colonists and their interest in maintaining news from England and also from the other colonies. Attention will be given to the relations of problems of communication to the organization and conduct of the Revolution.

5. Colonial art.—The American visage as seen by the foreign-trained sophisticates and by the itinerant painters; New England sign painters; figureheads and scrimshaw; the topographic artists like Christian Remick; the naturalists, like William Bartram; historical printmakers like Paul Revere; cartoons and caricatures.

6. The signers of the Declaration of Independence.—An exhibition of as many of their portraits as extant and available, accompanied by publication of a catalog and of a more definitive study. The exhibit would aim to illustrate the great diversity of individuals involved in the writing and signing of this document, in terms of their backgrounds, occupations, personalities, and the fortunes of these men during and after the Revolution.

7. *The Citizen-Soldier of the Revolution.*—A living exhibition depicting the life of the American citizen-soldier, with emphasis on the Revolutionary War period. Live performances at the proposed Bicentennial Park near Washington will help the visitor learn (and enjoy learning) the role of the colonial militia,

will help him see what the soldier wore, what he ate, how and where he slept and how he was trained to fight. These plans also include old-fashioned military band concerts.

8. *The Portraits of George Washington.*—An exhibition (with appropriate catalogues) of life portraits, political cartoons, and cult images during Washington's lifetime down to the present. Also under consideration is telling the story of Washington's life based on these portraits—interspersed with associative material and footage shot on location.

9. *The Price of Independence.*—An exhibit of the risks and the opportunities of independence for the American colonists. The first part depicts the risks of sea trade, of potential civil war within and between the colonies, the fear of defeat and the human and fiscal costs of war, supplemented by the problems which would be developed from the loss of trade with England. The second part depicts the new opportunities found in Independence: a new national politics, the opportunity for free trade and free manufacture, new fields for intellectual endeavors, and the removal of British controls over westward expansion. A newly designed computerized game (developed by Prof. Edmund S. Morgan of Yale University) will allow the museum visitor to select one of several roles (such as that of a Boston merchant, a Philadelphia laborer, or a Southern planter) and test his decisions against the actual facts of history in the period 1770–1820. In this way he can relive the risks and opportunities of the Revolutionary Era.

B. The American experience: Two centuries

1. *The U.S.A.—A Nation of Nations*—A major Smithsonian Bicentennial project is an exhibition to be called "A Nation of Nations." A planned two-part permanent addition to the National Museum of History and Technology will show by means of artifacts and the latest techniques of audio-visual communications: (a) the role of other nations in the development of the United States, and (b) America's contribution to the world.

The first portion—"From the Nations to a Nation"—will illustrate the ideas and physical objects brought to America by the first settlers and subsequent immigrant groups, ideas once alien to this continent, and the resulting melting-pot society that is America.

The second portion—"From a Nation to the Nations"—will display and explore the impact of the American experience on other countries. This will range from the ideas of the American Revolution through the political development of newer nations following America's philosophic leadership and including the effect of our technology and way of life on other cultures.

2. *The Corridors of American Experience.*—A series of "time corridors" will enable the visitor to experience daily living at specific points in America's past. Employing the most innovative concept in exhibits, the museum will surround the visitor by objects, sights, sounds, and smells of a particular historic moment: (a) 1750, just before the American Revolution; (b) 1850; and (c) 1950. A time machine will transport the visitor by novel means of surveying the intervening experience, from one time period to the next. The "time machine" is being developed and will be tested on the public by the close of fiscal year 1971.

3. *Man and Nature.*—A major exhibition of how the face of the American continent has been changed by the growth of this Nation during our 200 years: a historical perspective of agriculture and agricultural mechanization, of industrialization and urbanization, can provide a foundation for understanding the environmental problems of today. The exhibit will dramatize the problems and suggest possible and necessary measures for redressing the balance of man and nature.

4. *The World Above.*—The Smithsonian will present an exhibition on the history of man's exploration of the world overhead, from the first flight across the English Channel in 1785 through the Apollo XIII, and including Benjamin Franklin's kite and Robert Goddard's early research with rockets. The exhibition will also show, through pictures, graphs and objects, the development of satellite technology permitting better navigation in the air and on the high seas, more accurate weather forecasting, and the broadcasting of educational and entertainment programs for television.

III. RESEARCH, PUBLICATIONS, AND SCHOLARLY CONFERENCES

A. The Smithsonian Encyclopedia

The Smithsonian Encyclopedia is a Bicentennial project designed to provide an authoritative illustrated one-volume encyclopedia of American history, culture, life, and civilization. It will contain about 4,000 alphabetically arranged

articles totalling 1,250,000 words and about 1,200 pages of text. The Smithsonian Encyclopedia will offer the American people for the first time an inventory of the remarkable range of American achievement. It will include all the usual topics—Presidents treaties, battles, legislation, and literary classics in addition to thousands of others (Coca Cola, comic strips, corporate lawyers. dictaphones, hotel, quick lunch, safety pin, typewriter, and so forth) for which there is no other accessible authoritative source. About half of the entries will not be found in any other encyclopedia. The articles (prepared under the direction of the National Museum of History and Technology), will be written and edited by leading authorities in each area. Americans then will have a new opportunity, in a single volume, to explore and understand many of the items which make up the American way of life.

B. Symposiums and conferences

An international symposium in 1976 will reexamine the traditional national goals—life, liberty, and the pursuit of happiness—in the light of the profound technological, scientific, and ideological changes that have transformed the Nation in its two-century experiment. This country's preeminence in technology has indirectly broadened its citizens outlook on their country and the community of nations on this planet. The successful exploration of the moon has moved us conceptually beyond our national frontiers and to think of an interplanetary universe. Scientists working in the Smithsonian are already participants in a worldwide network of collaboration with men seeking knowledge about outer space, and the origins of life itself. The values suitable to such a revolution are a fulfillment of the universal outlook of our Founding Fathers.

Contemporary concerns with finding a balance between world food and population ratios, and in what individuals can do to fight pollution and improve the quality of life are problems faced by all societies since man began to cultivate the land and domesticate animals. Today differs from the past with our realization of the finite nature of our planet's resources. Unlike people of this country who were concerned with pollution and vanishing wild life 200 years ago, concern today is not enough and the Smithsonian is deeply committed to providing a forum for the discussion of possible solutions and hopefully their successful application.

C. Research in the sciences

Much of the Smithsonian Institution scientific research is concerned with environmental problems or human ecology. The improvement of the environment by the curtailment of pollution and the establishing of more equitable balances between man and nature are stated goals of the American Revolution Bicentennial Commission.

IV. TO ASSIST MUSEUMS AND OTHER INSTITUTIONS HERE AND ABROAD

A. National Museum Act of 1966

Under this Act, the Smithsonian assists and cooperates with other museums of the country in solving their problems and promoting their programs. Pursuant to this program the Smithsonian will help museums in this country and abroad to develop their programs for the Bicentennial.

B. Smithsonian Institution traveling exhibits service

The SITES program of the Smithsonian Institution is uniquely suited to aid in developing public awareness and understanding of the broad nature of this Nation's Bicentennial celebration.

Already circulating in the country to museums, universities, schools, banks, and other public institutions are some 120 exhibits from both foreign and domestic sources. Beginning in mid-1970, a series of exhibits, developed within the Smithsonian Institution, will travel throughout the Nation illustrating the different aspects of this celebration. Featured will be the historical events of the Revolutionary period, daily life in the 1770's, the continuing problem of misuse of resources and deteriorating environment and our unique American experience and its elements. These exhibits should provide both opportunity for people to see fully the nature of the Bicentennial celebration and its concern with the whole 200 years of American life and stimulate interest to participate in this celebration.

C. Handbooks and other services

The Smithsonian Institution is cooperating with the American Association for State and Local History in preparing a "Handbook for Bicentennial Exhibition Planning" for distribution to the association and other interested persons. Similar cooperative projects with other associations are planned.

D. International exhibitions

The Smithsonian will cooperate with the embassies of France, Great Britain, Spain, the Netherlands, and other countries to develop exhibitions in their national museums, conferences, and other activities for the Bicentennial.

THE SMITHSONIAN'S BICENTENNIAL PROGRAM

Dr. RIPLEY. We are very much encouraged by the plans, and the kinds of encouragement we have been receiving from the Executive Branch, and in the past years from the Congress. We must prepare for some 30 million Americans who are going to come to Washington in 1976. We hope at that point to have a coordinated exhibits and demonstration program right across this city involving every one of the institutions that exists and that is on the spot. We would like a bicentennial program to be a dignified and appropriate one to remind Americans of what the American experience has been, and to try to project where we are going. We are not so much interested in a carnival or a vast expenditure of a world's fair type. What we are really interested in, in this rather sobering period of American life, is in trying to revitalize the spirit of young Americans, and make them proud of what we have, and make them ambitious and hopeful for the future. And we plan to do it not in a tawdry, overnight way, which will have very superficial impressions on them, but to do it in a positive and really stimulating way. We think that we can do some of it by marshaling the resources that are already here, and simply demonstrating them in the appropriate way. This sounds relatively low keyed, but we are low keyed in this. We are worried about where Americans are going, and we are worried about their forgetting the roots and the heritage that they have. So we take a very deep and a very serious point of view in this regard.

SCHOLARSHIP AND HIGHER EDCUATION

We are hoping this coming year to receive support from the Congress for our academic programs. We are particularly conscious of the fact both in foreign projects using counterpart funds and also in educational projects right here in Washington, that there is a tremendous need as expressed in the demands that we receive for help by scholars. I know that there has been a very considerable decrease in the level of Government support for scholarship and for higher education in this country in the past 2 years, and a great deal of concern for scholarship.

We feel at least that there are many areas in our special competence where we can help to provide needed guidance and assistance, and I would, if I might, like to submit for the record a brief statement here about our academic programs. This shows some of the things that we have not been able to do because of lack of funds, but which we feel are cogent and valuable and useful for the future.

Mrs. HANSEN. Please do.

(The information follows:)

INTRODUCTORY REMARKS FOR ACADEMIC PROGRAMS TEXT AND ATTACHMENTS

I respectfully submit that investments in our academic programs merit your approval and the increase of $75,000 we have requested. The Institution serves as an auxiliary to education at all levels. I hope that members of the committee will be aware that we do our utmost to realize important benefits for young people from the facilities and programs committed to our care. We constantly strive for higher quality and more effective returns for students visting the Institution directly and also for schools and colleges in the subject areas of our interest. I wish to report a number of examples of excellent proposals made to us by students who would have benefited greatly from support, but which we have had to refuse because the present level of funding is inadequate. We can provide about 50 stipends from our present appropriation. I recommend that this level be increased steadily to a level more nearly in keeping with the range of basic disciplines to be served (nine disciplines; 450 professional staff members) and the strong interest which the university community continues to show (200 completed applications received during fiscal year 1970 for the coming year).

EXAMPLES OF VISITING STUDENT PROJECTS REFUSED SUPPORT FISCAL YEAR 1970

A student at the University of California at Santa Barbara who will receive his doctorate in March of 1970 proposed to study the systematic biology and host-parasite relationship of octopod mollusks of the eastern Pacific. Increased interest in octopods and their growing use as experimental animals is handicapped by the lack of knowledge about their characteristics as hosts and about their parasites as well. The objective is to achieve deeper conceptual understanding of interrelations among marine animals, through combining systematic and ecological studies, with the unique and extensive Smithsonian Institution intellectual and material resources in parasites, cephalopods and oceanographic studies. His academic supervisor and Smithsonian professional staff agreed that the conduct of this research at the Smithsonian Institution would provide an inimitable opportunity for achievement of the student's research and educational objectives, as well as to contribute stimulation and knowledge to existing Smithsonian Institution research activities.

A sedimentologist holding the doctorate from Dalhousie University and currently carrying out independent research at the Smithsonian proposed to continue the work which he initiated in the past 6 months. His study concerns the sedimentary deposit of Mesozoic and recent age occurring as capping continental margins in the Atlantic and Indian Oceans. Their origin and the evidence they may yield for the origin of continents make them a subject of continuing vital interest. Various techniques to analyze wedges of these sediments would be employed, directed toward interpretation of the sediments studied (eastern U.S. continental slope) and other similar sediments of widespread occurrence. The research subject is of direct interest to Smithsonian Institution professional staff and would complement and enhance ongoing research, as well as broaden the researcher's own competence, and prepare him to return to his native India to fill a void in that nation's research competence in marine geology, particularly deep sea sedimentology.

A student at the University of Kansas who will receive her doctorate in June of 1970 proposed a comparative study of food resource partitioning in insular and continental anole lizards. The purpose is to study the intensity of competition for food resources when anoles form a "trophic block" of species and individuals in an insular population contrasted with competition for food resources under continental conditions in which the anoles comprise a smaller part of the fauna. The objective is the expanded understanding of principles underlying predator—prey relationships, a key concept in ecological theory. The strong support of her university advisers was predicated on the significance of her research for the understanding of tropical ecosystems as well as deepening her awareness of the relationship between fieldwork and laboratory and theoretical ecological research.

A student at the University of Sydney, Australia, who will receive the doctorate in experimental agricultural biology in early 1971 proposed interdisciplinary research in the history of ecological science. His objective is to investigate the history of certain scientific ideas as they have affected the theory

and experimental practice of modern ecology and population biology. His particular emphasis would have been on the application of the axioms of population dynamics and mathematical demography to questions previously studied without success through the static modes of conventional plant ecology. The development of studies in the history of ecology could be well supported at the Smithsonian Institution through the exploitation of the resources of numerous professional staff members and would stimulate thinking in an area of particularly timely interest to scientists and humanists. The student's varied background, with training in agricultural sciences and in history and literature, combined with his wide-ranging interest in contemporary problems would have made him a most suitable addition to the intellectual life of the Smithsonian.

A student at Harvard University who will receive his doctorate in September of 1970 proposed to study nest building by social wasps at the Smithsonian Tropical Research Institute from a base in Cali, Colombia, emphasizing the evolution of nest building behavior and its adaptive significance for individual species and for the phylogeny of the social vespids. Few details are known of nest building behavior, which the field observation associated with the project would help to correct. The larger benefits of this study would be to illuminate obscure areas of social behavior among wasps. The proposal was strongly supported by the student's university professors particularly because of his capacity for original field work and experimentation and the suitability of the location for the study, and because of its major importance in the sophistication of his field experience in the study of social wasps.

A student at Syracuse University, who will receive his doctorate in August of 1970, proposed research in the mechanisms of energy transduction by molecular structures in living systems, specifically as mediated by the widespread plant pigment phytochrome. The determination of the primary structure of phytochrome would increase the knowledge of the molecule's chemical topography, making possible the investigation of sites and mechanisms of its activity in organisms. The research would have been conducted at the Radiation Biology Laboratory whose professional staff judged it particularly well designed to achieve experimental results, to complement the student's experience in other phases of protein biochemistry, and to contribute to current research.

A Ph.D. candidate at Yale University has proposed a research project to analyze evolutionary trends through studies of form and function in both living and fossil crinoids, a class of marine invertebrates. He has determined that phenomena of structural changes may provide a basis for understanding success and failure in the way organisms respond to environmental pressures. The largest fossil echinoderm collection in the world is housed in the National Museum of Natural History; this student could have found no better place to work on the fossil material pertinent to his study. He also proposed to go to the Smithsonian Tropical Research Institute to study living related organisms. Thus jointly these two Smithsonian facilities could have given this student unique access, as well as supervisory guidance, to the resources he needs in his attempt to bridge the gap between the present and the past.

Our academic programs reinforce the Institution's efforts in research by training students in our unique and specialized fields of inquiry. Thus they complement and do not duplicate the efforts of universities. It is clear from a list of projects that these investigations are very valuable in their own right and represent an extraordinary range of effort for what is really a small investment relative to the cost of our facilities and staff research.

FISCAL YEAR 1970 STIPENDS FOR HIGHER EDUCATION PROGRAMS

(Full-time appointments of 3 months or more)

National Museum of History and Technology

[1] JEREMY, David John, University of Delaware; the transit of textile skill and technology between Britain and the United States, 1783–1830/40; Philip W. Bishop, supervisory; department of industries.

LUNT, C. Richard K., Indiana University; the history of American traditional small boat building; Howard I. Chapelle, department of industries; Ralph Rinzler, division of performing arts, supervisors.

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[1] Surnames of postdoctoral investigators are given in capital letters.

McCUSKER, John J., University of Pittsburgh and University College; Philadelphia shipping, 1722–76; a statistical study; Melvin H. Jackson; department of industries.

McKEE, Linda M., Washington University; Commodore Isaac Hull, 1773–1843; Howard I. Chapelle; department of industries.

STECHL, Peter, University of Wisconsin; biological standardization of drugs after 1928; Sami K. Hamarneh; department of science and technology.

TUCKER, Spencer C., Texas Christian University; completion of a history of muzzle loading naval ordnance; Melvin H. Jackson; department of industries.

ZANGRANDO, JOANNA S., George Washington University; monumental bridge design in Washington, D.C., as a reflection of American culture, 1886–1932; Robert M. Vogel; department of science and technology.

BANTA, William C., University of Southern California; a comparative morphological and developmental study of frontal walls of some ascophoran cheilostome Bryozoa; Alan Cheetham; department of paleobiology.

COBB, Stanley J., University of Rhode Island; brain morphology in sternoptychidae and gonostomatidae; Stanley H. Weitzman; department of vertebrate zoology.

DAHL, Arthur L., University of California at Santa Barbara; phycological review and standardized data collection of marine floras; Mason E. Hale, supervisor; department of botany.

FEININGER, Tomas, U.S. Geological Survey; metamorphic facies and facies series of the Andean metamorphic belt in Colombia; George Switzer; department of mineral sciences.

GAUTIER, T. GARY, University of Kansas; Leonardian nonfenestrate cryptostomes from the Glass Mountains, Tex.; Richard S. Boardman; department of paleobiology.

GODDARD, R. H. Ives III, Harvard University; Algonquian linguistics, ethnography and ethnohistory; William C. Sturtevant; office of anthropology.

GOODYEAR, Richard, George Washington University; systematics and zoogeography of the deep sea fish family Malacosteidae; Robert H. Gibbs; department of invertebrate zoology.

GRIFFIN, Desmond J. G., Australian Museum; systematics of Indo-West Pacific crustacea Brachyura; Raymond B. Manning; department of invertebrate zoology.

HINDS, ROBERT W., Columbia University; morphology and systematics of the Bryozoan genus *Idomonea* from the eocene and oligocene of Mississippi, Alabama, and western Florida; Richard S. Boardman; department of paleobiology.

HUANG, Ter-Chien, Florida State University; the origin, nature, and transport processes of the sediments between shelf edge and continental rise; Daniel J. Stanley; department of paleobiology.

Kerby, Catherine Jane, George Washington University; Life history study of *Sabella microphthalma;* Meredith L. Jones, supervisor; department of invertebrate zoology.

Lewis, Jackson S., Tulane University; A study of genus *Calappa* as represented by the recent species in the Smithsonian Institution collections and by Miocene fossils from Florida; Fenner A. Chace, Jr.; department of invertebrate zoology.

Noonan, Gerald R., University of California at Riverside; Revision of the subtribe Anisodactylina; Paul J. Spangler; department of entomology.

Thonglongya, Kitti, Applied Science Research Corporation of Thailand; Taxonomic revision of the bats of Thailand; George E. Watson; department of vertebrate zoology.

Zaretsky, Irving I., University of California at Berkleley; Spiritualist movement in the San Francisco Bay Region, 1880–1965; William C. Sturtevant; office of anthropology.

Chesapeake Bay Center for Environmental Studies

Williamson, Penelope, Johns Hopkins University; The foraging ecology of the starling; George E. Watson; department of vertebrate zoology.

Radiation Biology Laboratory

Morton, Dorothy J., George Washington University; Developmental physiology of the grass seedling with special reference to effects of light on corn; Robert L. Weintraub; radiation biology laboratory.

Smithsonian Astrophysical Observatory

Brady, Leslie Ray Jr., Brandeis University; Electron screening in thermonuclear reactions and its effect on the rates of reactions in stars; Henri Mitler, supervisor; professional staff member.

Carbon, Duane Francis, Harvard University; Theoretical studies of non-grey model atmospheres for stars of intermediate and late spectral types; Owen Gingerich; professional staff member.

Cheng, Chung-Chieh, Harvard University; Theoretical studies of the flux and energy spectrum of gamma radiation from the sun; Giovanni Fazio; professional staff member.

Chipman, Eric George, Formation of strong lines in the solar atmosphere; E .H. Avrett; professional staff member.

Duerr, J. Stephen, Massachusetts Institute of Technology; Formation of Plessite in metallic meteorites; Charles Lundquist; professional staff member.

Forman, William R., Course work in astronomy; R. Southworth; professional staff member.

Grindlay, Jonathan Ellis, Harvard University; Cosmic X-rays and their detections with Smithsonian's 10-meter reflector at Mount Hopkins, Ariz.; Giovanni Fazio; professional staff member.

Kurucz, Robert Louis, Harvard University; Research in model atmospheres; Wolfgang Kalkofen; professional staff member.

Leibowitz, Elia M., Harvard University; Intersteller gas; Charles Lundquist, supervisor; professional staff member.

Rieke, George Henry, Harvard University; Gamma-ray astronomy; Giovanni Fazio; professional staff member.

Simon, Theodore, Harvard University; The chromospheric structure of Arcturus; E. H. Avrett; professional staff member.

Stephens, Timothy Lee, Harvard University; Atomic and molecular physics with applications to astrophysics; A. Dalgarno; professional staff member.

Veverka, Joseph Harvard University; Photopolarimetry of satellites and minor planets; Fred Whipple; professional staff member.

Smithsonian Tropical Research Institute

Foster, Robin B., Duke University; Fruiting strategy in a lowland tropical forest; A. Stanley Rand, professional staff member.

Gliwicz, Zbigniew M., University of Warsaw; Hydrobiology of tropical lakes; Martin M. Moynihan; professional staff member.

Hespenheide, Henry A., III, University of Pennsylvania; The ecology of tropical insectivorous birds and their insect prey; Martin M. Moynihan; professional staff member.

Kropach, Chaim N., New York City University; The biology and population structure of the Eastern Pacific sea snake; Ira Rubinoff, supervisor; professional staff member.

Miller, Bruce A., University of New Hampshire; Biology, ecology, and systematics of the Terebridae; Peter Glynn, Harald A. Rehder, Joseph Rosewater; professional staff members.

Ogden, John C., Stanford University; Stratification and resource partitioning in coral reef fishes; Ira Rubinoff; professional staff member.

Todd, Eric S., University of California at Santa Barbara; Ecophysiology of some air breathing gobiid and gobiescocid fishes; Martin M. Moynihan; professional staff member.

Zaret, Thomas M., Yale University; Seasonal variations in tropical freshwater environments; Martin M. Moynihan; professional staff member.

Other units

Baker, Joanne, Georgia Washington University; Tombstones as a reflection of American culture; Wilcomb E. Washburn; American studies program.

Guralnick, Stanley M., University of Pennsylvania; Science education in 19th century America; Nathan Reingold; Joseph Henry Papers.

Lewis, Emanuel Raymond, History of American sea coast fortification; John H. Magruder; National Armed Forces Museum Advisory Board.

Pursell, Carroll, Jr., University of California at Santa Barbara; Technical mobilization in World War I; Nathan Reingold, supervisor; Joseph Henry Papers.

Seger, Jon, University of California at Santa Barbara; Study of the use of audiovisual materials and museum exhibits in environmental education; Nathaniel S. Dixon, Office of Academic Programs.

White, Dana F., Suny at Buffalo; A systems study and area analysis of the physical city, Washington, D.C.; Wilcomb E. Washburn, American studies program.

Wing, William G., Comprehensive study of drug use Special Program in Popular Education; Philip C. Ritterbush; Office of academic programs.

Works, Robert N., Yale University; Studies in aspects of museum administration and a study in the history of American art; Marvin Sadik; National Portrait Gallery.

I wish to offer two descriptions of very talented individuals now conducting research under our higher education programs to show in more detail the relationship between their work and Smithsonian research.

A Ph. D. candidate from the University of Kansas (Lawrence, Kans.) currently holds a predoctoral fellowship award (visiting research associate) in the Department of Paleobiology at the Smithsonian Institution for the academic year 1969–70. As a graduate student at the University of Kansas, he developed a research interest in the taxonomic status of the Upper Paleozoic bryozoan genus *Tabulipora*. His research with this genus was concerned with the evolutionary significance of certain morphological changes which occurred during Upper Paleozoic time. The study has been conducted at the University of Kansas, and more recently at the Smithsonian where large collections of *Tabulipora* have been made available to him by Smithsonian scientists who are currently conducting programs of research involving the evolution of bryozoa. The results of his study will be published as a part of the "Treatise on Invertebrate Paleontology." At the present time the student, under the direct supervision of Dr. Richard Boardman, curator of invertebrate paleontology is studying the detailed morphology of Permian bryozoa. This program is particularly well suited for study at the Smithsonian because the student is able to examine the Institution's unique collection of silicified bryozoa from the Glass Mountains of West Texas. The opportunity to compare specimens that have been replaced by calcium carbonate, along with specimens replaced by silica, will enable him to evaluate previous work on a little studied group of animals. It will also permit him to develop for the first time some of the evolutionary relationships of Permian bryozoa, which have been studied in Australia, Asia, Greenland, and the U.S.S.R., but which have received little study in North America. It is expected that an important new understanding of the size, shape, development, and distribution of ancient bryozoan colonies and their relationships with living bryozoan genera will result from his study. The consequent ability to classify these bryozoa and to compare them with one another on the basis of small morphological features will allow biostratigraphers to establish a well-defined concept of the geology of such petroleum producing areas as the Permian Basin of West Texas.

This student's research activities at the Institution are in close harmony with the research objectives of the Division of Invertebrate Paleontology, which reflects an exceptional staff interest in the study of bryozoan genera as exemplified by a "Bryozoan Seminar" conducted twice a week on a year round basis. The value of this appointment can be considered both in terms of furthering the student's immediate academic goals (a Ph. D. degree) through access to staff and facilities (collections and libraries) which are not available elsewhere, and as contributing directly to a current research activity of the Institution through thoughtful and constructive participation in its programs. Further, the publications resulting from this student's activity at the Institution will broaden our concepts of important segments of past and present environments. The publications expected are: "Functional Morphology and Taxonomy of the Bryozoan Genus *Tabulipora*" (in press); Biological and Ecological Interpretation of Arborescent Bryozoa of the Treatise on Invertebrate Paleontology" (tentative title); and "Contributions to the Trepostome Chapter of the Treatise on Invertebrate Paleontology." Two other scientific notes are in preparation: "Less Expensive Micrography" and "Rapid Thin Section Production." After completing his appointment at the Smithsonian, this researcher plans to return to a uni-

versity to develop seminar courses related to his discipline and to encourage continued progress in his field through student research.

A doctoral candidate from Indiana University currently holds an academic appointment (Visiting Research Associate) at the Smithsonian Institution to study traditional small boat building in America, concentrating on several selected locations in New England. His study emphasized the historical development of the construction of small craft as a reflection of cultural and technological responses in maritime communities to the need for livelihood and for transportation.

The student employs in his research an approach which is well suited to be conducted at the Smithsonian, for it is closely related to two lines of research currently being pursued by investigators at the Smithsonian. This study of traditional small boat building requires a considerable knowledge of techniques for precise measurement, description, and reproduction of boat line, as well as knowledge of cultural implications of traditional technology and of fieldwork techniques in folkloric studies. In the former aspect the research complements the interest of the professional staff, and makes good use of the facilities of the Department of Science and Technology (National Museum of History and Technology) where, under the direction of Mr. Howard I. Chapelle, senior historian, a recognized authority on the history of American small craft development, the student is improving his competence in the technological aspects of his research. The museum's collections relating to small boats, together with Smithsonian library facilities, provide additional basic resources.

In the second aspect of his study, Mr. Ralph Rinzler, Director of Field Research Programs in Folklore (Division of Performing Arts) provides supervision and guidance in the interpretation of material culture represented by folkcrafts and in the development of his competence as a field investigator of cultural history.

The result of this particular research effort will be Ph. D. dissertation to be submitted to Indiana University in August, 1970. It is expected that the dissertation will be published in an appropriate professional publication. In addition to the educational value of the appointment to the recipient, the field work conducted by him in New England will produce informants and other resources to be used by the Institution in presentations and exhibits in the Festival of American Folklife planned for the Mall during the summer of 1970.

APPRECIATION OF SUPPORT BY THE CONGRESS

Dr. RIPLEY. I am very well aware, Madam Chairman, of the rate of support and encouragement that this committee and our Senate committee have given to the Institution in the last few years. I am very well aware also of the austerities of the present approach toward the budget process. I am reminded particularly of this, how shall I describe it, this ambivalence on the one hand, the support and friendship that we have received from our Congressional committees in the face of great austerity in the general budgeting process, by turning to the proceedings of a meeting held in 1927 in the Smithsonian. That meeting was called to discuss the future of the Smithsonian, at which President Coolidge's Director of the Bureau of the Budget, Mr. H. M. Lord, pointed out:

> In spite of present efforts to economize in all directions, it has been the disposition of the Congress to increase appropriations for Smithsonian caretaking and museum activities rather than to diminish them.

Thereby, of course, putting increasing pressure on our own small private funds.

DECLINE IN PERCENTAGE OF FUNDING FROM PRIVATE SOURCES

It is interesting that in 1927 the Federal funds support for the Smithsonian, as part of its total budget, was 62 percent as against 38 percent from our private sources, income from endowments, gifts, and grants. This past year, in 1969, the direct Federal appropriation was 68 percent of our total budget, and only 32 percent was the endowment, gifts, and grants program. So we are slightly down, and I suspect we are more down this year because of the agency support we get in grants, which has continued to decline markedly during the past few months.

DEVELOPMENT OF AN ASSOCIATES PROGRAM

I should express that we are most grateful to the Congress for the support that we have received in our museum and our public instruction and public exhibition efforts, but we are continually concerned by the pressure this brings on our private funds. It erodes our private funds a bit, and it is for this reason really that we have been so strongly trying to develop the program of the associates, the national associates, to bring the Smithsonian into the open, as it were, to increase private support for the Institution.

In 1927 at that committee meeting, the President, Members of the Cabinet, Members of the Congress, the Regents including members who were business leaders in the community in the United States voted at that time to start a development program for the Smithsonian. Unfortunately the death of one of my predecessors stopped the whole thing.

He died just at the time when it should have been carried on, and the impetus was lost. If we had only developed that program in 1927, we would have been in a far better position to weather through the kinds of austerity that came with World War II, from which we have only just been in recent years beginning to recover.

I mention this because I think the history is interesting, that the Smithsonian does its best and will do its best to attempt to develop appropriate sources of private support, in order to meet the challenge that your committee set for us, with your welcome, interested, and concerned support.

INCREASED APPROPRIATIONS LARGELY OFFSET BY INFLATION

I think that the record of the past 2 years shows that we have received support considered to be measurably significant, about 10 percent each year. These are generous increases, but about 56 percent of this growth was to cover the costs of higher Government salaries, and another 17 percent was connected with pay related support and price inflation in various types of museum purchasing activity.

Cost-of-living raises, pay support, and so on have put us under a tremendous strain, in spite of these demonstrable efforts by the Congress to reimburse us, as it were. Now that we are unionized, I find that our workers are complaining about the rates of hourly pay for work that they are expected to perform, the kinds of clothes, the kinds of luncheon breaks that they have. We can expect a very considerable added stress and strain in the immediate future. We have no way of knowing to what extent we can be reimbursed for this pay raise, which is in effect now virtually assured, and we may end up in a serious situation by the end of this fiscal year. And so I don't know what to do. I throw myself on your counsel, because we are expecting to have very austere times ahead. It is in this general tone of gratitude for what the committees have done for us, and at the same time concern for the immediate future, that I would like to close my opening remarks, Madam Chairman.

Mrs. HANSEN. Thank you very much, Dr. Ripley. Every agency this committee has reviewed is in a similar situation. For instance, it has been very interesting to note what effect a 1 cent increase in the postage rates will have on a department.

The average taxpayer does not realize that each agency of Government is charged for its postage. They think that because the mail is franked that it is a free service. It is not free.

JUSTIFICATION MATERIAL

Please insert pages 1 through 4, of the justifications in the record. (The pages follow:)

SMITHSONIAN INSTITUTION
GENERAL STATEMENT
FISCAL YEAR 1971

The Smithsonian Institution was created by Act of Congress in 1846, in accordance with the terms of the will of James Smithson of England, who, in 1826, bequeathed his property to the United States of American "to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men."

Since 1846, the Institution has devoted its resources to basic research, public education, and national service is science, the humanities, and the arts. Its museums, galleries, and scientific laboratories are national institutions with commitments in broad fields of scholarship and education. The Institution's physical facilities for research are extensive and its collections constitute a unique resource for research in a number of disciplines, scientific and humanistic. The research staff of over 300 professional scholars and scientists works in the fields of American history, anthropology, astronomy and astrophysics, botany, art history, entomology, the history of cultures and technology, marine and terrestrial biology, mineral sciences, and paleontology. Much of their effort is interdisciplinary, emphasizing evolutionary and behavioral themes leading to a better understanding of man and his relationship to his surroundings. Over the past century, hundreds of students, guest research scholars, collaborators, and associates in cooperation with Smithsonian staff have successfully completed significant projects, establishing a tradition for the Institution. Their work may be viewed collectively as a leading contribution to our intellectual heritage. The Smithsonian's exhibit programs and related performing art presentations attract millions of visitors from all over the world to view the artistic, cultural, and technological achievements of the country and its peoples.

The Smithsonian administers five museums, a zoological park, five art galleries, seven other research laboratories and scientific centers, a number of associated national and international programs, and several administrative and central support activities. It is responsible for the maintenance, operations, and protection of eight major exhibition buildings and nine support facilities in the Washington area, a major astrophysical observatory with headquarters in Cambridge, Massachusetts, and a worldwide data gathering network, and a facility for tropical research centered in the Panama Canal Zone.

In the decade of the 1970s, the Institution has a number of closely related program objectives:

--To study and explain areas of science and the humanities which can increase man's knowledge and understanding of his environment as well as of himself.

--To achieve integration and mutual reinforcement within our arrays of reference resources of collections, books, and information services.

--To devote an increasing measure of time and effort to studies of cultural development and technological change and to improved educational displays bearing upon this theme.

The budget increases requested for fiscal year 1971 are presented in the following three sections:

--"Salaries and Expenses": increases for carefully selected regular operating programs (museums, galleries, laboratories, and support offices); and special programs to prepare for the celebration of the Bicentennial of the American Revolution, and to make significant contributions to increase man's knowledge of the environment.

--Special Foreign Currency.

--Restoration and Construction of buildings and facilities.

"Salaries and Expenses"

The President's Budget allows the Smithsonian to seek an increase in its "Salaries and Expenses" appropriation of $6,902,000 over a revised base of $29,465,000 for a total of $36,367,000. Of this increase, $3,125,000 represent the appropriation request for the National Zoological Park. The Administration has requested the Institution to assume responsibility for the operating budget of the Zoo since it too is a national exhibition resource. The balance of the requested increase, $3,777,000, includes $400,000 to help meet the higher pay costs of current employees, and $3,377,000 for program improvements. Difficult choices have been made to match this increase against the greatest needs. All but our most essential funding requirements have been deferred. No additional program funding is being requested for 15 of our operating bureaus and support activities. We have attempted to consolidate and direct our requested program increases to the following activities which we believe will result in the greatest return to the public.

Increasing Man's Knowledge and Understanding of Himself and His Environment

At the Smithsonian, we seek to study and hope to explain areas which can increase man's knowledge of his environment as well as his knowledge of himself. From this point of view of environment, the single most important need of our society today is to understand the patterns and the functioning of ecosystems. Man must learn to live in harmony with the biosphere, that small existing envelope of available land, water, and air which allows him to exist. On this understanding, man's physical and cultural future depend.

For over 100 years, Smithsonian scientists and research collaborators have studied the earth, its inhabitants, and the vast spaces that surround this planet. Ten research laboratories and program support activities are actively engaged in investigations on the complex components of this system and how they affect one another.

For fiscal year 1971, the Smithsonian is requesting additional funding in the amount of $1,350,000 for improved basic research, documentation, and education related to environmental assessment, monitoring, and prediction.

Integration and Mutual Reinforcement of Reference Resources

The Institution possesses an array of reference resources tracing man's physical, cultural, and technological development which is unmatched anywhere in the world. Our data bank of biological specimens may turn out in a hundred years to represent four or five times the genetic diversity then available to us, for by that time 75 to 80 percent of the species of living animals or plants may be extinct. The possession of these objects and data has enabled the Institution to perform research, produce exhibits, and publish basic reference works that have set standards in many fields of the natural and physical sciences and the humanities. It must continue to fill these national responsibilities in new and challenging ways.

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Five years ago, the Institution first began to explore ways of developing its information resources to make them more accessible and useful, both for the needs of today's researcher as well as his successors. While some progress has been made, much more needs to be done in assembling this reference material for useful investigations. We are purposefully seeking ways to arrange our information resources so that each reinforces the others to the maximum practical extent. Not books separate from objects; not specialized information services separate from either; but rather integrated reference systems which can unite all three.

For fiscal year 1971, the Institution is seeking an additional $455,000 to continue this development work.

Studies and Displays of Cultural and Technological Development

In earlier times, nature was considered an enemy which had to be hacked, burned away, and pushed back in order to provide a setting for the proper development of civilization. Unfortunately, mankind never developed measures which would reveal whether or not his culture and his environment were ever competing with each other on terms of rough equality. Evidence seems to be mounting in our cities, our forests, our oceans, and our remote and barren regions that our material culture is not only dominating nature, but is in the process of overwhelming it.

As a nation, we have developed the knowledge and the capability to deal with many technological and economic priorities. Very little effort, however, has been devoted to demonstrating the delicate balance between nature and culture and the need to deal successfully with problems in these areas. Smithsonian research and exhibits will give increasing emphasis to man's survival in a rapidly changing environment. It is very important to provide to the public, especially to the younger generation, an understanding and appreciation of man's cultural background and how his artistic efforts and technological advances have contributed to the development of civilized life and what the future may hold. Preparations for the celebration of the 200th anniversary of the United States must give attention to reassessing ideals, reviewing national achievements, and placing in perspective the ethnic, cultural, and religious diversity which have consistently contributed to our country's development.

For fiscal year 1971, the Smithsonian is requesting $1,125,000 for the preparation of new art galleries and museums, for developing experimental exhibits for greater educational impact, and for preparations for the commemoration of the Bicentennial of the American Revolution.

An additional $447,000 are requested for administrative and central support services and for the maintenance, operation, and protection of buildings.

Special Foreign Currency Program

Provision has been made in the President's Budget for the Smithsonian to seek an increase of $2,184,000 in its Special Foreign Currency Program for a total of $4,500,000 in order to meet the increasing number of requests of American institutions. The need is to provide adequate support, without any dollar drain to the nation, for overseas archeological work, systematic and environmental biology, astrophysical studies, and museum programs of benefit to American institutes of higher learning. Ongoing research, based on a progressively broader authority to employ these funds, now consumes the entire appropriation. New demand, spurred by diminishing dollar funding of basic research and by greater research opportunities abroad, is intense. This program is showing important results in cultural and biological studies that are both timely and pertinent to many of the problems man is now facing.

Construction

The Smithsonian's construction requests for fiscal year 1971 consist of only the most essential improvements and additions to the physical plant of the Smithsonian.

The request for Construction and Improvements, National Zoological Park, amounts to $200,000. This is for funds for repairs and continued maintenance to keep those buildings and exhibits which will be replaced eventually in usable condition.

Included in the request of $1,130,000 for the Restoration and Renovation of Buildings are a number of projects to complete work in progress or to repair and make better use of existing facilities. Included in the request are: $300,000 to complete the Renwick Gallery of Art; $500,000 to construct second floor decks in the 90-year-old Arts and Industries Building to provide needed work space; $25,000 for continuing emergency repairs to deteriorating buildings at the Smithsonian Tropical Research Institute; $75,000 to construct a fumigation facility in the National Museum of Natural History; $50,000 to modify space in the Museum of Natural History Building for use by the Libraries; $80,000 for the preparation of plans and specifications for an off-Mall museum storage and study facility; and $100,000 for feasibility studies.

An appropriation of the remaining $8,897,000 is requested to liquidate the balance of the contract authority for the construction of the Joseph H. Hirshhorn Museum and Sculpture Garden. This building will be under construction in fiscal year 1970.

With the continued support of the Congress, the Smithsonian will work energetically to improve its performance in those areas of research, education, information dissemination, and exhibits that seem of special timeliness in the new decade.

TABULATION OF BUDGET ESTIMATES AND APPROPRIATIONS

Mrs. HANSEN. Please insert in the record a tabulation of your budget estimates and appropriations for fiscal years 1960 through 1970.

(The information follows:)

TABULATION OF BUDGET ESTIMATES AND APPROPRIATIONS

"SALARIES AND EXPENSES"

Estimates		Appropriations	
1960	$7,718,000	1960	$7,718,000
1961	7,768,000	1961	7,768,000
1961 Pay Supp	346,000	1961 Pay Supp	346,000
1962	9,275,000	1962	9,125,000
1963	11,354,000	1963	10,900,000
1963 Pay Supp	169,000	1963 Pay Supp	160,550
1964	13,324,000	1964	13,124,000
1964 (Supp.)	67,000	1964 (Supp.)	67,000
1965	14,794,000	1965	15,000,000
1965 Pay Costs	540,000	1965 Pay Costs	540,000
1966	20,865,000	1966	18,468,000
1966 Pay Costs	453,000	1966 Pay Costs	453,000
1967	23,437,000	1967	22,523,000
1967 Pay Costs	176,000	1967 Pay Costs	176,000
1968	25,100,000	1968	23,913,000
1968 Pay Costs	472,000	1968 Pay Costs	427,000
1969	27,130,000	1969	25,748,000
1969 Pay Costs	695,000	1969 Pay Costs	695,000
1970	28,955,000	1970	28,134,000
1970 Pay Costs	1,431,000		
1971	36,367,000		

MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

Estimates		Appropriations	
1966	$1,300,000	1966	$1,300,000
1967	5,700,000	1967	2,316,000
1968	6,100,000	1968	2,316,000
1969	6,000,000	1969	2,316,000
1970	4,500,000	1970	2,316,000
1971	4,500,000		

CONSTRUCTION AND IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK

Estimates		Appropriations	
1963	$950,000	1963	$1,275,000
1964	1,736,000	1964	1,275,000
1965	1,776,000	1965	1,525,000
1966	1,539,000	1966	1,539,000
1967	1,589,000	1967	1,589,000
1968	485,000	1968	400,000
1969	660,000	1969	300,000
1970	600,000	1970	600,000
1971	200,000		

RESTORATION AND RENOVATION OF BUILDINGS

Estimates		Appropriations	
1966	$2,248,000	1966	$2,248,000
1967	2,300,000	1967	2,300,000
1968	1,353,000	1968	1,125,000
1969	1,200,000	1969	400,000
1970	755,000	1970	525,000
1971	1,130,000		

CONSTRUCTION

Estimates		Appropriations	
1968	$803,000	1968	$803,000
1969	14,197,000	1969	2,000,000
1970	[a]6,200,000	1970	[b]3,500,000
1971	8,897,000		

a Includes $6,000,000 liquidation of contract authorization.

b Includes $3,300,000 liquidation of contract authorization.

REMODELING OF CIVIL SERVICE COMMISSION BUILDING

Estimates		Appropriations	
1962	$400,000	1962	$400,000
1964	6,465,000	1964	5,465,000
1965	1,000,000	1965	1,000,000

NATIONAL AIR AND SPACE MUSEUM

Estimates		Appropriations	
1964	$511,000	1964	$511,000
1965	1,364,000	1965	1,364,000

INCOME FROM PRIVATE DONATIONS

Mrs. HANSEN. Also insert in the record your annual average income from private donations for application to Smithsonian activities.

(The information follows:)

FISCAL YEAR 1969

The income from endowments and current fund investments was approximately $1,400,000. Roughly one-half of this total was directed to the support of the Freer Gallery of Art. Of this amount, $286,000 was spent on salaries and benefits, $258,000 on purchases for the collections, and $175,000 on research and other costs. An amount of about $300,000 was restricted by the terms of the original gifts and bequests to other valuable endeavors in specific fields of research and education, such as the care of gift collections. The balance of approximately $400,000 was unrestricted as to use.

In addition the Smithsonian received approximately $2,300,000 in gifts and miscellaneous income, almost all of which was restricted to specific projects, such as purchases for the collections, and hence unavailable for general operating purposes.

SMITHSONIAN ACTIVITIES FOR THE INCREASE AND DIFFUSION OF KNOWLEDGE

Mrs. HANSEN. In 1846, James Smithson of England bequeathed his property to the United States of America to found an establishment "for the increase and diffusion of knowledge among men." This quotation on the purpose of the Smithsonian Institution, of course, prescribes an almost limitless sphere of activity. The Smithsonian Institution has made extensive progress since the days when its total activities were housed in "the little red brick building on the Mall." I think it would be well for you to summarize for the committee, in general terms, the extent of the various activities in which the Smithsonian Institution is engaged in today.

PROMOTION AND DISSEMINATION OF ORIGINAL RESEARCH

Dr. RIPLEY. I think it is extremely interesting to note the progress and development of the original idea which has been referred to from time to time consistently by every succeeding Secretary, the original idea of Joseph Henry, which was that the Institution, in order to carry out the mandate of James Smithson, had a tripartite role. First, there is the increase of knowledge, and I may say this original plan of his was adopted by the Regents in 1846. The increase of knowledge was determined to be the promotion by the Institution of original research, original studies in any field of knowledge that was thought to be for the betterment of the American people.

Second, the diffusion of knowledge would then consist of attempts, using the income of the Institution as it might be, to publish and disseminate these researches. Joseph Henry, of course, was concerned at the time with the fact that scholars in the United States were relatively few in number in a relatively smaller number of States, in a limited population, and their outlets for publication and circulation of their research were very limited as well. He saw the opportunity of putting these scholars in touch with their colleagues abroad, and in this way enriching the total scholarly production of the United States, getting a repercussion from abroad to this circulation, and

buffering it so that by increasing this communication, the scholars would know more about their particular fields, be able to do better work, and be able to increase the total volume of research, and the effect that it would have on the American people.

IMPORTANCE OF THE SMITHSONIAN'S SITE IN WASHINGTON

The third aspect of the work which he envisaged was the siting of the Smithsonian in Washington. He felt that it could be significantly the greatest cultural instrument in the United States, by being close to the seat of the Government, the Executive and the Legislative branches. By being in touch with these same scholars, it would be possible then to bring these elements together in a public forum, and have them discuss and communicate with each other, so that at all times knowledge would be in the freest interchange between these elements.

ASSUMPTION OF RESPONSIBILITY FOR PUBLIC COLLECTIONS

After a few years, the Government itself impressed very strongly on the Institution the necessity of taking over the public collections of objects possessed by the Government, many of which were housed in the U.S. Patent Office. After some resistance by Joseph Henry, in the early 1850's, the Smithsonian accepted this principle: That in addition to collections which might be its own privately, it would accept publicly donated collections, collections which had been donated to the United States. The Institution would accept the responsibility for housing, curating, and caring for them, but only if the government would support this work. As Henry said, if the income of the endowment were to be used for the support of the public collections, it would all be expended before any research had been accomplished. He considered that nothing was more uneconomic than attempting to run a museum collection, which by its very nature tended continually to increase. To the extent that he could, Henry and his successors have attempted to give away collections and exchange them with other musuems so that we could more efficiently and appropriately house what we could and show what we could study.

This increase in diffusion of knowledge and exchange of knowledge still goes on, and is still the basic foundation for the Institution.

ESTABLISHMENT OF THE WEATHER BUREAU

It is true also that as time went on, the scope of this kind of increase and diffusion of knowledge changed and increased in itself, and it did so in very interesting ways.

For example, Henry was much concerned about the possibility that in America as a whole, it would be possible to determine and to predict weather, and some of his earliest research involved spending the private funds of the Institution in exchanging weather information. This eventually resulted in the Secretary himself pinning to the front door of the Institution every day a summary on weather conditions in the United States.

By 1870 the creation of the United States Weather Bureau, which had come into being as a result of Henry's initiation of this research, eliminated the necessity of the Smithsonian's worrying any more about

weather prediction and weather recording. It is a curious byproduct, Madam Chairman, that Henry's type of weather prediction was much more comprehensive than that undertaken by the Weather Bureau, which was largely taken up as an applied science. The basic research which he had wanted to conduct included all kinds of short range and short lived phenomena of the sort that here in 1968 and 1969 we are worried about. Although this was largely left out of the Weather Bureau, we are beginning to realize now that Henry was on the right track in the 1850's and 1860's, when he said that it was, indeed, important to know about many environmental changes that were taking place which should be put into the system. It is a fascinating corollary to the spinning-off of the Weather Bureau as an applied science, mission-oriented agency that the basic research aspect, which was part of Henry's original plan, was largely changed in the process. Some of it was left out, and some of it we are still concerned with and trying to bring it to the attention of scientists and scholars in this country.

Mr. REIFEL. It was more than just determining which way the wind was blowing.

EARLY SMITHSONIAN STUDY OF ENVIRONMENTAL DETERIORATION

Dr. RIPLEY. Right. By the 1870's Henry was very much concerned about two essential urban problems. One was smoke and smog, and this resulted in a long series of experiments and concern by the Institution into industrial effluents and industrial pollution, and the other was urban effects on people. In a famous speech of 1874, he declaimed on the difference that was observable in people when they had left the farm and the country and gone to live in the city. They became subject to vice, they became prey to all manner of evil, they lost their morality, they lost their sense of responsibility. They preyed on other people, just as animals did in the jungle, and he implored citizens, concerned citizens in this country, to erect museums and educational and cultural institutions in the cities to help overcome this urban cultural blight which he could see spreading.

Henry's successors have kept up this tradition of concern through the idea of museum exhibitions and museum educational programs. You yourselves, members of this committee, support our Anacostia Neighborhood Museum program which can be traced to being a direct outgrowth of our concern with the fact that something about the urban condition and the urban environment does destroy the morale of people who live there, and tend to erode the morale and the spirit of people who live there.

SMITHSONIAN SUPPORT FOR ASTROPHYSICS AND SPACE SCIENCE

The astrophysical work began in this Institution in 1874 with the interest of Samuel P. Langley, who eventually became Secretary of the Smithsonian. Langley was an astronomer who predicted many of the results that have emerged subsequent to his death. For example, in a paper in 1903, Langley predicted that rocket propulsion would be possible for a heavier-than-air craft. It was this statement in one of his papers which drew Dr. Robert H. Goddard to write to the Institution in 1916 to say that everybody else thought he was crazy, but

maybe the Smithsonian wouldn't because one of the Secretaries of the Smithsonian had been writing about rockets As a result the Smithsonian provided the first grant that he received for rocket research.

Mrs. HANSEN. The committee will adjourn until 2 o'clock.

AFTERNOON SESSION

SMITHSONIAN ACTIVITIES DURING NEXT 5 YEARS

Mrs. HANSEN. The committee will come to order.

We would be interested in hearing your ideas on what the general scope of Smithsonian activities should be within the next 5 years.

BICENTENNIAL OF AMERICAN REVOLUTION

Dr. RIPLEY. Of course we have two big projects coming up which have been discussed over the years past with this committee. In the first place, we have this question of the extent to which the Congress would like us, as the Smithsonian, to prepare for the Bicentennial of the American Revolution, the extent to which Congress feels that it is appropriate that we should participate.

(Discussion off the record.)

Dr. RIPLEY. This certainly is a principal concern of the Institution. As you know, the proposal by the Commission itself, the American Revolutionary Bicentennial Commission, is that it will be a series of commemorative events stretching over to 1982, so that in effect we will be involved in a series of exhibits and commemorative programs.

Mrs. HANSEN. The Bicentennial celebration won't actually be completed until the 100th anniversary of the adoption of the Constitution.

Dr. RIPLEY. Yes. You mean 1984 really?

Mrs. HANSEN. Isn't it 1987 through 1989?

Dr. RIPLEY. My fault; yes. I hadn't really thought of it as being as long as that. I agree though.

Mrs. HANSEN. I think the history of the Republic, in that context, begins with the Declaration of Independence.

Dr. RIPLEY. Yes.

Mrs. HANSEN. Mr. Marsh, the Bicentennial Commission, and myself, felt that the activities of the Commission should extend through the 100th anniversary date of the adoption of the Constitution.

Dr. RIPLEY. Right. That, of course, is 1988. Well, that date certainly would wind up our participation in this. We have said all along that we feel that we must mount an appropriate presentation for the Bicentennial, but that we have committed ourselves, before this committee, that we will do this, and then diminish any personnel after that. The Bicentennial observance may have its own budget and its own program as part of our activities, but we will not featherbed and just add its personnel permanently to our staff. We will conclude the celebration with an appropriate diminution and winding down of the occasion. However, this will require, from our point of view, staging, phasing, budgeting, taking on of temporary personnel to accomplish these purposes.

AIR AND SPACE MUSEUM CONSTRUCTION

The second objective that I can see as one which is authorized is the eventual planning and construction of an air and space museum. I had hoped as you know, Madam Chairman, this year to obtain some planning funds, to try and save the Government a considerable amount of money by planning for a contemporary, much less expensive building. I felt that we were built into a situation where, if we built a building over the next 5, 6, or 10 years with yesterday's plans, we would be causing unnecessary inefficiencies, both in the plan and design of the building, and in the consequent expense of it. It would be far better to start prudently replanning and perhaps save a very considerable amount of money.

I mentioned this to the Administrator of GSA.

(Discussion off the record.)

Dr. RIPLEY. I had hoped that in perhaps another year we can plan for this, that we can ask for some appropriate planning money to try and scale down this museum, which I feel should be built. I realize that at the moment the idea of a large air and space museum seems relatively extraneous. It is true that in the legislative report on the authorization it says that construction will be delayed until such time as there has been a marked deescalation in the Vietnam conflict. I hope this delay doesn't end up costing us a lot more money. I hope we can phase into this project in the same way as the Bicentennial by trying to take it in steps and save money in the process.

ARMED FORCES HISTORICAL PARK

The general plan of the Institution is for programs that are subject to very little expansion at this time. One concern is how sensibly to handle the proposals which have been on the books and authorized by the Congress since the 1950's. One example is the Armed Forces Historical Park, or whatever appropriate title one wishes to give it. At the present moment we would like to call it Bicentennial Park. We are concerned about how we should approach planning for an authorized project of this sort.

NATIONAL MUSEUM OF MAN

We would like to continue a forum discussion with Members of the Congress and members of the public at large who are interested in the problem of ethnic subcultures and minorities, and see whether we should not continue to develop plans for this existing Center for the Study of Man and evolve a National Museum of Man. We presently, as you know, have a Museum of Man as a component of our Natural History building. I would like to dignify this after appropriate discussion and development of public awareness with the concept of perhaps an exhibit building celebrating the roots and the history of the ethnic subcultures of this country. I think this would have a very marked effect on the education of young people.

SEMINAR AND PUBLIC DISCUSSION SERIES

We plan to continue our seminar series and our public discussion series. For these we raise private funds. They have been very successful. Last year's was on the behavior of higher primates. We called it "Man and Beast", and it was a very interesting symposium, participated in to some extent by the Congress. We had an open session and seminar up here on the Hill, and a number of Members of the Congress came and were greatly interested in the discussion.

As you know, there has been much popular literature on the subject, recently the books of Konrad Lorenz, Robert Ardrey, and Desmond Morris and so on, on the curious phenomenon of the discoveries of behavior patterns of the higher primates, and at least a suggestive resemblance to some human behavior.

PLANNED SEMINAR ON CULTURAL STYLES AND SOCIAL IDENTITY

We plan this coming year to have a similar seminar on the subject of social identity and disorders and confusion at the present time. I anticipate by the spring we will have the funds and the exhibit plans in hand to put on a pioneering exhibition for youth on the historical roots and the rationale of hallucinogens and narcotics. We feel that this is such a pressing and urgent subject, which should be understood culturally and as a problem of social identity. We as the premier department of museum-related anthropology probably in the world are amply equipped to handle an exhibit of this kind. It could travel around the United States and could have what I would hope it would have, a sense of relating the whole history of the subject is such a way that people would lose the sort of fever of excitement and novelty. If the young could only understand that there is nothing new about mescaline, marijuana, heroin, hashish, opium, or whatever, and that these are parts of the cultural roots of all peoples, then much of the novelty, like the theories of prohibition, much of the novelty would instantly vanish, and they would realize that they are not participating in an exciting underground phenomenon, but that they are merely part of a temporary and ephemeral vogue.

(Discussion off the record.)

Dr. RIPLEY. We think that this is the kind of service that the Institution can do effectively, where we have our own resources in terms of anthropology, where we have publications on peyote. We have information on the use of peyote and mescaline, going back to the 1890's in the Smithsonian anthropology publication series. I think it is high time that the Institution got involved with this kind of relevant exhibition as part of our seminar series.

SMITHSONIAN ASSISTANCE TO MUSEUMS

I think the next 10 years, Madam Chairman, are going to provide a great threat to the survival of museums, because the demands for the kinds of educational exhibits that we can provide are going to become so extreme that our own budgets may fail to support these demands, and we may not——

Mrs. HANSEN. This is why this committee hoped that the States could participate in the this type of program. I might make a suggestion that you contact the Governor's group.

Dr. RIPLEY. The Governor's Conference?

Mrs. HANSEN. You might contact the Governor's conference, the Legislative Branch conference, and the Council of State Governments.

Dr. RIPLEY. I am delighted to have you mention that, because I hadn't been able to think of a ready access to them, except through the Federal Council on the Arts and the Humanities.

Mrs. HANSEN. If the Council of State Governments could begin discussions and indicate their willingness to participate, I am sure Federal matching funds would be appropriated. There is going to be, as you mentioned, a continuing need, and I think discussions must start to evaluate the needs and to develop a plan of State participation.

Dr. RIPLEY. I think it is vitally important for the museum field, because the methodology of teaching is going to change radically I am sure within the next 10 years. One of the fingers is going to come and point squarely at the museums to provide the answers for some of the new concepts. These concepts are already being discussed by sociologists. They are already being planned and programed by planners. We have no funds necessarily to meet this challenge.

YOUTH IN MUSEUM EDUCATION

Mrs. HANSEN. There is a great number of young people trained in the humanities who are interested in museum technology. Yet because of the lack of planning and lack of funding nothing is being done to capture this group who are oriented, probably as no other group has been, to the significant challenges of today. In 10 years you might not have a group of young people who are as interested in the arts as they are today.

Dr. RIPLEY. We have had individual approaches. A particular State, for example, has asked us to install a museum for them in their State, and offered to pay all the expense. We have had to turn this down because we felt that if we started doing this for one State, we might end up actually working our entire time outside of Washington.

Mrs. HANSEN. But if you had the States participating financially in this type of program more could be accomplished.

Dr. RIPLEY. I am going to see this particular Governor at the end of next week, and I will propose to him that perhaps he can help me bring this up at the Governors' Conference, too.

COUNCIL OF STATE GOVERNMENTS

Mrs. HANSEN. You must sit down and discuss these problems with the Council of State Governments. They are a very forward looking group and a very progressive and thoughtful group, especially in the 13 Western States.

Dr. RIPLEY. I am very grateful for that suggestion, because we do feel this is one of our highest priorities. I think that concludes my statement.

BASIC ACTIVITIES

Mrs. HANSEN. Is it your feeling that your more extensive activities during the past 10 years have in any way resulted in what is popularly thought of as your "basic fundamental activities" being neglected?

Dr. RIPLEY. No, Madam Chairman. I do not think so. I think it is true that the opening of the new National Museum of History and Technology has brought a fresh approach to the world at large of the Smithsonian's image and picture. The opening of these two art galleries, the National Collection of Fine Arts and the National Portrait Gallery, has in effect brought a fresh image of the Smithsonian to the world at large, but I don't think basically that we are departing from any more of our mandate, as it were because the very presence of these physical entities has allowed us to utilize the objects in the collections so much more effectively that I am constantly being challenged at somehow having brought a new broom to the Smithsonian and so on. All we have been doing is taking advantage of these wonderful buildings, and exposing our wares to the public and creating, of course, more understanding.

Mrs. HANSEN. Aren't the museums of today not just a walk-through experience but a part of explaining a way of life?

Dr. RIPLEY. Yes, I think that is absolutely right.

EFFECT OF NEW TAX LAWS ON PRIVATE CONTRIBUTIONS TO MUSEUMS

Mrs. HANSEN. To what extent have private contributions to museums been affected by recent changes in the tax laws and the spiral of inflation we have been experiencing?

Dr. RIPLEY. It is too early, I think, to hazard a guess, but we have noticed a general diminution or pause, pause, I think, is a good word, in private contributions. Since the enactment of the tax laws, the tax bill of last year, the foundations, for example, have been continually reexamining their programs and their fiscal situation, in anticipation of having to pay various sorts of taxes, and in the process have just held off giving funds in general. This has been a very noticeable effect. In the same way private donors are now concerned about whether they should set up foundations, or whether they should give the money outright to some charitable institution, and they as a result are in a pause situation, and are not doing anything.

VISITORS TO THE SMITHSONIAN

Mrs. HANSEN. Please insert in the record a tabulation of Smithsonian Institution visitation for the last 10 years.

Dr. RIPLEY. We will do so.

(The information follows:)

Smithsonian visitor attendance, fiscal years 1960–70

1960	6,494,630	1966	12,150,854
1961	7,103,474	1967	13,312,586
1962	8,923,131	1968	11,523,897
1963	10,309,836	1969	10,430,730
1964	10,813,195	1970 (estimated)	13,665,000
1965	13,153,713		

An additional approximate 3 million visitors come to the National Zoological Park and 40,000 to the Anacostia Neighborhood Museum.

GIFTS DURING PAST YEAR

Dr. RIPLEY. Would you be interested, in connection with your previous question, Madam Chairman, for us to detail any of the private gifts that we have received during the past year?

Mrs. HANSEN. Please do. Many people are unaware of the extent of private contributions to the National Gallery of Art and to the Smithsonian Institution.

(The information follows:)

SIGNIFICANT CONTRIBUTIONS DURING PAST YEAR

OUTSTANDING ACQUISITIONS

National Museum of Natural History

Sword of Col. Benjamin Talmidge of the Continental Army (gift valued at $10,000).

Specialized collection of American Colonial and Continental currency notes as well as original 18th century packages of Rhode Island notes banded by the State Treasurer's Office (gift valued at $10,000).

Specialized collection of Russian gold and platinum coins and medals donated by Mr. Willis H. DuPont (valued at about $1.5 million).

One Boyd City Express Post mail box of about 1844 representing one of the earliest objects extant relating to the collection of U.S. mail; predating European letter boxes by about 10 years (gift).

Pullman negatives, a collection of 13,000 glass and film negatives which records in exceptional detail the products (1885c–1930c) of America's largest railroad car builder (gift valued at $20,000).

National Portrait Gallery

Portrait of Gen. Horatio Gates—oil on canvas by James Peale after Charles Willson Peale (gift of $12,000).

Portrait of Andrew Jackson—water color by James Barton Longacre (gift valued at $3,500).

National Air and Space Museum

X–15 rocket powered aircraft (on indefinite loan from the Air Force).

Archival collection of 180,000 negatives (gift of the Curtiss-Wright Corp.).

Apollo 8 space craft (Borman flight) (transfer from NASA).

Apollo 11 material.

National Museum of Natural History

Archeological material from South Dakota—this is a collection of 12,000–13,000 objects dating back to 1200–1400 A.D., before the advent of the white man in North America. Collected by the River Basin Surveys.

Coelacanth specimen (a living fossil)—gift of Dr. H. N. Schnitzlein, University of Alabama Medical Center.

Mammal specimens from Venezuela and Africa—these 26,000 specimens were acquired through field research of the Smithsonian Venezuelan project and the African Mammal project. They represent an approximate 5 percent addition to the Museum's mammal holdings and include new species.

National collection of fine arts

"Grey Sun"—Arni marble sculpture by Isami Noguchi (gift of the artist. valued at $40,000).

"24 Lines"—Stainless steel sculpture by George Rickey (gift valued at $30,000).

FINANCIAL GIFTS AND BEQUESTS

Major contributions included the $685,000 of funds received from Cooper Union and the Committee to Save Cooper Union Museum in connection with the Smithsonian assumption of responsibility for that museum; $150,000 from the

Scaife Family of Pittsburgh and $75,000 from the Old Dominion Foundation for the Chesapeake Bay Center land acquisition project; Ford Foundation grants of $208,500 and $45,000, respectively, for "Reading is Fun-damental" and the new Woodrow Wilson International Center for Scholars; $230,000 from the Morris and Gwendolyn Cafritz Foundation for the new Calder setting on the Mall; and a bequest of $235,000 and a valuable collection of hemiptera-heteroptera from the Carl Drake estate.

Mrs. HANSEN. People are prone to forget the investments made in the form of gifts that are part of our Nation's legacy. Isn't this correct?

Dr. RIPLEY. This is absolutely correct.

NECESSARY CHANGES TO MAKE THE SMITHSONIAN MORE RESPONSIVE TO PUBLIC NEEDS

Mrs. HANSEN. If it were not for various restrictions which exist, including the availability of funds, what major changes would you make in the operation of the Smithsonian Institution to make it more responsive to the intellectual needs of our people?

Mr. REIFEL. Madam Chairman, before he responds to that question, did I understand that you are going to insert those contributions in the record?

Dr. RIPLEY. And the visitation.

Mr. REIFEL. Are you going to have those inserted in the record?

Dr. RIPLEY. We will insert these in the record and the visitation will be in the record. We have these figures.

(Discussion off the record.)

IMPROVEMENT OF EXHIBITS AS EDUCATIONAL TOOLS

Dr. RIPLEY. The essential problem of administering an institution which has museums as its most visible component revolves around the difficulty of bringing into play the research done by the staffs and the exhibits which are to a large extent an outgrowth of that research. We feel that as far as the public image is concerned of the Institution, our principal marketable product is our exhibits. These are extremely difficult to keep up to date and to change without ample funding. We are continually plagued by lack of sufficient funds to change the exhibits to incorporate new research and new educational techniques. We would like to make our exhibits twice as exciting as they are at the present, and therefore twice as effective as educational tools, and fiscal restraint is really the principal difficulty here, but another difficulty is the hiatus between public understanding of what museums do and the ability of educators to realize the importance of what they can do, and to particiapte.

We are also having to act as missionaries with the educational establishment, to persuade them to give us the tools effectively to improve and up-date our exhibits at all times.

RESEARCH AND COLLECTION OF INFORMATION

In terms of the scholarly world, one of our greatest needs at the present is the automatic data processing of information. We know from our connections with the people who are working on the environ-

ment and ecology that if we have sufficient resources in funds to really make our program in automatic data processing go ahead fast, we would be able to answer a good number of the questions which people concerned with environmental problems are floundering about trying to ask. It is merely a question of mobilizing the information in correct procedures and programs, and then asking the question of the machines and getting it out.

I have cited before to this committee the contrast between World War II days and the difficulty of finding out where certain marine organisms are concerned, and today when it is possible, with automatic data processing, to produce answers in minutes instead of months.

SCIENCE INFORMATION EXCHANGE

We have a part of the Smithsonian known as the Science Information Exchange, which specializes in biology, medicine and agriculture. This has been an attempt by us, over the past 20 years, to get data reports, reports of on-going research in these particularly vital fields today, and keep them in a data bank, and then make available at any moment to Government agencies, the Executive, or the Congress, whenever they want them, summaries of these reports of on-going research.

We are terribly badly underfunded. Originally the agencies agreed to pay for all expenses of running this service. Then they handed the service to the National Science Foundation and said, "You fund it," and the National Science Foundation, with budget cuts, began, of course, cutting off peripheral activities which were not administered by it. Naturally we are severely understaffed and funded today. We have lost over 40 people, and it is a serious problem, because once you have a data bank, and once you have had it for 20 years, the main thing is that that exists, and you have it, and if you want to throw it away, it is just like taking a match to the Library of Congress and burning it up.

It seems to me a tragic loss to the future of environmental studies and those who are working on it, if this service is to be dropped. I am deeply concerned about this as a priority item for the kind of things which the Smithsonian administers.

FORMULATION OF SMITHSONIAN POLICIES

Mrs. Hansen. To what extent do the various museum directors and bureau heads in your organization have a positive voice in formulating the general policies of the Smithsonian Institution.

Dr. Ripley. To a very major extent. We have weekly or monthly meetings with the bureau heads. They have complete responsibility for their own administrative policies in their museums. They, of course, participate at all levels in the budgeting. Our purpose is to give them as much administrative flexibility as we can, trying to centralize some services to make them more flexible fiscally.

GOVERNING OF SMITHSONIAN PROGRAMS

Mrs. HANSEN. Please describe for the committee the extent to which administration of Smithsonian programs are governed by the Board of Regents.

Mr. BRADLEY. Madam Chairman, I should say that the Board of Regents is a very effective control and policy board that does review all principal actions. On two occasions and sometimes on three occasions each year there are meetings of the Board of Regents, each preceded by a week or two by the Executive Committee, when that committee goes into matters somewhat more deeply.

Mrs. HANSEN. Insert in the record the members of the executive committee and the Board of Regents.

(The information follows:)

BOARD OF REGENTS OF THE SMITHSONIAN INSTITUTION

Hon. Warren E. Burger, Chief Justice of the United States, Chancellor of the Smithsonian Institution.
Vice President Spiro T. Agnew, Regent of the Smithsonian Institution.
Hon. Clinton P. Anderson, U.S. Senate, Congressional Regent.
Hon. J. W. Fulbright, U.S. Senate, Congressional Regent.
Hon. Hugh Scott, U.S. Senate, Congressional Regent.
Hon. Frank T. Bow, U.S. House of Representatives, Congressional Regent.
Hon. Michael J. Kirwan, U.S. House of Representatives, Congressional Regent.
Hon. George H. Mahon, U.S. House of Representatives, Congressional Regent.
Mr. John Nicholas Brown, Citizen Regent from Rhode Island.
Mr. William A. M. Burden, Citizen Regent from New York.
Mr. Crawford H. Greenewalt, Citizen Regent from Delaware.
Mr. Caryl P. Haskins, Citizen Regent from the District of Columbia.
Vacancy, Citizen Regent from the District of Columbia.
Mr. Thomas J. Watson, Jr., Citizen Regent from Connecticut.

EXECUTIVE COMMITTEE (PERMANENT COMMITTEE) OF THE BOARD OF REGENTS

Hon. Warren E. Burger, Chancellor.
Mr. Caryl P. Haskins, Chairman (ad interim).
Hon. Clinton P. Anderson.
S. Dillon Ripley, Secretary.

Mr. BRADLEY. I should say that a quick answer, and I am sure you need a quick answer, is that they are very effective, since we put before the Board of Regents all principal actions, policy actions, appointments, finances, position on legislation, policy changes and so forth, new programs, everything is laid before the Board.

OFFICIAL REVIEWS

Mrs. HANSEN. How often are your activities reviewed by the General Accounting Office or other official investigative staffs?

Mr. BRADLEY. We have most recently, Madam Chairman, had a general review of financial practices during this very past year, and we are in the process now of reviewing and commenting on their draft report, which has not yet been accepted by the Comptroller General. It is in the process of being discussed between the staff there and the staff here. Before that there was only a payroll check about 6 years earlier.

Dr. RIPLEY. Our private funds, of course, are completely audited every year by outside auditors.

Mrs. HANSEN. Is the outside auditors' report on file with your Board of Regents?

Dr. RIPLEY. Yes, and appears in our annual report and the reports are on file.

Mrs. HANSEN. What firm audits your private funds?

Mr. BRADLEY. Peat, Marwick & Mitchell, and Co.

GENERAL COUNSEL'S OFFICE

Mrs. HANSEN. How many lawyers on the General Counsel's staff?

Mr. BRADLEY. Madam Chairman, including himself, five.

Mrs. HANSEN. I would like to pay tribute to one of your staff who assisted the Committee last year in a rather intricate discussion. I have never had an attorney, who understood the time in which we are living more than that gentleman. I thought it was an extremely beneficial afternoon. He participated with the counsel from Interior and the solicitor from Agriculture. It was a very interesting discussion, because the three counsels represented three different types of program administration, and the breadth of knowledge of your attorney was exceptionally good.

Mr. BRADLEY. Madam Chairman, that was Peter Powers.

Mrs. HANSEN. He was excellent. I wish you would tell him that we deeply appreciated his experience, expertise, and understanding.

Dr. RIPLEY. We certainly will.

Mrs. HANSEN. What would be your evaluation of their competence to interpret existing laws and Federal regulations?

Mr. BRADLEY. I think that the staff that we now have is quite competent. I think that they come to us because here they find variety. Here they find, to use the famous word today "challenge", but here they find in a small agency that they can't become a specialist on a particular facet of the law, and so they get this diversification which demands versatility on their part, and this in turn provides interest, and so we are an attractive target for bright young attorneys.

Mrs. HANSEN. This is what we found from our experience last year.

Dr. RIPLEY. We are unhappy to report we lost two of our staff to Congressional committees in the past year. And both of them are in the environmental field, which is very interesting.

Mrs. HANSEN. Would you say they are given an active role in making certain that all activities of the Smithsonian Institution are administered within the limitations of existing law and Federal regulations?

Dr. RIPLEY. Complete. I think there is no question.

Mr. BRADLEY. Increasingly so, Madam Chairman.

ASSOCIATION WITH OTHER MUSEUMS

Mrs. HANSEN. Please relate for the committee your association with other museums of the country with regard to existing arrangements for exchange of knowledge and your cooperative work in solving present day problems of museum administration.

Dr. RIPLEY. This consists essentially, Madam Chairman, of two functions. One is the representative activities that we take part in with two museum associations. One is the American Association of Museums, and the other is the International Council of Museums, on which I sit at present, and I have formerly sat on the other board. Our general counsel, Mr. Peter Powers, and our director of museums, Mr. Frank Taylor, participate in all conferences and meetings of these groups that they can possibly attend, which is virtually all.

We take a position of offering services and facilities to the museum field in general, which includes, of course, these hundreds of applications for service advice a year. In addition, we have from time to time collaborated with groups, such as the American Association of Museums, in official museum representation with the Government. For example, discussions leading to the Belmont Report that I mentioned this morning. In my capacity, sitting on the Federal Council on the Arts and the Humanities, I then am able to help represent museum interests on that Council, and to plead for special recognition, as I can, along with, I may say, Carter Brown, who has now replaced John Walker and is also on the Federal Council.

In the foreign field, in the international field, we have a major role to play through the use of excess foreign currencies. In our special foreign currency program we have developed several hundred projects in the last 4 years using this opportunity to bring American museums and museum institutions, museum-like institutions into touch with foreign counterparts, in common efforts in archeology, museum practices, biology, and the like. This has been, of course, one of the most fruitful things that we could have done for the museum field in this country, giving them an option, an opening to foreign countries and foreign activities.

(Discussion off the record.)

SALARIES AND EXPENSES

Mrs. HANSEN. Please insert pages 1 through 63 of the justifications in the record.

(The pages follow:)

SMITHSONIAN INSTITUTION

"Salaries and Expenses"

Summary Statement

Appropriation Act, Fiscal Year 1970	$28,134,000
Anticipated Supplemental	+1,431,000
Total Available, Fiscal Year 1970	29,565,000
Non-recurring	-100,000
Fiscal Year 1971 Base	29,465,000
Budget Estimate, Fiscal Year 1971	36,367,000
Increase, Fiscal Year 1971	$6,902,000

Summary of Increases Fiscal Year 1971

Page		Amount
B-7	Necessary Pay-- for annualization of General Schedule and Wage pay raises and periodic step increases	$531,000
B-9	Office of the Director General of Museums-- to design and develop new educational exhibits and to provide training under the National Museum Act	75,000
B-11	National Museum of Natural History-- to apply computer systems to important botanical, vertebrate, invertebrate, and fossil collections, and to undertake special anthropological, geological, and marine invertebrate research projects	200,000
B-15	National Air and Space Museum-- for preservation and display of historic space objects in keeping with strong public interest sparked by the moon flights	50,000
B-17	National Zoological Park-- for the operation of the new Hospital-Research Building and other spaces, grounds care, animal purchases and food, and animal health programs	2,994,000
B-24	Anacostia Neighborhood Museum-- for continued successful operations of a community museum with special emphasis on workshop, craft, and instructional activities for children	75,000
B-25	Renwick Gallery of Art-- to prepare this restored and renovated museum of arts, crafts, and design for a planned public opening in fiscal year 1971	100,000

B-26	Joseph H. Hirshhorn Museum and Sculpture Garden-- to prepare the gift collections of art and sculpture for the opening of a major art gallery under construction on the Mall	375,000
B-28	Smithsonian Tropical Research Institute-- for an environmental monitoring program on Barro Colorado Island, building on 40-years of project research, and for comparative marine ecological studies	100,000
B-30	Radiation Biology Laboratory-- to operate, staff, and equip the new laboratory building in order to realize the research potential permitted by the authorized new space	200,000
B-32	Smithsonian Office of Ecology-- for baseline biological studies and property protection at the Chesapeake Bay Center for Environmental Studies--a geographic area of unusual economic importance	$55,000
B-34	Office of Oceanography and Limnology-- to sort, identify, and distribute backlogged marine biological and geological collections being requested by researchers for the study of marine resources	150,000
B-36	Center for the Study of Man-- to begin actual work on the revision of the Handbook of North American Indians (the standard reference in this field) and to fund grants for urgent anthropology studies.....	50,000
B-37	Center for Short-Lived Phenomena-- for the maintenance of a rapidly developing and responsive worldwide reporting system on biological, geophysical, and astrophysical events as they are occurring	25,000
B-39	American Revolution Bicentennial Program-- for scholarship, exhibitions and other presentations, and national cooperative assistance to other museums	400,000
B-44	Environmental Sciences Program-- to build on traditional Smithsonian competence in the sciences and the humanities for environmental assessment, prediction, and education.....	600,000
B-49	Academic Programs-- to serve college, university, and Smithsonian needs by providing additional opportunities for research and advanced study and to improve the elementary and secondary school tour program	75,000
B-51	Office of the Treasurer-- for strengthened financial management and postage and Workmen's Compensation requirements.....	60,000

B-52	Division of Performing Arts-- for production requirements of the American Folklife and College Theatre Festivals and assistance to state and local cultural groups	50,000
B-53	Office of Personnel and Management Resources-- to meet an increased personnel assistance workload created by new Smithsonian programs and additional Civil Service Commission requirements.....	50,000
B-54	Health Units-- to establish a health unit in the Arts and Industries Building to serve emergency needs of visitors and staff	10,000
B-55	Information Systems Division-- to improve the reference and research value of Smithsonian collections in art, history, and science by applying modern information storage and retrieval techniques.....	$100,000
B-56	Smithsonian Institution Libraries-- to correct serious deficiencies in its ability to serve the Institution and outside users by increasing book and journal purchases, binding and preservation, reference services, and the protection of gift and rare books.....	150,000
B-58	Photographic Services Division-- for exhibit and publication photographic services	25,000
B-59	Smithsonian Institution Press-- for the preparation of exhibition and collection catalogs and research reports.....	75,000
B-60	Buildings Management Department-- to meet the costs of operating, maintaining, and protecting the Renwick Gallery scheduled to open and to fund the higher costs of utilities, communications, and the repair and preventative maintenance of security and fire detection systems and elevators and escalators	327,000
	Total Increase.....	$6,902,000
	Nonrecurring	-100,000
	Net Increase, Fiscal Year 1971.....	$6,802,000

SMITHSONIAN INSTITUTION
"Salaries and Expenses"

Summary of the 1969 Appropriation and 1970 and 1971 Estimates

Page No.	Unit	1969 Actual Pos.	1969 Actual Amount	1970 Estimate Pos.	1970 Estimate Amount	1971 Estimate Pos.	1971 Estimate Amount	Analysis of Increases: Pay Increases 1/	Program Pos.	Program Amount
	1. Museums of Science and History (including research)									
B-9	Office of Director General of Museums...	5	$208,000	7	$240,000	10	$317,000	$2,000	3	$75,000
	Office of Exhibits	167	2,173,000	167	2,337,000	167	2,362,000	25,000	0	0
	Conservation Analytical Laboratory	10	116,000	11	151,000	11	154,000	3,000	0	0
	Office of the Registrar	28	271,000	29	302,000	29	305,000	3,000	0	0
	National Museum of History and Technology	154	1,869,000	155	2,056,000	155	2,085,000	29,000	0	0
B-11	National Museum of Natural History	258	3,456,000	258	3,674,000	268	3,930,000	56,000	10	200,000
B-15	National Air and Space Museum	41	505,000	41	570,000	45	625,000	5,000	4	50,000
B-17	National Zoological Park	0	0	0	0	252	3,125,000	131,000	252	2,994,000
	National Armed Forces Museum Adv. Bd.	7	129,000	7	148,000	7	151,000	3,000	0	0
B-24	Anacostia Neighborhood Museum	4	42,000	8	82,000	12	159,000	2,000	4	75,000
	Total, Museums of Science & History	674	8,769,000	683	9,560,000	956	13,213,000	259,000	273	3,394,000
	2. Art Galleries									
	Freer Gallery of Art	7	37,000	7	54,000	7	56,000	2,000	0	0
B-25	National Collection of Fine Arts	56	951,000	56	1,043,000	60	1,155,000	12,000	4	100,000
	National Portrait Gallery	27	568,000	27	818,000	27	824,000	6,000	0	0
B-26	Joseph H. Hirshhorn Museum and Sculpture Garden	7	149,000	13	347,000	20	726,000	4,000	7	375,000
	Total, Art Galleries	97	1,705,000	103	2,262,000	114	2,761,000	24,000	11	475,000
	3. Research Activities (other than museums)									
	Smithsonian Astrophysical Observatory	54	1,898,000	57	2,060,000	57	2,074,000	14,000	0	0
B-28	Smithsonian Tropical Research Institute	23	409,000	38	460,000	43	571,000	11,000	5	100,000
B-30	Radiation Biology Laboratory	32	399,000	36	789,000	40	998,000	9,000	4	200,000
B-32	Office of Ecology	5	110,000	5	133,000	8	190,000	2,000	3	55,000
B-34	Office of Oceanography and Limnology	18	310,000	18	336,000	26	496,000	10,000	8	150,000
B-36	Center for the Study of Man	1	82,000	2	113,000	5	164,000	1,000	3	50,000
B-37	Center for Short-Lived Phenomena	0	0	0	10,000	1	35,000	0	1	25,000
	Smithsonian Research Awards	0	400,000	0	400,000	0	400,000	0	0	0
	Total, Research Activities	133	3,608,000	156	4,301,000	180	4,928,000	47,000	24	580,000
	4. Special Programs									
B-39	American Revolution Bicentennial	0	0	0	0	5	400,000	0	5	400,000
B-44	Environmental Sciences Program	0	0	0	0	14	600,000	0	14	600,000
	Total, Special Programs	0	0	0	0	19	1,000,000	0	19	1,000,000

Page No.	Unit	1969 Actual Pos.	1969 Actual Amount	1970 Estimate Pos.	1970 Estimate Amount	1971 Estimate Pos.	1971 Estimate Amount	Analysis of Increases: Pay Increases 1/	Program Pos.	Program Amount
	5. Other Activities									
B-49	Academic Programs	17	$544,000	18	$535,000	20	$615,000	$5,000	2	$75,000
	Office of International Activities	6	104,000	6	112,000	6	114,000	2,000	0	0
	International Exchange Service	9	114,000	9	120,000	9	124,000	4,000	0	0
	Woodrow Wilson International Center	0	0	2	100,000	0	0	0	-2	-100,000
	Office of the Secretary	26	475,000	29	452,000	29	460,000	8,000	0	0
	Management Support	33	441,000	33	397,000	33	406,000	9,000	0	0
B-51	Office of the Treasurer	31	558,000	31	542,000	33	607,000	5,000	2	60,000
	Division of Performing Arts	7	204,000	7	168,000	9	221,000	3,000	2	50,000
B-53	Office of Personnel & Management Support	16	259,000	16	293,000	19	347,000	4,000	3	50,000
B-54	Health Units	2	48,000	2	50,000	3	61,000	1,000	1	10,000
	Office of Public Affairs	12	232,000	12	237,000	12	239,000	2,000	0	0
	Supply Division	20	276,000	20	327,000	20	331,000	4,000	0	0
B-55	Information Systems Division	8	171,000	10	163,000	14	267,000	4,000	4	100,000
B-56	Smithsonian Institution Libraries	44	586,000	44	629,000	52	793,000	14,000	8	150,000
B-58	Photographic Services Division	18	218,000	18	237,000	20	265,000	3,000	2	25,000
B-59	Smithsonian Institution Press	20	577,000	21	658,000	23	740,000	7,000	2	75,000
	Total, Other Activities	269	4,807,000	278	5,020,000	302	5,590,000	75,000	24	495,000
B-60	6. Buildings Management Department									
	History and Technology	254	2,290,000	254	2,512,000	254	2,594,000	38,000	0	44,000
	Natural History	242	2,380,000	242	2,590,000	242	2,661,000	36,000	0	35,000
	Fine Arts and Portrait Galleries	88	660,000	114	890,000	114	944,000	16,000	0	38,000
	Smithsonian Institution	59	496,000	59	546,000	59	571,000	9,000	0	16,000
	Arts and Industries	92	680,000	92	773,000	92	794,000	13,000	0	8,000
	Renwick Gallery of Art	7	42,000	7	73,000	27	254,000	1,000	20	180,000
	All Other Buildings	85	883,000	89	948,000	89	967,000	13,000	0	6,000
	Rehabilitation Projects	0	20,000	0	90,000	0	90,000	0	0	0
	Total, Buildings Management	827	7,451,000	857	8,422,000	877	8,875,000	126,000	20	327,000
	Grand Total, "Salaries and Expenses"	2,000	$26,340,000	2,077	$29,565,000	2,448	$36,367,000	$531,000	371	$6,271,000

SMITHSONIAN INSTITUTION
SALARIES AND EXPENSES, FISCAL YEAR 1971

JUSTIFICATIONS

1/ Pay Increases

Need for Increase--An increase of $531,000 is required to finance existing positions. This total is made up of funds for personnel compensation ($494,000) and personnel benefits ($37,000). An amount of $400,000 of this request is for the existing staff of the Smithsonian Institution currently being financed from the appropriation "Salaries and Expenses." The other $131,000 is for similar types of pay requirements for the employees of the National Zoological Park. The National Zoological Park employees have been financed from funds advanced from the District of Columbia, but in fiscal year 1971 it is proposed to transfer the financing directly to the Smithsonian.

The requested increase is made up of the following components:

(1) Annualization of the pay raise granted to current General Schedule employees on July 13, 1969..... $53,000

(2) Annualization of the Wage Grade increases granted in October 1969 and to local rate employees in the Canal Zone $172,000

(3) Periodic step-increases in accordance with the Government Employees Salary Reform Act of 1964 and step-increases granted to Wage Grade employees in accord with prevailing Government-wide practices will cost an additional $255,000. This includes the portion of the fiscal year 1971 step-increases to be paid in that year and the carryover cost from fiscal year 1970. The apparent cost was determined through a position-by-position study and has been reduced to real cost by projected offsets resulting from employees being separated or promoted before receiving step-inc increases and from filling some positions at a lower grade step than the former incumbents held..... $255,000

(4) To finance the pay raise granted to the police force at the National Zoological Park by Public Law 91-34, approved June 30, 1969..... $40,000

(5) To finance positions at the National Zoological Park that were funded for only part of the year during fiscal year 1970..... $11,000

A thorough examination of Smithsonian operations has been made to determine and apply the maximum possible degree of absorption in all areas of increased pay. Absorption of an additional amount in fiscal year 1971 is impossible in the face of present workloads and nondeferrable expenses. Over three years, the Smithsonian has absorbed approximately $400,000 of the several General Schedule and Wage pay increases. In fiscal year 1970, 78 percent of the total operating appropriations are devoted to the largely nondiscretionary costs of payroll, benefits, rent, communications, and utilities. Additional funds for pay purposes in fiscal year 1971 could be found only by forced cuts in employment or by diverting a large portion of the remaining operating funds appropriated to the Smithsonian to rectify material and equipment shortages in its museums, galleries, and laboratories.

SMITHSONIAN INSTITUTION

"Salaries and Expenses"

Necessary Pay Increases Fiscal Year 1971

Organizational Unit	Annualization GS Pay Raise	Annualization Wage Raise	Within-Grade Increases	Other	Total
United States National Museum:					
Office of the Director General of Museums	0	0	$2,000		$2,000
Office of Exhibits	$3,000	$2,000	20,000		25,000
Conservation Analytical Laboratory	0	0	3,000		3,000
Office of the Registrar	0	0	3,000		3,000
National Museum of History and Technology	3,000	0	26,000		29,000
National Museum of Natural History	8,000	0	48,000		56,000
National Air and Space Museum	1,000	1,000	3,000		5,000
National Armed Forces Museum Advisory Board	0	0	3,000		3,000
Anacostia Neighborhood Museum	0	0	2,000		2,000
Freer Gallery of Art	0	0	2,000		2,000
National Collection of Fine Arts	1,000	0	11,000		12,000
National Portrait Gallery	1,000	0	5,000		6,000
Joseph H. Hirshhorn Museum and Sculpture Garden	1,000	0	3,000		4,000
Smithsonian Astrophysical Observatory	3,000	0	11,000		14,000
Smithsonian Tropical Research Institute	2,000	6,000	3,000		11,000
Radiation Biology Laboratory	1,000	0	8,000		9,000
Office of Ecology	0	0	2,000		2,000
Office of Oceanography and Limnology	1,000	0	9,000		10,000
Center for the Study of Man	0	0	1,000		1,000
Academic Programs	0	0	5,000		5,000
Office of International Activities	0	0	2,000		2,000
International Exchange Service	0	2,000	2,000		4,000
Office of the Secretary	1,000	0	7,000		8,000
Management Support	1,000	0	8,000		9,000
Office of the Treasurer	1,000	0	4,000		5,000
Division of Performing Arts	0	0	3,000		3,000
Supply Division	1,000	0	3,000		4,000
Office of Personnel	1,000	0	3,000		4,000
Health Units	0	0	1,000		1,000
Office of Public Affairs	0	0	2,000		2,000
Information Systems Division	1,000	0	3,000		4,000
Smithsonian Institution Libraries	1,000	0	13,000		14,000
Photographic Services Division	0	0	3,000		3,000
Smithsonian Institution Press	0	0	7,000		7,000
Buildings Management Department	6,000	120,000	0		126,000
National Zoological Park	15,000	41,000	24,000	51,000	131,000
Total	$53,000	$172,000	$255,000	$51,000	$531,000

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

OFFICE OF DIRECTOR GENERAL OF MUSEUMS

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	7	3	10
11 Personnel Compensation	$ 134,000	$ 31,000	$165,000
12 Personnel Benefits	9,000	2,000	11,000
21 Travel & Transp. of Persons	12,000	2,000	14,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	0	0	0
24 Printing and Reproduction	1,000	0	1,000
25 Other Services	73,000	27,000	100,000
26 Supplies and Materials	1,000	1,000	2,000
31 Equipment	10,000	14,000	24,000
TOTAL	$240,000	$77,000	$317,000
Analysis of Total			
Pay Increases	$5,000	$2,000	$7,000
Program	$235,000	$75,000	$310,000

Specification of Increase (Program):

Experimental Exhibits and Museum Education (2 positions, $43,000)

Museums teach people about real things and arrange objects and happenings in perspective. By this relevance, museums can and do stimulate the viewer's interest and his desire to learn more about a specific subject. The Smithsonian believes that it and other museums can do a better job of supplementing and reinforcing formal education at all academic levels, especially at the elementary and secondary levels, by developing, testing, and getting visitor reactions to new exhibit techniques. This request is for an experimental psychologist and an experimental exhibits specialist ($25,000) to plan and evaluate exhibition techniques. This staff will require funds for travel ($2,000), other services ($1,000), supplies ($1,000), and equipment ($14,000) to install test devices.

Museum Training Under the National Museum Act (1 position, $32,000)

The Smithsonian receives about 1,000 requests a year from other museums and national and international associations of museums to provide training for museum personnel in conservation, exhibition, and other museum practices. Although the Institution can provide advice and informal on-the-job training (500 persons visited the Smithsonian for these purposes over the last year or so), it cannot meet these growing requirements in an adequate way. A program assistant ($6,000) and $26,000 for cooperative training grants and museum surveys and studies are requested.

OFFICE OF DIRECTOR GENERAL OF MUSEUMS

1969 Actual $208,000
1970 Estimate $240,000
1971 Estimate $317,000

The Office of the Director General of Museums provides program planning and review of the Smithsonian Institution's museum and exhibition activities with special emphasis on developing educational exhibits, surveying the impact of the Smithsonian on the visiting public, and providing assistance to other museums. It works cooperatively with museum professionals in the United States and abroad to increase the effectiveness of museums in the performance of their scholarly and public functions.

An increase of $75,000 is requested to improve the educational effectiveness of exhibits and to increase museum training opportunities under the National Museum Act. An amount of $2,000 is sought for necessary pay purposes.

Need for Increase

1. Experimental exhibits and museum education (2 positions, $43,000)

Museums teach people about real things and arrange objects and happenings in perspective. This is why they attract the public, particularly young people. This relevance is frequently lacking in other ways our young people are taught. As an example, dates are being eliminated from the study of social science because it is assumed they have no contextual value. Eliminating perspective is also a failure of informal learning media. The scale of time is lost on television where everything is instant, and nations of men can be born, live, and die, all within an hour's time.

The use of museums to stimulate interest, to create the desire to learn, and to encourage learning by the students' own efforts outside the classroom is increasingly required to strengthen faltering education at all levels. The Smithsonian's broad sweep of museums, large attendance, and comprehensive collections provide unequalled opportunities to experiment and develop new concepts of communication and museum education. The Smithsonian hopes to produce educational exhibits which will complement current elementary and secondary instructional practices. An important aspect of this effort will be to analyze the reaction and responses of the public, particularly children, to the Institution's exhibits in a constant effort to produce more effective displays.

Actions to date have included a seminar on museum communication and techniques to involve viewers with exhibits and collect information about their reactions. The visitors' survey is continuing. A summer institute on exhibit objectives and methods has been held. The Institution has explored ways of producing exhibitions on issues and concerns of the times that will permit the viewer to make choices of priorities and solutions, to see the consequences of his decisions, and to register his likes and dislikes. Several recent temporary exhibits have tried simple experimentation techniques.

Continued efforts to implement new techniques will be of great value to the Smithsonian's museums and other museums concerned with continually improving their public education efforts. Funding is requested for an experimental psychologist and an experimental exhibit specialist to plan and develop exhibition tests and to evaluate results ($25,000). Services, supplies, and equipment, including the development and installation of test devices and the construction of exhibits, will add $18,000.

2. Museum training under the National Museum Act (1 position, $32,000)

Increased museum training opportunities under the National Museum Act for personnel from other museums and related organizations also will help to strengthen the public service capabilities of museums. About 1,000 requests a year are received from all parts of the United States and the world to provide training for museum personnel in the conservation of museum objects, in exhibition, in techniques of museum education, in administration and in the management of collections. National and international associations of museums urge surveys and studies of broad museum problems. They seek advice and require support for the purpose of setting standards of museum performance and professionalism in order to improve museum practices and to accredit museums. Training, standards, and accreditation are three of the principal needs of American museums described in the Belmont Report prepared by the American Association of Museums in response to former President Johnson's request. The Report recognizes the special capabilities of the Smithsonian Institution to aid these studies and provide training.

Within existing resources, the laboratories and offices of the Smithsonian have responded. More than 500 museum personnel have come from other institutions to spend from a day to a year seeking specialized advice and learning techniques. These visitors came from 35 states and 25 foreign countries. Smithsonian resources are not adequate, however, to meet the growing requirements for museum assistance and development. A program assistant ($6,000) and $26,000 for cooperative training grants, surveys, and studies with other museums are requested.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

NATIONAL MUSEUM OF NATURAL HISTORY

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	258	10	268
11 Personnel Compensation	$ 3,078,000	$ 120,000	$ 3,198,000
12 Personnel Benefits	231,000	9,000	240,000
21 Travel & Transp. of Persons	61,000	28,000	89,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	15,000	0	15,000
24 Printing and Reproduction	0	0	0
25 Other Services	90,000	32,000	122,000
26 Supplies and Materials	90,000	15,000	105,000
31 Equipment	109,000	52,000	161,000
TOTAL	$ 3,674,000	$ 256,000	$ 3,930,000
Analysis of Total			
Pay Increases	$266,000	$56,000	$322,000
Program	$3,408,000	$200,000	$3,608,000

Specification of Increase (Program):

Electronic Data Processing for Collections Management (8 positions, $105,000)

If this Museum is to continue to serve as a base for important research projects, it must make its collections and their accompanying data more accessible to researchers and scholars. Electronic data processing provides the only means by which this can be done. Several collections have been identified as being of particular importance--fossils, botany, invertebrates, and vertebrates. These collections are of importance because of their scientific significance as well as their use by oil geologists, forest breeders, oceanographers, and conservationists. To establish data banks for these collections will require eight museum technicians and specialists ($55,000), and funds for supplies and materials ($4,000), equipment ($27,000), and other services ($19,000).

Special Projects in Archeology, Biology, and Marine Sciences (2 positions, $95,000)

The Museum has identified several projects as being particularly important because of their scientific merit and reference to current problems. A major archeological and ecological exploration of the Seistan is important because it will contribute to our knowledge of how a society is affected by a drastic change in its environment. A study of invertebrate organisms of Panama, to be done with the assistance of the Smithsonian Tropical Research Institute, provides an opportunity to study closely related organisms inhabiting adjacent but distinctive areas. A study of sea floor spreading and deep-sea rocks will provide an insight into the earth's crustal movements. For these projects, the Museum will require a petrologist and a scientific illustrator ($18,000), and funds for travel ($28,000), supplies and materials ($11,000), equipment ($25,000), and other services ($13,000).

NATIONAL MUSEUM OF NATURAL HISTORY

1969 Actual $3,456,000
1970 Estimate $3,674,000
1971 Estimate $3,930,000

The National Museum of Natural History has been performing a comprehensive program of basic research for over 100 years. This research has been directed at obtaining a better understanding of man, plants, animals, and rocks, both recent and fossil. In pursuit of this end, in fiscal year 1969 the Museum's scientists engaged in approximately 340 research projects throughout the world and produced over 450 publications. Because the Museum directs its efforts at uncovering the basic facts, laws, and relationships that exist among plants, animals and the Earth, its work serves as a foundation for much of the applied research being carried on by others. For instance, a joint Smithsonian/National Institutes of Health program has been started to utilize the Institution's resources and collections to study the occurrence of abnormal cancer-like growths in lower animals in order to aid the search for cancer antibodies. Museum scientists have provided advice to dozens of federal agencies in subjects ranging from astronomy to pollution control; in fiscal year 1969, over 73,000 specimens from the collections were lent to scientists and researchers. In addition to their research roles, the Museum's staff develops and designs the many exhibits on public display in the Natural History building on the Mall.

In order to continue to fulfill its research responsibilities and provide assistance to the scientific community, an increase of $200,000 is requested. This increase will be used to provide improved access to information in the collections, a major archeological/ecological project, a study of marine organisms in Panama, and a study of sea floor spreading. An additional $56,000 are requested for necessary pay increases.

Need for Increase

1. Electronic Data Processing for Collections Management

If this Museum is to continue to serve as a base for important research projects, it must make its collections and their accompanying data more accessible to the community of scholars. At the present time, information relating to these specimens can only be obtained by a time-consuming search through the collections themselves as well as through logs, journal books, and other records. This search often requires the expenditure of tens or hundreds of man-hours of professional and semiprofessional effort for a single project and leads to significant increases in project costs.

Electronic data processing (EDP) techniques provide the means by which the Museum may properly handle the increasing volume of specimens and specimen-related data. A pilot study in collections management has been underway through a two-year grant (ending June 1970) from the Department of Health, Education, and Welfare, with the collaboration of the Smithsonian's Information Systems Division. This study has determined that by the application of EDP techniques considerable savings in time and effort and significant improvements in the quality of research can be achieved.

It is proposed that EDP techniques be applied to those collections that are regarded as being of unusual importance because of their use, size, and relevance to research projects being conducted within the Smithsonian and elsewhere. Four projects of particular usefulness are the following.

Data bank for the collection of fossils (3 positions, $30,000)

The collection of fossils in the Department of Paleobiology is the largest in the United States, and one of the most important in the world. This collection is used by scientists and researchers both here and abroad in studies involving the evolution of animal and plant organisms, locations, adaptation, and for comparative analysis of species of plants and animals. This information is essential, for instance, in oil exploration. No comprehensive study of fauna fossils can be made without reference to this collection, yet no catalog or card file on it is available. As a result, the scientific community cannot make full use of this material. Three museum technicians ($20,000) and $10,000 for supplies, equipment, and other services are required to establish a data bank of specimens. After the establishment of this data bank, the present staff would maintain and update the computer file as additional specimens are collected and identified.

Type register of botanical collections (1 position $20,000)

A herbarium is a botanical Bureau of Standards, for the results of any botanical research project, whether it be a breeding program, an investigation into the physiology of forest trees, or an inquiry into processes of evolution, may be worthless if the researcher does not know the species with which he is dealing. The criteria for assigning a plant to a given species ultimately involves comparison with a single specimen known as the "type" which is the "standard" for that particular species or subspecies. Since there is a type specimen, not only for every species of flowering plant but also for every variety, the total number of types is very high--approximately 60,000 in the United States National Herbarium in the Smithsonian alone. Other types are scattered throughout the herbaria of the world.

The type register of the Smithsonian's Department of Botany is the first attempt to compile a catalog of types along with their locations and other information needed by the botanist. Important botanical institutions in the United States and abroad, such as the New York and Missouri Botanical Gardens, the Royal Botanic Gardens in Kew, England, and the National Museum of Canada, are cooperating in planning for, and will participate in, this project by interchanging information with the Smithsonian. A museum technician ($9,000) and $11,000 for travel, supplies, equipment, and other services are requested in order to establish a type register of botanical collections.

Data bank for the collections of invertebrates (3 positions, $35,000)

The extensive collections maintained by the Department of Invertebrate Zoology are a potential source of an enormous amount of basic information on the distribution and ecology of the largest bulk of marine animals, the invertebrates. In their present state, these collections are essential to zoologists studying these organisms, but their utility as an environmental information resource has barely been tapped. The computer data base on crustacea, nematode worms, and cephalopod mollusks would first be broadened and then files for collecting station and ecological data relating to these collections would be developed. The completion of this project would enhance the value and use of the collection as an information resource to oceanographic investigations, including studies of food resources. Three museum technicians ($17,000) and $18,000 for supplies, equipment, and other services are requested for this project.

Data bank for higher animals and endangered species (1 position, $20,000)

The Department of Vertebrate Zoology has more than 20,000 species of birds, mammals, reptiles, amphibians, and fish in its collections. For several years, data on some specimens of both previously accessioned birds and newly acquired fish, reptiles, amphibians, birds, and mammals have been cataloged on paper tape output typewriters in a catalog format compatible with computer processing.

Data on seabirds have already been stored, as well as on some specimens of rare and endangered species. Seabirds are important because they are a discrete ecological unit of animals which range widely over vast expanses of ocean. Their distribution and habits are of use to commercial and sport fishermen in locating exploitable fish schools as well as to scientists who are attempting to understand the complex interrelationships of oceanic life. However, the distribution and abundance of most species of seabirds remains unknown because the large volume of data on identified museum specimens cannot be easily processed by hand.

It is proposed to continue the computer entry of selected bird and mammal data for research use and to investigate the feasibility of storing data from other vertebrate collections in the computer. A museum specialist ($9,000) and $11,000 for supplies, equipment, and other services are needed to extend this coverage on a worldwide basis in response to the needs for current research and for enforcement of the Rare and Endangered Species Act passed in 1969. In addition, published catalogs of vertebrates in the National Collections would be updated since they range in age from five to 27 years, and then distributed to research scientists in this country and abroad.

2. Special Projects in Archeology, Biology, and Marine Sciences

The following projects have been chosen because of their importance to the scientific community and their relevance to current problems.

The Seistan project is a major interdisciplinary program to study an area that has had drastic changes in its climate over a period of several hundred years. A study of this area hopefully will reveal the social and economic stresses that occurred in this community and the reasons the community was unable to adapt to the changing climate.

The study of invertebrate animals in Panama is an attempt to understand how natural or manmade stresses affect the composition, distribution, and relationships of various species of invertebrate animals. Such a study would be of value in the evaluation of conditions that may cause long-term changes in the environment.

The study of sea floor spreading and deep-sea rocks is basic to an understanding of the geological behavior of the earth's crust. This project is significant because crustal movements have been shown to cause uprisings of large masses of land, alterations in coastlines, and many times, violent earthquakes.

Major archeological and ecological project in Seistan ($40,000)

Seistan is the region of southwestern Afghanistan and southeastern Iran where large moving sand dunes, extensive salt flats, strong winds from 40 to 120 miles per hour, and temperatures from 130° F in summer to below 0° F in winter make the region almost uninhabitable except for the narrow valley of the Helmand River. However, from at least the 6th century B.C. until the 15th century A.D., this region of approximately 10,000 square miles was extensively populated and had been described as the "grainery of Asia." This is evidenced today by the ruins of dozens of fortified farm "communes," two cities, each nearly a mile square, and complex water distribution systems.

An intensive study of this site is of particular importance since it can reveal the basic reasons why a relatively complex and sophisticated society was unable to adapt to a change in its environment. Preliminary studies and field investigations begun in 1964 have been made to determine the feasibility of initiating a major ecological project. The nature of the ancient habitations in this region

clearly indicates the need for a broadly based study not limited simply to archeology but including extensive studies in ancient and contemporary hydrography and agriculture, together with basic research on geomorphology, climate, botany (especially archeobotany and palynology), zoology, and limnology of this region--all being closely interrelated factors in the ancient society which developed in this region and flourished until the 15th century.

This project will use the present staff of the National Museum of Natural History; however, $40,000 are requested for support in the form of travel, equipment, supplies, and other services. The research program would be conducted in cooperation with the Afghani Government, the Kabul University Research Center, the Cartographic Institute, and the Helmand Valley Authority of Afghanistan. Scientific staffs from other institutions such as Harvard University, the University of Michigan, and Washington University in St. Louis will also participate in this project.

Invertebrate animals in coastal areas of Panama (1 position, $30,000)

Little information is available on the invertebrates occurring on each side of the isthmus of Panama. This project would initiate fundamental studies on species composition, distribution, and the ecology of marine invertebrates in this area. Panama is of particular interest not only because of the possibility of vast fauna changes as a result of the construction of the proposed sea level canal, but also because it provides an opportunity to study closely related organisms inhabiting adjacent, but distinctive, habitats in tropical areas. The Gulf of Panama is an area of high productivity and upwelling, whereas the environment of the Caribbean appears to be more stable. Success of this project is dependent upon cooperation between the Museum, including its divisions of crustacea and mollusks, and the Smithsonian Tropical Research Institute.

The professional staff for this project will be drawn from the Museum. However, a scientific illustrator ($6,000) will be needed to devote full time to the project. An additional $24,000 are requested for support in the form of travel, equipment, supplies, and other services.

Sea floor spreading and the origin of deep-sea rocks (1 position, $25,000)

This project will involve the study of the origin of deep-sea rocks and the establishment of a systematic collection of such rocks. The information in such a collection would be of importance in determining, for instance, changes in coastlines and shifts in the earth's crust that cause stresses leading to earthquakes. Also, since knowledge about rocks from the deep-sea floor is relatively new, the Museum's collection of deep-sea rocks (which is already one of the largest in the world) serves as a unique resource for understanding and exploiting the seas. Models of sea floor spreading and continental drift now being developed by a number of federal and private institutions are closely tied to the availability of a comprehensive collection and to accurate identifications of deep-sea rocks. The proposed program would permit the participation by Smithsonian scientists in voyages of ocean research vessels and other ships in order to do deep-sea sampling and to conduct laboratory studies and analyses of these samples.

A petrologist ($13,000) and $12,000 for travel, equipment, supplies, and other services support are requested for this project.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

NATIONAL AIR AND SPACE MUSEUM

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	41	4	45
11 Personnel Compensation	$ 356,000	$ 37,000	$ 393,000
12 Personnel Benefits	27,000	2,000	29,000
21 Travel & Transp. of Persons	14,000	2,000	16,000
22 Transportation of Things	25,000	7,000	32,000
23 Rent, Comm. and Utilities	3,000	0	3,000
24 Printing and Reproduction	5,000	0	5,000
25 Other Services	69,000	2,000	71,000
26 Supplies and Materials	35,000	2,000	37,000
31 Equipment	36,000	3,000	39,000
TOTAL	$ 570,000	$ 55,000	$ 625,000
Analysis of Total			
Pay Increases	$40,000	$5,000	$45,000
Program	$530,000	$50,000	$580,000

Specification of Increase (Program):

Space Artifacts Program (4 positions, $50,000)

More than two million persons a year are now visiting the Smithsonian's air and space displays to see such exciting objects as Apollo spacecraft and a one-pound lunar rock. These and many other historically and technologically important objects are being transferred to the Smithsonian under the terms of a 1967 agreement with the National Aeronautics and Space Administration. The NASA provided $199,000 to start a program of preservation, exhibition, and loan of these objects. The Institution stretched these funds through fiscal year 1969, but they are now exhausted. The strong public interest and educational benefits in this program require that it continue. To do so, the Smithsonian requires a curator, a research assistant, and two support staff ($34,000) and funds for travel to inspect prospective transfers ($2,000), the shipping of objects ($7,000), and services, supplies, and equipment to handle and preserve spacecraft ($7,000).

NATIONAL AIR AND SPACE MUSEUM

1969 Actual	$505,000
1970 Estimate	$570,000
1971 Estimate	$625,000

The National Air and Space Museum is the nation's center for exhibition, education, and research in the history and principles of air and space flight. It maintains the world's greatest collection of objects related to flight and is a unique resource for research in aviation and aerospace history, in flight science and technology, in the impact of man-flight on the cultural life and economy of America, and in the pioneering efforts of early aviators and astronauts. This growing collection now consists of more than 200 technically and historically important aircraft, more than 300 engines, 1,000 air and spacecraft models, and a vast array of related equipment. Supplementing the physical specimens are extensive holdings of records resulting from air and space research, development and operations, films, art works, and memorabilia that are available to students, historians, biographers, technicians, and engineers. Drawing upon these resources, the Museum produces exhibits portraying the past, present, and future of aeronautics in America.

An increase of $50,000 is requested to continue the program of acquiring, preserving, and displaying important space objects. An additional $5,000 are requested for necessary pay increases.

Need for Increase--The National Air and Space Museum was originally established as a museum concerned with aviation alone. The Act of July 19, 1966, extended the Museum's responsibility to include space history and technology. Under the provisions of the 1967 Agreement on Space Artifacts between the Smithsonian Institution and the National Aeronautics and Space Administration, the Museum has acquired priceless objects marking the successful accomplishments of the United States' space program.

The most significant of these specimens are placed on exhibit; for example, Apollo and Surveyor spacecraft, Apollo spacesuits, Saturn rocket engines, and a one-pound lunar rock from the Apollo 11 flight. The remainder of the exhibitable specimens are loaned to other museums, and through the United States Information Agency and the Department of Commerce for exhibit in U.S.-sponsored exhibits abroad. These exhibits represent the rapidly evolving technology of space flight. With the successful lunar landings in 1969, visitor attendance tripled in the Fall of 1969 compared with 1968. More than two million persons are now visiting air and space displays annually.

In view of wide public discussion as to the extent to which the United States may be involved in future space missions--whether there will be orbiting research laboratories, recoverable space boosters, extensive lunar explorations, or a landing on Mars--the Smithsonian has a unique opportunity to educate the public by exhibits of actual space material. Such exhibits require not only the display of objects but also an interpretation of the accomplishments and the resulting benefits to all mankind.

The collection of spacecraft and related materials is continually increasing. This program cannot be continued successfully within the Federal appropriation available to the Museum. Research and documentation of these artifacts for exhibit require specialized curatorial skills not now available. Because of the need for inspection of available materials stored in many locations throughout the country, considerable travel is required. Many objects are large and heavy, and costly to ship, and they require special services, supplies, and equipment for protection.

In fiscal year 1968, the NASA funded initial operations of the space artifacts program in the amount of $199,000. This was a one-time contract for one-year budget. Funds were stretched over a second year in fiscal year 1969. These funds are no longer available. To meet the responsibilities of the NASA/Smithsonian agreement and to properly exhibit and display these artifacts to the American public, a minimum requirement of $34,000 is needed for a curator, a secretary, a research assistant, and a clerk-typist. An additional $16,000 are requested for travel, transportation of objects, supplies and materials, equipment, and other services.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

NATIONAL ZOOLOGICAL PARK

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	246	6	252
11 Personnel Compensation	$ 2,157,000	$ 164,000	$2,321,000
12 Personnel Benefits	165,000	12,000	177,000
21 Travel & Transp. of Persons	6,000	5,000	11,000
22 Transportation of Things	3,000	0	3,000
23 Rent, Comm. and Utilities	86,000	12,000	98,000
24 Printing and Reproduction	1,000	0	1,000
25 Other Services	39,000	3,000	42,000
26 Supplies and Materials	302,000	43,000	345,000
31 Equipment	55,000	72,000	127,000
TOTAL	$2,814,000	$ 311,000	$3,125,000
Analysis of Total			
Pay Increases	$112,000	$131,000	$243,000
Program	$2,702,000	$180,000	$2,882,000

Specification of Increase (Program): (Details on Following Pages)

Office of Director (4 positions, $62,000)

Planning and Design Unit; staffing the Hospital-Research Building; increased costs of operating items.

Operations and Maintenance Department (1 position, $68,000)

Steam distribution system; building and custodial supplies and materials; equipment replacement.

Department of Living Vertebrates ($23,000)

Animal purchases; animal food; equipment replacement.

Scientific Research Department (1 position, $9,000)

Animal care in laboratories.

Animal Health Department ($18,000)

Medical data system.

NATIONAL ZOOLOGICAL PARK

1969 Actual..... $2,528,000*
1970 Estimate..... $2,814,000*
1971 Estimate..... $3,125,000

The National Zoological Park was founded by Congress in 1889 for the "advancement of science and the instruction and recreation of the people." To accomplish this mission, the Zoo exhibits a broad zoological collection of animals from all parts of the world in natural surroundings; maintains an information and education program for the benefit of the visiting public from all over the United States; and promotes scientific research, including biomedical programs, for advancement of science and the benefit of the animals so that visitors can enjoy them in prime health. To accomplish this mission, the Zoo is organized in five departments: Office of the Director; Operations and Maintenance; Living Vertebrates; Scientific Research; and Animal Health.

For fiscal year 1971, a program increase of $180,000 is requested to establish a planning and design unit for construction and repair projects; to staff and operate the new Hospital-Research Building and other facilities; to operate the new heating plant and incinerator; to replace ground and animal care equipment items; to augment the animal purchase and food funds; and to install a system for adequate animal health records. An additional $131,000 are required for necessary pay increases.

These increases are distributed in the following table. Specific details of organization, functions, and budget requirements are presented on the following pages.

(In thousands of dollars)	1969 Pos.	1969 Amount	1970 Pos.	1970 Amount	1971 Pos.	1971 Amount
Office of Director.....	60	$661	60	$799	64	$917
Operations and Maintenance..	97	924	99	989	100	1,099
Living Vertebrates.....	77	827	77	888	77	939
Scientific Research	5	59	5	68	6	79
Animal Health.....	5	57	5	70	5	91
Total.....	244	$2,528	246	$2,814	252	$3,125

The number of zoo visitors increases annually. In 1969, approximately 5 million people visited the Zoo. A significant number of these visitors are in organized school groups from the metropolitan area and more distant points. The Zoo is increasingly used as a teaching site by teachers of biology and other natural sciences. The increased visitor load increases requirements for patrols, trash clean-up, washroom sanitation, first aid, and other services.

Continued improvements have been made in the collection of animals, which is one of the world's largest. As the collection evolves, the Zoo will present exhibits of greater visitor interest and, at the same time, give greater emphasis to species and groups which effectively demonstrate significant points of animal adaptations and behavior. Greater emphasis will be given also to increasing zoo births by pairing unmated animals and maintaining breeding groups. Not only is this good conservation practice; it is also essential in view of the increasing scarcity of many species and the high prices that must be paid to acquire them.

Construction and improvement programs have progressed with the following results. The east-west perimeter road, eliminating through traffic in the main section of the Park was completed in June 1964. The incinerator for the sanitary disposal of trash and waste materials was completed in June 1964. In February 1965, the remodeling and renovation of the Bird House was accomplished. In June 1965, the new Great Flight Cage and two parking lots for 245 visitor cars were completed. A parking lot which accomodates 260 visitor cars and 24 buses was completed October 1965. Sewer construction, eliminating most of the pollution discharged into Rock Creek, was completed in June 1967. The remaining discharge, chiefly from waterfowl ponds, will be eliminated by construction funds appropriated in fiscal year 1968. The Deer Area was completed in November 1965. The Hardy Hoofed-Stock Area was completed in August 1966, and the Delicate Hoofed-Stock buildings No. 1 and 2 were completed in January 1967. The construction of the new Hospital-Research Building, started in June 1968, was completed in January 1970.

*Included in the District of Columbia budget.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

National Zoological Park
Office of Director

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	60	4	64
11 Personnel Compensation	$ 592,000	$ 81,000	$ 673,000
12 Personnel Benefits	44,000	6,000	50,000
21 Travel & Transp. of Persons	6,000	5,000	11,000
22 Transportation of Things	1,000	0	1,000
23 Rent, Comm. and Utilities	86,000	12,000	98,000
24 Printing and Reproduction	1,000	0	1,000
25 Other Services	25,000	3,000	28,000
26 Supplies and Materials	38,000	6,000	44,000
31 Equipment	6,000	5,000	11,000
TOTAL	$ 799,000	$ 118,000	$ 917,000
Analysis of Total			
Pay Increases	$46,000	$56,000	$102,000
Program	$753,000	$62,000	$815,000

Specification of Increase (Program):

Planning and Design Unit (3 positions, $28,000)

Experience gained during the construction and repair program has demonstrated the need to develop schematic designs and operating specifications before outside architects are employed, and to provide closer technical review of architectural design. There is also a growing need for in-house design capability to handle small projects, including designs and specifications for contract repairs. Request is for three positions ($23,000); funds for travel ($1,000); supplies ($2,000); and equipment ($2,000).

Staffing the Hospital-Research Building (1 position, $11,000)

The Hospital-Research Building was completed and occupied in January 1970. Request is for a librarian to serve the new facilities ($8,000), supplies ($1,000), equipment ($1,000), and books ($1,000). The librarian will also have responsibility for the medical and pathological information system.

Increased Costs of Operating Items ($23,000)

An increase in travel funds ($4,000) is requested largely in connection with the animal acquisition program. An increase in utilities ($12,000) is requested to operate the new heating plant and renovated incinerator which will be in operation for the heating season in fiscal year 1971. Funds also are requested for contractual services ($3,000), supplies ($3,000), and equipment ($1,000) to cover the increased costs of these items.

National Zoological Park
Office of Director

The Office of the Director plans and directs all Zoo programs. It also coordinates the activities and functions of the Pathology Office; directs the protective service program; develops and maintains the Zoo's educational program; and furnishes general administrative services. The capital improvement program and the animal acquisition program are under the direction of this office. The Pathology Office performs histopathologic and gross pathologic diagnosis of disease in the animal collection. The protective services program enforces laws and regulations for the protection and safety of visitors, animals, and Government property. The education program is being implemented through informative labels, exhibits, lectures, guided tours, and cooperative programs with local school systems. Administrative services include personnel, budget, fiscal, supply, and procurement functions.

An increase of $62,000 is requested to establish a planning and design unit for the construction program; to staff the Hospital-Research Building; and to cover increased costs of travel, utilities, contractual services, supplies, and equipment. An additional increase of $56,000 is sought for necessary pay purposes.

Need for Increase--Funds for major new construction were not appropriated in fiscal years 1968, 1969, or 1970. Funds were appropriated, however, for continued planning and for essential renovation and repairs to existing facilities. Many small and medium-sized projects are involved requiring careful study, design, preparation of specifications, technical review, and coordination. To provide these services, it is requested that a small Planning and Design Unit be established, consisting of three new positions (an architect designer, a draftsman, and a clerk-typist) plus the presently employed staff engineer. This unit will coodinate all construction projects and prepare criteria for architectual design of major structures. Major contract drawings and specifications will continue to be prepared by architects, contracted for by the General Services Administration. The unit will design all miscellaneous, supplementary structures and facilities, such as small buildings, shelters, pens, runs, fences, and guard rails, and outdoor cages to conform to and be compatible with major completed and planned construction in the Master Plan. These three positions, with funds for travel, supplies, and equipment, will cost $28,000.

The Hospital-Research Building was completed and occupied in January 1970. A library will be located in this new building to serve Zoo personnel, students, and researchers. The library, which will consist of book stacks and a reading room, will specialize in general natural history, taxonomy, animal behavior, and veterinary medicine. It will require the specialized training and abilities of a librarian. The librarian will also have responsibility for the medical and pathological information storage and retrieval system. Funds for books, supplies, and equipment are included in this request for $11,000.

During the summer of 1969, the first phase of conversion of the heating plant from coal to gas was accomplished. The second phase, and the conversion of the incinerator to gas, is planned to be accomplished during the summer of 1970. Funds in the amount of $12,000 are requested for utilities to operate the new heating plant.

An additional $11,000 are requested for travel, largely in connection with the animal acquisition program, and for contractual services, supplies, and equipment associated with Director's Office operations. For the most part, these funds are required to meet rising costs.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

National Zoological Park
Operations and Maintenance

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	99	1	100
11 Personnel Compensation	$ 781,000	$ 46,000	$ 827,000
12 Personnel Benefits	62,000	3,000	65,000
21 Travel & Transp. of Persons	0	0	0
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	0	0	0
24 Printing and Reproduction	0	0	0
25 Other Services	14,000	0	14,000
26 Supplies and Materials	115,000	22,000	137,000
31 Equipment	17,000	39,000	56,000
TOTAL	$ 989,000	$ 110,000	$ 1,099,000
Analysis of Total			
Pay Increases	$28,000	$42,000	$70,000
Program	$961,000	$68,000	$1,029,000

Specification of Increase (Program):

Maintenance and Operations of the Physical Plant (1 position, $68,000)

Delay in planned Zoo reconstruction makes it necessary to prolong the life of the old steam distribution system. This will require the services of one additional steamfitter ($7,000) and additional funds for building and sundry supplies and materials ($22,000) for the entire operations and maintenance program. An increase is also requested in the equipment allotment to permit scheduled replacement of major and minor equipment items, including the purchase of a front-end loader and a turf-type tractor ($39,000).

National Zoological Park
Operations and Maintenance Department

The Operations and Maintenance Department has responsibility for all plant maintenance and supporting services. These include:

1. Operational services: automotive maintenance; operation of trucks and heavy equipment; trash collection; sweeping of streets and walks; snow removal; and janitorial services.

2. Maintenance: maintaining and repairing 14 major buildings and a wide range of cages and other facilities. This unit also performs renovation and minor construction, and builds nest boxes, shipping crates, exhibits, and other needed items.

3. Grounds: maintaining and improving the 156 acres of trees, lawns, shrubs, flower beds, and indoor plantings.

4. Air-heating: maintaining all heating plants and air conditioning in the buildings throughout the Park.

An increase of one position and $68,000 are requested to provide for workload increases in maintenance and operational services. An additional $42,000 are requested for necessary pay increases.

Need for Increase--At present there is only one steamfitter available to maintain the pipes and equipment of the Zoo's heating system. Extensive overhaul of the old steam distribution system is necessary, of which only 25 percent has been completed. The present work backlog of 6,762 man hours requires the addition of one position ($7,000).

Existing funds are not adequate to keep pace with rising supply costs and the increased maintenance requirements of additions to the physical plant, such as the new Hospital-Research Building. Additional building and custodial supplies and materials of all types are required ($22,000).

For the past several years, the Zoo has been placing equipment items on planned replacement cycles. An increase of $39,000 in the equipment allotment will allow additional equipment in the replacement cycle as well as cover rising costs. Also included are funds to replace the front-end-loader to be used by the transportation section throughout the Park, and to purchase a turf-type tractor with backhoe to be used by the grounds division.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

National Zoological Park
Department of Living Vertebrates

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	77	0	77
11 Personnel Compensation	$ 668,000	$ 26,000	$ 694,000
12 Personnel Benefits	50,000	2,000	52,000
21 Travel & Transp. of Persons	0	0	0
22 Transportation of Things	2,000	0	2,000
23 Rent, Comm. and Utilities	0	0	0
24 Printing and Reproduction	0	0	0
25 Other Services	0	0	0
26 Supplies and Materials	142,000	13,000	155,000
31 Equipment	26,000	10,000	36,000
TOTAL	$ 888,000	$ 51,000	$ 939,000
Analysis of Total			
Pay Increases	$30,000	$28,000	$58,000
Program	$858,000	$23,000	$881,000

Specification of Increase (Program):

Acquisition of Animals and Increased Costs of Food and Supplies ($23,000)

An increase in the animal purchase fund ($8,000) is needed to meet the rapidly rising prices of rare animals. For instance, a purchase of a single group of rare deer cost $19,000. Only $25,000 are now available for animal purchases. An increase in the food allotment and sundry supplies ($13,000) is requested to cover increased costs. Approximately $126,000 are now being spent on animal food. Funds are requested to establish an equipment replacement allotment ($2,000) for the animal care program. No funds are now available for the periodic replacement of approximately 200 pieces of equipment.

National Zoological Park
Department of Living Vertebrates

The Department of Living Vertebrates is responsible for approximately 3,200 animals of over 1,100 species, representing one of the largest and most varied collections of exotic animals in existence. To support this collection, the Department conducts an animal care program involving feeding, cleaning of cages, and exhibition. Included in the animal care program are pest control efforts to eliminate insects and rodents and a commissary program for ordering, receiving, storing, preparing, and delivering animal food, as well as raising special food items. In addition to these major activities, the staff collaborates with the Animal Health Department, the Scientific Research Department, and the Pathology Office to improve the medical treatment of animals, collection of medical data, evaluation of medical programs, and development, investigation, and support of various research programs.

An increase of $23,000 is requested to cover the rapidly rising costs of animals, animal food, and sundry and uniform supplies, as well as to establish an equipment replacement allotment. An additional increase of $28,000 is sought for necessary pay increases.

Need for Increase--The animal acquisition program is aimed at providing an adequate number of interesting and unusual specimens for a well-balanced and educational zoological collection. The present allotment for the acquisition of animals, which includes purchase prices and/or shipping charges, is $25,000. An increase of $8,000 is requested. There has been no increase in these funds since 1965. Animal prices have risen rapidly in the past five years. A purchase of a single group of rare deer cost $19,000. In the past, the Zoo has relied heavily on gifts and exchanges. It is rarely possible, however, to stipulate the species, ages, sex, and condition of gifts; and exchanges are dependent on what other zoos have in surplus. These two methods tend to yield an unbalanced collection. The Zoo's collection objectives can be fulfilled only by purchasing animals of selected species.

Additional funds are requested for the food allotment to provide for steadily rising food prices. Approximately $126,000 is now available to purchase animal food. The Commissary makes every effort to obtain surplus food at reduced prices, but this is frequently of low quality. The replacement prices for sundry supplies and uniforms also have risen sharply. Funds in the amount of $13,000 are requested to cover the increased cost and usage of these items.

There are approximately 200 pieces of equipment all under $1,000 each, located in various buildings, used for the care of animals. Funding of $2,000 is requested to establish an efficient schedule of equipment replacement.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

National Zoological Park
Scientific Research Department

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	5	1	6
11 Personnel Compensation	$ 60,000	$ 8,000	$ 68,000
12 Personnel Benefits	5,000	1,000	6,000
21 Travel & Transp. of Persons	0	0	0
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	0	0	0
24 Printing and Reproduction	0	0	0
25 Other Services	0	0	0
26 Supplies and Materials	1,000	1,000	2,000
31 Equipment	2,000	1,000	3,000
TOTAL	$ 68,000	$ 11,000	$ 79,000
Analysis of Total			
Pay Increases	$3,000	$2,000	$5,000
Program	$65,000	$9,000	$74,000

Specification of Increase (Program):

Care of Research Animals (1 position, $9,000)

The Hospital-Research Building was completed and occupied in January 1970. As the number of animals under study in the laboratories increases, an animal keeper will be required to assure that the best care is given to these animals. Request is for one position ($7,000), funds for supplies ($1,000), and equipment ($1,000).

National Zoological Park
Scientific Research Department

The Scientific Research Department undertakes studies of animal behavior, reproduction, and nutrition. The National Zoological Park collection is a major scientific resource. For this reason, facilities and assistance are often provided to scientists from such federal agencies as the National Institutes of Health as well as from universities. The Zoo's own scientific studies add to man's understanding of the living world. Investigations undertaken in the Zoo and in the field have yielded numerous scientific publications. The work of the Scientific Research Department results in improved care of animals in the collection, as reflected in their well-being and reproduction. This work is also of benefit to other zoos and animal collections. In addition, the Scientific Research Department is of assistance to other organizations, including foreign governments concerned with wildlife management and conservation. The Department provides training and research opportunities for graduate students.

An increase of $9,000 is requested to provide one position for the care of the animals under study in the laboratories. An additional $2,000 are requested for necessary pay increases.

Need for Increase--The Hospital-Research Building was completed and occupied in January 1970. Planned research on the maintenance of mammals and birds in captivity can now be started. The research personnel using this facility will include guest investigators and graduate students from those laboratories and universities coordinating their research program with the National Zoological Park. Included are the Armed Forces Institute of Pathology, the George Washington University, the University of Pennsylvania, and others. One of the central problems in the maintenance of captive vertebrates concerns the propagation of rare and endangered species. The successful breeding of rare mammals requires that special research be conducted on space requirements, nutritional requirements, and reproductive physiology. As the number of animals under study in the laboratories increases, an animal keeper will be required to assure that the best care is given to these animals.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

National Zoological Park
Animal Health Department

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	5	0	5
11 Personnel Compensation	$ 56,000	$ 3,000	$ 59,000
12 Personnel Benefits	4,000	0	4,000
21 Travel & Transp. of Persons	0	0	0
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	0	0	0
24 Printing and Reproduction	0	0	0
25 Other Services	0	0	0
26 Supplies and Materials	6,000	1,000	7,000
31 Equipment	4,000	17,000	21,000
TOTAL	$ 70,000	$ 21,000	$ 91,000
Analysis of Total			
Pay Increases	$5,000	$3,000	$8,000
Program	$65,000	$18,000	$83,000

Specification of Increase (Program):

Improve the Utilization of Scientific and Medical Findings ($18,000)

The clinical, pathological, and scientific programs generate large quantities of data, which must be systematically stored for ready retrieval to be of permanent value. A number of other government and private laboratories have adopted the Trematrex system for this purpose. Since data is exchanged with these laboratories, a compatible system is necessary. An increase will permit acquiring the basic equipment ($15,000). Additional funds for medicines, glassware, and chemicals ($1,000) and medical equipment ($2,000) are requested.

National Zoological Park
Animal Health Department

The Animal Health Department is responsible for the maintenance of the health of the animal collection of 3,200 living specimens of 1,100 species. This requires: clinical treatment of illnesses and injuries; prophylactic procedures; using clinical pathological data to assist in diagnosis of diseases and formulation of effective treatment regimens; and collaboration in biomedical research directed toward a broader knowledge of disease processes in exotic animals and in their treatment. The staff of the Animal Health Department consults and collaborates with investigators from governmental agencies and academic institutions in the solution of problems of mutual interest.

An increase of $18,000 is requested to establish an efficient data recording system and funds for supplies and other equipment to meet increased costs. An additional increase of $3,000 is sought for necessary pay increases.

Need for Increase--The knowledge of disease in exotic animals stands in about the same position as did human medicine more than 100 years ago. A data storage and retrieval system will provide for maximum usefulness of scientific and medical findings. The Animal Health Department records approximately 4,000 entries per year on the medical records. The Pathology Office performs approximately 600 necropsies per year, which requires the entry of approximately 2,000 diagnoses. There are approximately 10,000 technical entries recorded on cards each year. The recorded data is now of limited value, because of the time required to locate information. Funds are requested to establish a Termatrex system. This is a simple, rapid system using light showing through minute coded holes in a card to locate and correlate data. The system will be maintained in the Hospital-Research facility and will be used by all scientific activities. It will allow immediate retrieval of specific records and permit correlation and statistical analysis of the recorded data. An amount of $15,000 is requested for this purpose.

An increase of $3,000 is requested to cover the costs of medicine, glassware, chemicals, etc., used by the Animal Health Department and to purchase medical equipment used in animal care and treatment.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

ANACOSTIA NEIGHBORHOOD MUSEUM

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	8	4	12
11 Personnel Compensation	$59,000	$ 30,000	$ 89,000
12 Personnel Benefits	5,000	2,000	7,000
21 Travel & Transp. of Persons	2,000	1,000	3,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	7,000	23,000	30,000
24 Printing and Reproduction	0	0	0
25 Other Services	2,000	0	2,000
26 Supplies and Materials	6,000	20,000	26,000
31 Equipment	1,000	1,000	2,000
TOTAL	$82,000	$ 77,000	$159,000
Analysis of Total			
Pay Increases	$4,000	$2,000	$6,000
Program	$78,000	$75,000	$153,000

Specification of Increase (Program):

Museum Education, Administration, and Operations (4 positions, $75,000)

Community demands on the Museum for classes, workshops, and other museum-related education services have increased steadily since the Museum opened in September 1967. Since opening, 117,000 children and other community residents have participated in the Museum's activities. Part-time and volunteer help from the community has been used, but two full-time instructors ($16,000) are required to put the class and workshop activities on a more regular basis. An assistant director and a clerk-typist ($14,000) are requested to help develop programs, assist with administrative matters, plan exhibits that meet community needs, and work with other groups interested in setting up similar museums. Funds in the amount of $45,000 are requested also for space rental and custodial, exhibit, and workshop supplies and equipment.

ANACOSTIA NEIGHBORHOOD MUSEUM

1969 Actual	$42,000
1970 Estimate	$82,000
1971 Estimate	$159,000

The Anacostia Neighborhood Museum opened in September 1967 in one of Washington, D. C.'s deteriorated urban communities. This area has dilapidated housing, an exploding school population, low income and unemployed persons, and other characteristics of blighted urban areas in cities across America. The Museum was designed to enhance the quality of life in this community by offering meaningful learning experiences to the local residents, by interpreting the history and contributions of the community, and by involving children and adults in challenging opportunities for creative self-expression. Since opening, 117,000 children and other community residents have enjoyed and been educated by the Museum's exhibits, classes, lectures, films, and other projects designed for maximum public participation. Over 27,000 metropolitan school children toured the exhibit "The Sage of Anacostia," a graphic history of the life of Frederick Douglass.

To meet this enthusiastic response, an increase of $75,000 is requested for the Museum for classroom and workshop activity, overall program administration and general costs of operations. An additional $2,000 are requested for necessary pay increases.

Need for Increase--Within the past year, community demands on the Museum have increased steadily. The staff has worked closely with the Anacostia Model School Project, and the Museum's education program manager was elected to its Council and Governing Board. As a result of meetings held with principals, counselors, Community Reading Assistants, Head Start personnel, and special groups of teachers, many requests for specific workshops and classes have been made. Among those requests that have been met are: a four-week series of programs on Afro-American history for two sixth-grade classes; an art appreciation workshop for local teachers and Community Reading Assistants that focused on the making of paints from ordinary household items; the training of local recreation staff in ceramics and pottery; a series of International Hours for preschoolers which included the sampling of food from other countries; and story hours, films, and slide shows. Much of this work has been accomplished through the use of part-time and volunteer help. Many requests cannot be met. Two full-time instructors are requested to plan and conduct classes and workshops for children and adults in the community ($16,000).

With increased public interest and participation in the Museum's activities, an assistant director and an additional clerk-typist are required. These employees will help plan and evaluate programs; assist with budget, personnel, and procurement matters; do research on exhibits' topics appropriate to community needs; and help with a large correspondence workload. Letters are received almost daily from other museums, community groups, and concerned citizens seeking advice and technical assistance in undertaking similar museums in their areas. The assistant director will be involved personally with these groups and will act as a liaison between the Anacostia Museum and other museums to keep abreast of museum education trends and apply those that are applicable and valuable to Anacostia's needs. Funds in the amount of $14,000 are requested for these two employees.

Funds are also required for general expenses as private funding for regular operations declines. The Museum requires $45,000 for space rental, maintenance and custodial supplies, exhibit and classroom supplies and materials, and a small amount of office and exhibit equipment.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

NATIONAL COLLECTION OF FINE ARTS-RENWICK GALLERY OF ART

Object Class	1970 Base	1970 Requested	1971 Estimate
Number of Permanent Positions	56	4	60
11 Personnel Compensation	$580,000	$ 31,000	$611,000
12 Personnel Benefits	43,000	2,000	45,000
21 Travel & Transp. of Persons	25,000	1,000	26,000
22 Transportation of Things	17,000	2,000	19,000
23 Rent, Comm. and Utilities	14,000	0	14,000
24 Printing and Reproduction	1,000	0	1,000
25 Other Services	174,000	27,000	201,000
26 Supplies and Materials	25,000	2,000	27,000
31 Equipment	106,000	47,000	153,000
42 Grants	58,000	0	58,000
TOTAL	$1,043,000	$112,000	$1,155,000
Analysis of Total			
Pay Increases	$43,000	$12,000	$55,000
Program	$1,000,000	$100,000	$1,100,000

Specification of Increase (Program):

Preparations for Opening the Renwick Gallery (4 positions, $100,000)

Approximately $2,000,000 of appropriated funds have been spent on renovating and restoring this historic building in order that it can also have a valuable functional use as a museum of arts, crafts, and design in an area of Washington that is a center of attraction for official visitors and the general public. Although much essential restoration work needs to be done this year and next, the Smithsonian is planning a partial public opening in mid-fiscal year 1971. To accomplish this, the Smithsonian is requesting a small staff--an exhibits specialist, two museum technicians, and a clerk-typist ($21,000)--to assist the NCFA curatorial staff and funds for travel to obtain and ship collections, including loaned items; for services to prepare exhibits; and for the purchase of collections and exhibit equipment ($79,000).

NATIONAL COLLECTION OF FINE ARTS-RENWICK GALLERY OF ART

1969 Actual.....	$951,000
1970 Estimate.....	$1,043,000
1971 Estimate.....	$1,155,000

The National Collection of Fine Arts was established "to encourage the development of contemporary art and to effect the widest distribution and cultivation in matters of such art". To meet this responsibility, the NCFA acquires, exhibits, and makes available for study a significant collection of art, and related documentary materials, produced by artists of the United States. At present, some 11,000 paintings, sculptures, and decorative art objects are included in its exhibits and reference collections. Administered by the NCFA, the Renwick Gallery of Art is planned as an exhibition center of American crafts and design, and as a visitor center related to Blair House and the White House. Housed in the building originally designed for the Corcoran Gallery by James Renwick, Jr., it preserves an architectural landmark which simultaneously can have an important functional use in an area of Washington that is a center of attraction for public and official visitors.

An increase of $100,000 is requested to prepare the Renwick Gallery for a public opening in fiscal year 1971. Funds in the amount of $12,000 also are requested for necessary pay for the National Collection of Fine Art's present staff.

Need for Increase--Approximately $2,000,000 of appropriated funds have been invested in the restoration and renovation of the building. According to the present schedule, this work will be sufficently completed in fiscal year 1971 to permit an inaugural exhibition by mid-year. The Smithsonian is requesting an appropriation of $300,000 of construction funds to complete the restoration project. Without concurrent provision of operating funds, however, it is likely that the building will remain closed. The continued efforts by the National Collection of Fine Arts to develop its public and scholarly functions, do not permit a major redirection of funds to the Renwick, although substantial staff time will be applied to this need.

The present high priority efforts to ready the physical structure for opening to the public require a companion effort to provide outstanding exhibits. The staff must select and acquire basic furnishings and equipment appropriate to the building including display cases and other Gallery furniture; seek out and obtain through gifts and purchases an outstanding American crafts and design collection; and initiate work on an exhibition program including obtaining commitments from donors and lenders of art. A number of exhibitions will be staged each year, drawing on the varied collections of the Smithsonian as well as other private or public collections.

With regard to likely official uses of the Gallery, the great reception room across the width of the building is potentially one of the finest in America. This room, the stairs leading to it, and an adjacent octagon room will be furnished to evoke the spirit of the 1860's and 70's, and will be an appropriate background for the uses of the President, visiting heads of state, official presentation activities of the Smithsonian, such as for important donors, and for other similar uses.

To permit preparing, opening, and maintaining the exhibition and other programs of the Gallery, the following additional staff and other resources are requested. An exhibits specialist, two museum technicians, and a clerk-typist are the basic personnel required ($21,000). These would assist the National Collection of Fine Arts curatorial staff. Support funds are required for travel to obtain and ship collections, for services to prepare exhibits, and for the purchase of exhibit equipment and objects ($79,000).

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	13	7	20
11 Personnel Compensation	$129,000	$ 50,000	$ 179,000
12 Personnel Benefits	9,000	4,000	13,000
21 Travel & Transp. of Persons	11,000	14,000	25,000
22 Transportation of Things	8,000	12,000	20,000
23 Rent, Comm. and Utilities	29,000	44,000	73,000
24 Printing and Reproduction	4,000	2,000	6,000
25 Other Services	124,000	176,000	300,000
26 Supplies and Materials	16,000	34,000	50,000
31 Equipment	17,000	43,000	60,000
TOTAL	$347,000	$ 379,000	$ 726,000
Analysis of Total			
Pay Increases	$8,000	$4,000	$12,000
Program	$339,000	$375,000	$714,000

Specification of Increase (Program):

Preparation of Collections to meet Opening Deadline (7 positions, $375,000)

Twelve hundred of the choicest paintings and pieces of sculpture have been chosen from the more than 7,000 items in the gift collection for exhibit when the Museum opens. These paintings and pieces of sculpture, valued at $20 million, must be examined, photographed, cleaned, and, in some cases, restored prior to exhibit. The total cost of this effort, not including any additional paintings that might be contributed by Mr. Hirshhorn, is estimated at $460,000, of which $160,000 are requested in fiscal year 1971. In addition to the restoration effort, the staff must receive and process the more than 500 new works of art being added to the collection each year by Mr. Hirshhorn; conduct research and documentation for the opening; catalog the collection; and meet public inquiries such as requests for loans, photographs, and information. To do this, the Museum requires an increased staff consisting of a curator, two exhibit technicians, three museum technicians, and a clerk-typist ($50,000). Additional funds are required for travel ($14,000), transportation of objects ($12,000), rental of storage space ($44,000), printing ($2,000), supplies and materials ($34,000), equipment ($43,000), and other services ($16,000).

JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN

1969 Actual $149,000
1970 Estimate $347,000
1971 Estimate $726,000

The Joseph H. Hirshhorn Museum and Sculpture Garden will display the collection of fine art donated by Joseph H. Hirshhorn to the United States for the benefit of the people. The Hirshhorn Collection is a unique collection of sculpture and paintings. The sculptures range historically from antiquity to the works of today's young creators. Its fine representation of African art is highlighted by a superb group of Benin bronzes. The Collection's paintings focus on the 20th century. From the works of precursors such as Thomas Eakins and Winslow Homer to the canvases of today, the course of painting in America is covered in depth. Complementing the American section is a strong selection of paintings by modern European masters and young contemporaries.

An increase of $375,000 is requested to continue the preparation of the Collections. An additional $4,000 are requested for necessary pay increases.

Need for Increase--Plans and specifications for the construction of the Joseph H. Hirshhorn Museum and Sculpture Garden have been revised to scale down the project to insure that it does not exceed the available funds. A bid award is expected in February 1970 with construction to begin in March. Based on this information, a thorough review of work necessary to complete the Museum and place it in operation has been made. It was on the basis of this information that reprogramming of $150,000 for the use of the Hirshhorn Museum was requested and approved. It is clear that in order to bring this major new museum into existence, a dramatic step-up of operating program activity must take place during the two-year building construction period. This will require a very substantial increase in program funds over this period if a public opening date of October 1972 (nine months after the completion of the building) is to be met.

Major additional funding requirements are in two categories: preparation of the collections, and the acquisition of furnishings and special equipment for the building. In fiscal year 1971, the Museum is seeking additional funds to accelerate preparation of the collections.

Some 1,200 paintings and pieces of sculpture of the total gift collection of 7,000 items must be readied for exhibition. These will be the choicest pieces with an estimated value of $20 million. Of these 1,200 items, 700 are paintings and 500 are sculpture pieces. A careful survey of the restoration and framing requirements of these items has disclosed the following:

1. 100 large paintings (6 to 15 feet) will need major restoration at an average cost of $1,000 each ($100,000) and 50 will require work at $300 each ($15,000).

2. 350 smaller paintings will require restoration at prices ranging from $250 to $500 ($150,000).

3. 500 paintings must be framed at prices ranging from $45 to $200 for a total cost of $57,000.

4. 400 sculpture pieces, including about 150 which are classed as monumental, will need restoration at prices ranging from $100 to $750. Estimated total cost of the job will be $170,000 which includes protective display cases for the smaller pieces of fragile sculpture, and the construction of bases for approximately 170 items.

To meet part of these costs, an additional $160,000 are requested to meet the Museum's opening date. This work must be greatly accelerated and a production rate of at least one item a day must be maintained. Since conservators are in short supply and one piece may take many weeks to restore, premium prices may have to be paid, although an intensive search will be made to locate additional conservators.

A commensurate increase in professional and technical staff is required to prepare for the Museum's opening and subsequent exhibition and research programs. This staff must: receive and process the approximate 500 new works of art being added to the collection each year by Mr. Hirshhorn; negotiate with conservators and other contractors, and follow up on work in progress; conduct research and documentation for the opening exhibition as well as continue with the cataloging of the entire collection; and continue the Museum's present public services such as loans, photographic requests, and research queries. Conservation, photography, and storage facilities also must be planned. Museum administrative, budget, personnel, and fiscal business must be handled. This increased staff will cost $50,000 and will include a curator, two exhibits technicians, three museum technicians, and a clerk-typist. A gradual phased buildup of essential staff members over the next two years makes sense in lieu of current and future Museum needs.

An additional $165,000 are requested for other contractual service costs related to the collections, the rental of warehouse space and warehouse services (moving items in and out of storage for inspection, conservation, framing, etc.), photography to document the collections for exhibits planning and research purposes, and protective packing for shipping once restoration has been performed. Major trips to art museums and galleries for research will be necessary as well as trips to various collection storage areas.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	38	5	43
11 Personnel Compensation	$339,000	$ 54,000	$ 393,000
12 Personnel Benefits	26,000	4,000	30,000
21 Travel & Transp. of Persons	15,000	6,000	21,000
22 Transportation of Things	3,000	3,000	6,000
23 Rent, Comm. and Utilities	17,000	5,000	22,000
24 Printing and Reproduction	0	0	0
25 Other Services	28,000	15,000	43,000
26 Supplies and Materials	22,000	10,000	32,000
31 Equipment	10,000	14,000	24,000
TOTAL	$460,000	$ 111,000	$ 571,000
Analysis of Total			
Pay Increases	$21,000	$11,000	$32,000
Program	$439,000	$100,000	$539,000

Specification of Increase (Program):

Barro Colorado Island Environmental Monitoring (1 position, $25,000)

Forty years of study on Barro Colorado Island give an irreplaceable foundation for developing a project for comprehending the dynamics of a tropical environment. A project to measure the magnitude, frequency, predictability, and importance of a number of environmental fluctuations would significantly increase our knowledge of tropical dynamics. A forest ecologist ($12,000) will tie together the efforts of many in launching this effort. Support will include research-related travel and transportation ($3,000), supplies, materials and equipment ($6,000), and related contract services ($4,000).

Comparative Marine Research (2 positions, $32,000)

The natural resources for marine biology at STRI are unmatched. Cooperative research with other institutions on a number of key environmental problems depends directly on availability of new professional and support resources. Progress can be maintained with the addition of an invertebrate biologist ($12,000), a laboratory technician to man Galeta station on the Atlantic coast of Panama ($7,000), research-related travel and transportation ($3,000), supplies, materials and equipment ($5,000), and related contract services ($5,000).

Buildings, Grounds, and Administration (2 positions, $43,000)

With the spread of physical facilities and research in surrounding habitats, vehicle transportation is a constant bottleneck. One machinist ($5,000) to repair and maintain vehicles, acquired largely as surplus property and used for field trips, is essential. Supporting supplies and contract services ($5,000) are also needed to keep various mechanical apparatus in service for the present heavy and constant year-round demands placed on them. Rent, communications, and central contract services, including dependent's tuition and medical care, require $11,000. Replacement of two ancient trucks and air-conditioners will cost $9,000. Contract and grant negotiations, including cost recoveries, for productive collaborative work require a contract specialist ($11,000) and travel ($2,000).

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

1969 Actual	$409,000
1970 Estimate.....	$460,000
1971 Estimate.....	$571,000

The principal function of the Smithsonian Tropical Research Institute (STRI) is to advance the frontiers of biology through intensive biological and ecological studies in the tropics. STRI's work serves a twofold purpose. First, understanding the earth's biology demands comprehension of the complex evolutionary and behavioral relationships of its most varied organisms,which are in the tropics. The tropics are the place of origin and principal center of evolution of most groups of organisms. New and major types of adaptation to new ways of life are more likely to be evolved by tropical species than by those of other regions. Tropical species also are more successful in invading other regions than are species of other regions in invading the tropics. In tropical areas, an abundance of observances, tests, assessments can be made every month of the year on change, competition, survival, and evolutionary success and failure.

Second, human populations in the tropics are increasing very rapidly, and are headed for ecological disaster in the absence of adequate information about their environment. In the north, we are concerned about air pollution, eutrophication of lakes, and the deleterious effects of insecticides. In the tropics, the problems are more brutal. Areas such as the hill country of Colombia and Panama, and the whole island of Madagascar, are fast becoming deserts. The basic features of tropical ecology must be understood as quickly as possible.

The staff scientists, research associates, pre and postdoctoral fellows, and visiting scientists and students from other institutions are attempting to describe the ecological and behavioral relationships among species in more precise quantitative, mathematical, or physical terms. More than 50 papers by STRI's staff in the past year are contributing to this knowledge. Research and study visits to the Institute climbed from 289 in 1966 to over 500 this past year, with the scientists and researchers remaining for longer and more productive work-stays.

An increase of $100,000 is requested to develop and implement an environmental monitoring program; to provide for a strengthening of the marine biology program; and to improve the central services of the Institute. An additional $11,000 are requested for necessary pay increases for the present staff.

Need for Increase--The principal center of terrestrial and fresh water research at STRI continues to be Barro Colorado Island, set aside as a preserve where men can join to understand a complex tropical environment. A host of separate studies have been conducted on the island over the past four decades, accelerating in recent years. It is probably better known than any comparable piece of land anywhere else in the tropics. This knowledge provides a unique foundation. The work to date represents an investment in professional time of irreplaceable import. Now we can build on it with a project of environmental monitoring--measuring the magnitude, frequency, predictability, and importance of a number of accessible environmental fluctuations. This can provide a key to one of the most essential questions in biology, How stable are the tropics and how does the answer tie in with evolutionary change? The project will be led by a forest ecologist ($12,000) working in consort with present members of the staff. An additional $13,000 are requested for travel, transportation, supplies and materials, equipment, and research support services.

The Smithsonian Tropical Research Institute is becoming increasingly active as a research base for marine scientists working in tropical waters. The biological richness of the area, the separation of two oceans by approximately 50 miles of land, the excellent accessibility of Panama, year-round opportunities

for test-organism breeding in food culture experiments, and many other factors yield a practical mandate for developing and refining a quality program in marine biology. A marine invertebrate biologist ($12,000) is requested to assure continued steady progress of the Institute's tropical marine research program and its advanced scientific training program. One laboratory technician ($7,000) is needed to permit the fuller use of the unique Galeta marine station, located on the Atlantic coast of Panama. Funds for travel, transportation, supplies, equipment, and other costs are also requested ($13,000).

Central services have been strained to keep pace with current demands and the growth of the research program. One machinist ($5,000) is requested to keep the small fleet of largely surplus vehicles, used for field work by the scientists, in proper operating condition. An additional $25,000 are requested for supplies, rent, communications, contractual services (including mandatory school tuition and medical services for dependents), and the replacement of two worn-out vehicles and air conditioners. The addition of a contracts specialist ($11,000) will improve STRI's ability to enter into reimbursable contract relationships with the many agencies, institutions, and centers that seek professional assistance in tackling problems concerning research and advanced training. An increase of $2,000 is requested for travel support.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

RADIATION BIOLOGY LABORATORY

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	36	4	40
11 Personnel Compensation	$ 372,000	$ 47,000	$ 419,000
12 Personnel Benefits	31,000	3,000	34,000
21 Travel & Transp. of Persons	5,000	0	5,000
22 Transportation of Things	2,000	0	2,000
23 Rent, Comm. and Utilities	256,000	101,000	357,000
24 Printing and Reproduction	0	0	0
25 Other Services	20,000	3,000	23,000
26 Supplies and Materials	24,000	5,000	29,000
31 Equipment	79,000	50,000	129,000
TOTAL	$ 789,000	$ 209,000	$ 998,000
Analysis of Total			
Pay Increases	$35,000	$9,000	$44,000
Program	$754,000	$200,000	$954,000

Specification of Increase (Program):

Basic Mechanical and Support Staff at the New Location (4 positions, $200,000)

Fiscal year 1971 will be the first full year of operations in the new laboratory building in Rockville, Md. For the first time since the Laboratory's establishment in 1929, it has available a properly configured space of adequate size. The increased funding provided in the fiscal year 1970 appropriation will meet the basic costs of the lease and part of the mechanical and support staff required at the new location. However, other building and operating costs were not met:

--24-hour service support is needed to maintain the 11 cold rooms, 40 growth chambers, 8 walk-in environmental chambers, and a greenhouse.

--Basic custodial supplies, materials, and equipment are needed to clean the area to prevent safety hazards and to maintain the degree of cleanliness needed by the precision equipment.

--Substantial utility costs will be incurred to operate the laboratory and electrical equipment.

--Library services must be provided since the Smithsonian Institution Library cannot provide service at the Laboratory's new location.

--50 percent of the Laboratory's equipment is more than eight years old and in need of replacement.

--Security of the building, which has five outside entrances, must be provided to insure protection of the equipment and chemicals.

Two operating engineers, an electrician, and a library technician ($41,000) and funds for utilities, services, supplies, and equipment ($159,000) are requested.

RADIATION BIOLOGY LABORATORY

1969 Actual.....	$399,000
1970 Estimate.....	$789,000
1971 Estimate.....	$998,000

The program of the Radiation Biology Laboratory, fundamentally concerned with the effects of the sun's energy on Earth's life, has been devoted to the study of the responses of living organisms to various qualities and intensities of radiant energy and to the determination of the influence of various factors in the environment--light, temperature, humidity, and atmospheric content--on growth and development cycles of plants. As a corollary to the serious concern with regard to the deleterious effects of air pollutants on living systems, there has been speculation that less of the sun's energy is reaching the Earth's surface. Recent comparisons with data gathered by the Smithsonian at the turn of the century indicate that the decrease in solar energy may be as much as 16 percent. This investigation is continuing. There are essentially no data available to indicate what the long-term effects of such a reduction will be upon crop and food production. The Laboratory's program of solar energy measurements and biological response correlation fills a significant gap in efforts to provide understanding of the interacting factors that man must adjust and control in order to maintain a habitable environment. The Laboratory has been credited with major contributions in photobiology which include the first detailed action spectra of such diverse responses as photosynthesis, photocontrol of seedgermination, the induction and reversal of photomorphogenesis, and phototropism.

An increase of $200,000 is requested in order to complete the relocation requirements of the Laboratory at the new Rockville, Md., site. Funds in the amount of $9,000 are also requested for necessary pay.

Need for Increase--Fiscal year 1971 will be the first full year of operations in the new laboratory building in Rockville, Md. The move is now scheduled to be completed by March 1970. For the first time since the Laboratory's establishment in 1929, it will be provided with properly configured space of adequate size. A significant base for improved research capability has been provided. To assure the successful use of this new space for scientific investigations, additional funding is requested for the basic operation of the building and for research support.

Increased funding, provided in the fiscal year 1970 appropriation, will meet the basic cost of the lease and part of the mechanical and service support staff required. Other building and operating costs will not be met. The lease for the new building costs $256,000 annually. An additional amount will be required to pay for the GSA administrative charge, which has yet to be determined. The new laboratory area is at least one-third greater than the inadequate space in the Smithsonian Institution building previously occupied. It will include 11 cold rooms, 40 large growth chambers, 8 walk-in environmental chambers, and a large controlled environment greenhouse. Mechanical and service support for the operation of these facilities on a 24-hour continuous basis is essential. Two operating engineers (mechanical and refrigeration) and an electrician to maintain and operate the facilities and complex laboratory equipment are required ($33,000).

Basic custodial supplies, materials, and equipment will be needed to clean and maintain the new building space. A laboratory has unusually heavy demands for maintaining working areas clean and well lighted because of the inherent safety hazards of handling chemicals and equipment, as well as requirements for precision measurements. An amount of $5,000 is requested for cleaning materials and lamp replacements.

Substantial utility costs will be incurred for electrical power for laboratory and refrigeration equipment and to light controlled plant growing rooms, as well as for conventional lighting for the 50,000 square ft. building. Telephone, water, gas, sewage, and trash disposal services must also be provided. An additional $101,000 are requested to provide for these services.

Security of the building, with five outside entrances, can most economically be achieved by the use of an automatic electronic alarm system. A guard system would require a minimum of five men and $30,000 to achieve the same results. Contractual service funds in an amount of $3,000 are requested for security costs.

Library services will be needed at the new location because the Institution's regular library staff will not be able to supply service at the Laboratory's new location. At the present time, there is no library service; secretarial time, as available, is used to keep shelves in order. A full-time library technician is requested to maintain the present literature collection; recommend new publications; furnish information with regard to acquisitions; catalog and file published material authored by staff members; fill requests for reprints; meet requests from research staff for literature citations; arrange for loans from other libraries; and provide other library services ($8,000).

Equipment deficiencies will retard the Laboratory's research activities. Fifty percent of RBL's scientific equipment, including spectrophotometers, radiation devices, monochromators, autoclaves, centrifuges, and other instruments are more than eight years old and in need of replacement. The present equipment has been screened and careful determinations made with respect to the costs of relocation and modernization versus construction and purchase of new equipment. The bulk of the present equipment is being relocated; but many items, particularly those which had been installed or built into the previous quarters, can be more economically purchased new. A continuing effort is being made to obtain equipment available from federal surplus lists and by the purchase of second-hand laboratory benches and exhaust fume hoods, as such items become available. However, even with these considerable savings, $50,000 will be required for basic equipment needs.

It should be reemphasized that the requested increases outlined are a minimum to operate, maintain, and protect new and larger building spaces at a working level. The needs included do not represent program expansion.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

OFFICE OF ECOLOGY

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	5	3	8
11 Personnel Compensation	$101,000	$ 28,000	$ 129,000
12 Personnel Benefits	7,000	2,000	9,000
21 Travel & Transp. of Persons	7,000	2,000	9,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	0	0	0
24 Printing and Reproduction	0	0	0
25 Other Services	10,000	6,000	16,000
26 Supplies and Materials	2,000	9,000	11,000
31 Equipment	6,000	10,000	16,000
TOTAL	$133,000	$ 57,000	$ 190,000
Analysis of Total			
Pay Increases	$5,000	$2,000	$7,000
Program	$128,000	$55,000	$183,000

Specification of Increase (Program):

Comprehensive Ecological Study of the Chesapeake Bay Watershed
(2 positions, $49,000)

The Chesapeake Bay area has considerable historic, recreational, and economic importance. Yet, this area is being subjected to vast changes in its ecology due to industrialization, housing development, and thermal and chemical pollution. Basic to any understanding of the problem or its solution is a comprehensive study of the watershed, including studies to determine energy output, biological productivity of the land and water areas, and pollution effects upon terrestrial and aquatic life. The Chesapeake Bay Center for Environmental Sciences, using its facilities as a base, proposes to conduct such a comprehensive study in order to better understand this valuable area. To do this, the Center requires a resident ecologist, a program assistant ($22,000) and funds for travel ($2,000), supplies and equipment ($19,000), and other services ($6,000).

Improved Security for the Chesapeake Bay Center for Environmental Sciences
(1 position, $6,000)

The Center's utility to scientists depends upon the land and water areas remaining in an undisturbed state. Picnickers, poachers, vandals, and other trespassers have, on occasion, disturbed the ecology as well as carefully designed experiments set up in the area. To prevent such occurrences, a security officer ($6,000) is required to patrol the area and the buildings.

OFFICE OF ECOLOGY

1969 Actual	$110,000
1970 Estimate	$133,000
1971 Estimate	$190,000

The Office of Ecology was established to support and coordinate research within various bureaus of the Smithsonian and with other organizations. It provides project planning, guides ecological studies, develops and assists international ecological and conservation projects, and helps in the biocommunications area with ecological symposia and conferences. The Office facilitates the use of the Smithsonian's resources by biologists, ecologists, and other scientists. Competence in radiobiology, biology, and earth sciences is available. The Smithsonian is unique in having some of the largest natural history collections in the world, which are required for precise identifications of ecosystem components. In addition, Smithsonian natural preserves in the tropics (Smithsonian Tropical Research Institute) and the temperate zone (Chesapeake Bay Center for Environmental Sciences) provide strategic sites for ecological field studies.

An increase of $55,000 is requested to provide for a resident ecologist, a program assistant, a security officer, and support funds for a comprehensive ecological program at the Chesapeake Bay Center for Environmental Sciences. An additional $2,000 are requested for necessary pay increases for the present staff.

Need for Increase--The Chesapeake Bay Center for Environmental Sciences was established to provide an easily accessible and protected area in which ecological and environmental research could be conducted. Projects at the Bay Center are carefully chosen for their merit and to assure that they complement rather than duplicate work being done elsewhere. The variety of ecosystems, including marshes, abandoned pastures, upland hardwood forests, and cultivated land at the Center, are used by scientists from various bureaus of the Smithsonian, federal and state agencies, and a consortium of universities for studies covering a wide variety of subjects.

A comprehensive ecological study is needed of the Chesapeake Bay watershed. This area has considerable economic importance, and is being subjected to increasing amounts of thermal and chemical pollution. The program would include studies to determine energy output, the total biological productivity of the land and the estuary, and the effects of pollution. Essential to this study is the research program at the Chesapeake Bay Center, a summary of which is shown on the following page. A resident ecologist, program assistant ($22,000), and $27,000 for support in the form of travel, supplies, equipment, and other services are requested to develop, coordinate, and implement this comprehensive ecological study of the Chesapeake Bay watershed. Under their direction and guidance, scientists from the Smithsonian and elsewhere would engage in a systematic study of the Chesapeake Bay area around the Center and in other selected areas of scientific interest.

The Center's utility to scientists depends upon the land and water areas remaining undisturbed. However, in the past, picnickers, poachers, vandals, and other trespassers have disturbed the land and water area and the carefully designed experiments set up through the Center. For this reason, a security officer ($6,000) is requested to provide the proper protection for the Center's facilities and experiments.

Chesapeake Bay Center for Environmental Sciences
Examples of Research Projects Being Conducted

Estuarine Studies

Water quality including the measurement of temperature, salinity, PH, conductivity, and dissolved oxygen and nutrients such as ammonia, nitrates, nitrite-nitrogen, polyphosphates, orthophosphates.

Fish populations, varieties, distribution, rate of growth, and predator-prey relationships.

The productivity of plankton in the estuary and its tributaries.

The distribution and abundance of native and introduced aquatic vegetation.

Studies of the epifauna community.

Bacterial characteristics of the water.

Bottom sedimentology and bathymetry in the estuary.

Terrestrial Studies

Ecology of birds, especially ducks, geese, and swans.

Studies of terrestrial plants and animals.

Vegetation mapping.

Population studies of terrestrial birds and their relation to successional plant communities.

Underlying mechanisms of vegetation change.

Diseases of Plants and Animals

Host-parasite relationships of birds, viruses, and blood parasites.

Diseases of aquatic plants.

Pesticide residues in plants, animals, and birds.

Archeology

Field work into the 35-40 sites, identified so far on the Center's property, that date as far back as 500 B.C.

Land-Use History

Research into previous occupancy and the utilization of the land in order to understand the present nature, distribution, and abundance of plant and animal communities.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

OFFICE OF OCEANOGRAPHY AND LIMNOLOGY

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	18	8	26
11 Personnel Compensation	$253,000	$ 68,000	$ 321,000
12 Personnel Benefits	19,000	5,000	24,000
21 Travel & Transp. of Persons	5,000	5,000	10,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	4,000	2,000	6,000
24 Printing and Reproduction	0	0	0
25 Other Services	40,000	40,000	80,000
26 Supplies and Materials	7,000	20,000	27,000
31 Equipment	8,000	20,000	28,000
TOTAL	$336,000	$ 160,000	$ 496,000
Analysis of Total			
Pay Increases	$18,000	$10,000	$28,000
Program	$318,000	$150,000	$468,000

Specification of Increase (Program):

Smithsonian Oceanographic Sorting Center (8 positions, $150,000)

The Sorting Center processes marine samples for use by more than 300 scientists in 27 countries in their research projects ranging from taxonomic studies to pollution control. In the past year, the Center sorted 3,500,000 specimens for 289 researchers, 55 of whom were in federal agencies. In addition, the Center provides advice and assistance on specimen-related activities such as field collection and the disposition of sorted samples in repositories. The Center has made concerted efforts to improve its productivity and efficiency. However, the increased number of samples sent to the Center, coupled with an increased demand for specimens, has created a large backlog of unsorted material. Unless these samples are processed soon, many of them will deteriorate to the point of uselessness for research purposes. To raise the capacity of the Center to the point where it can meet the demand for specimens, the Center requires seven sorter-technicians and a chemist ($63,000), funds for travel ($5,000), utilities ($2,000), supplies, materials, and equipment ($40,000), and other services ($40,000).

OFFICE OF OCEANOGRAPHY AND LIMNOLOGY

1969 Actual	$310,000
1970 Estimate	$336,000
1971 Estimate	$496,000

The Office of Oceanography and Limnology was established to provide increased knowledge of the oceans and fresh waters that comprise 71 percent of our planet. Through its sorting centers in Washington, D. C., and in Tunisia (the latter principally supported by the foreign currency program), the Office serves as a substantial producer and repository of biological and geological data for federal and private users and broadens the ability of scientists to respond to national needs. The Office also facilitates the productive involvement of Smithsonian and other scientists and research organizations in marine and freshwater research by providing a focal point for their effective use of Smithsonian resources. Emphasis has been given to assisting investigators in the problems associated with the consequences of environmental modification, including such biological changes as may result from the connection of the two oceans, problems of nearshore modification, and pollution.

An increase of $150,000 is requested to strengthen the operations of the Smithsonian Oceanographic Sorting Center. Funds in the amount of $10,000 are requested for necessary pay increases for the Office's present staff.

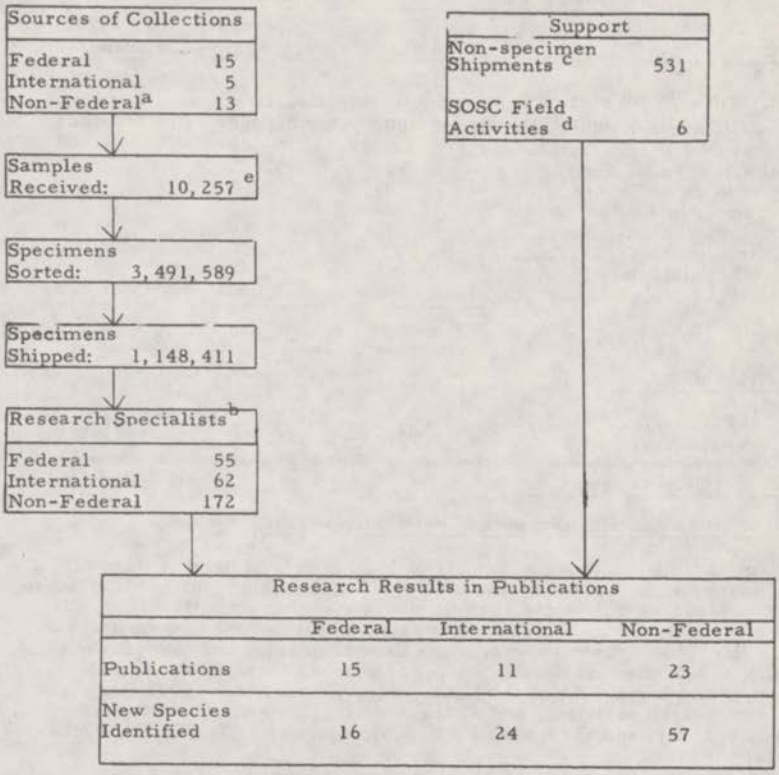
Need for Increase--The Office of Oceanography and Limnology operates the Smithsonian Oceanographic Sorting Center, which processes marine specimens from United States and international expeditions for use by more than 300 scientists from 27 countries in specimen-related research. The Center provides marine biological and geological identification services and serves as a national referral service for all kinds of specimen-based activities, from field collecting to the disposition of identified species in permanent repositories. The Center receives bulk samples, including station data (water, temperature, salinity, etc.), from governmental and private sources, sorts them into appropriate groupings, and sends them, upon request, to researchers and scientists for use in various research projects. A summary of the activities of the Sorting Center during fiscal year 1969 is shown on the following page.

The Sorting Center has made concerted efforts to improve its productivity. An automatic data processing system for specimen records has been started. Many manual operations--including the preparation of labels, inventory cards, and shipping documents--have been automated. Many instruments and scientific devices have been acquired or fabricated by the Sorting Center to improve efficiency and, when possible, have been purchased through government surplus sources to cut costs. Field manuals for the identification of the common and important species are being developed, as well as new techniques for the preservation and fixation of marine biological specimens.

Even after instituting these efficiencies, the Center is unable to meet the increasing demand from colleges, universities, and federal agencies for specimens. Backlogs of unsorted samples now exist for specimens gathered from the Great Lakes and several important oceanic expeditions. The backlog is due primarily to the fact that the present staff is unable to process and sort the more than 10,000 samples being received annually. Unless these backlogged samples are sorted soon, many will deteriorate to the point of being useless for research.

In order to alleviate this backlog, $63,000 are requested for eight positions to be used for sorter-technicians and a chemist who will be employed to process and preserve the large number of specimens at the Center. Support funds in the amount of $87,000 are requested to provide services, supplies, and equipment essential to sort, package, and distribute specimens, travel, and rental of equipment.

Smithsonian Oceanographic Sorting Center
Fiscal Year 1969



In addition to supplying 55 Federal organizations and specialists with specimens through the Sorting Center, the Office of Oceanography and Limnology has worked closely with the President's National Council on Marine Resources and Engineering Development through participation in its committees and panels, and also with the National Water Commission by developing an Ecological Review Panel to assist the Commission in developing their study. It has also responded to many requests for aquatic data from the Departments of Interior, Navy, State, Army, Transportation, and Health, Education, and Welfare, and the Atomic Energy Commission, and has assisted the Corps of Engineers in the development and evaluation of pollution studies.

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[a] United States and foreign colleges, universities, institutes, and others.

[b] Approved by SOSC Advisory Committees.

[c] Supplies and collecting gear for expeditions, cruise reports, data summaries and charts, bottom photographs.

[d] Participation in cruises and expeditions.

[e] Samples vary in size from test tubes to thousands of gallons in drums.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

CENTER FOR THE STUDY OF MAN

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	2	3	5
11 Personnel Compensation	$ 27,000	$ 24,000	$ 51,000
12 Personnel Benefits	2,000	2,000	4,000
21 Travel & Transp. of Persons	2,000	5,000	7,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	0	0	0
24 Printing and Reproduction	0	0	0
25 Other Services	81,000	18,000	99,000
26 Supplies and Materials	0	0	0
31 Equipment	1,000	2,000	3,000
TOTAL	$ 113,000	$ 51,000	$ 164,000
Analysis of Total			
Pay Increases	$2,000	$1,000	$3,000
Program	$111,000	$50,000	$161,000

Specification of Increase (Program):

Handbook of North American Indians (3 positions, $45,000)

This Handbook will be an encyclopedia of 15 or more volumes, summarizing all that is known of the prehistory and history of all Indian groups north of Mexico. Work up to now has been directed at preliminary planning activities--lists of 2,000 potential contributors have been compiled, consultations and meetings to develop the Handbook's format and contents have been held, and procedures to screen and check the manuscripts developed. It is now time for the actual work on the Handbook to begin. To do this, the Center for the Study of Man requires an editor, a research assistant, and a clerk-typist ($25,000), funds for travel to meet with scholars and researchers ($5,000), equipment ($2,000), and other services ($18,000).

Urgent Anthropology Small Grants Program ($5,000)

The primary purpose of this program is to gather data on cultures or subcultures that are rapidly changing or disappearing due to economic or technological pressures. By awarding small grants from $100 to $1,000, qualified investigators are enabled to carry out research before the changes become so pronounced as to make research difficult, if not impossible. In addition, the small grants program provides the Smithsonian with valuable data at far less cost than possible by other means. This request is for $5,000 to be used for a number of small grants in urgent anthropology.

CENTER FOR THE STUDY OF MAN

1969 Actual	$82,000
1970 Estimate.....	$113,000
1971 Estimate.....	$164,000

The Center for the Study of Man was established in 1968 to foster and coordinate interdisciplinary research, education, and service efforts involving scientists and historians from the Smithsonian and other institutions in this country and abroad, to facilitate the study of man on a worldwide scale. Its special concern is the development of the human sciences as they deal with all cultures and peoples from the earliest times to the present and the relevance of anthropological knowledge to major problems which beset mankind.

An increase of $50,000 is requested to continue work on the revision of the Handbook of North American Indians and to fund an Urgent Anthropology Small Grants Program. An additional $1,000 are sought to help meet necessary pay increases.

Need for Increase

1. Handbook of North American Indians (3 positions, $45,000)

The Handbook will be an encyclopedia of 15 or more volumes, summarizing all that is known of the prehistory and history of traditional and modern cultures of all the Indian groups north of Mexico. The new Handbook will utilize the resources of the Institution--scientific staff, manuscript and picture archives, library, and museum collections--which are unexcelled as a basis for this project--to update and replace the previous standard encyclopedic work on this topic which was issued by the Smithsonian in 1907-1910. The revised Handbook will become the standard reference work on all aspects of North American Indian history and cultures for students, teachers, authors, researchers, and administrators, both Indian and nonIndian.

The plans for the new Handbook were first announced in 1966. Since then, work on the revisions has been directed at preliminary planning activities--lists of some 2,000 potential contributors have been compiled; consultations held on organizing the Handbook's contents; and procedures to screen and check manuscripts developed. The Handbook is now at the stage where actual work on the book can begin. Any delays will cause the disillusionment of the academic community whose support as contributors and advisors is essential. An amount of $25,000 is requested to provide for an editor, a research assistant, and a clerk-typist. An additional $20,000 will be required for travel, equipment, short-term research contracts, and other services.

2. Urgent Anthropology Small Grants Program ($5,000)

The primary purpose of this program is to gather data on cultures or subcultures that are rapidly changing or disappearing as a result of economic or technological pressures. By awarding small grants, from $100 to $1,000, it enables qualified investigators in many areas to carry out urgent research on groups while they still exist as distinct entities. Results of these studies may have bearing on the solution of social and economic problems. A pilot project consisting of a series of small awards, made from grant funds (usually on a matching basis with other institutions), over the past several years has proved highly successful, frequently taking advantage of researchers who happen to be on the scene. A $300 grant to a VISTA volunteer working in an Eskimo village enabled him to document changes to the traditional culture of a village caused by industrialization. Another grant of only $150 provided for the recording on film and tape of traditional music of the native people of the Eastern Caroline Islands. Both of these projects provided the Smithsonian with valuable data at far less cost than obtainable by other means. Similar grants would be made under this program.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

CENTER FOR SHORT-LIVED PHENOMENA

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	0	1	1
11 Personnel Compensation	$ 0	$ 6,000	$ 6,000
12 Personnel Benefits	0	1,000	1,000
21 Travel & Transp. of Persons	0	0	0
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	10,000	8,000	18,000
24 Printing and Reproduction	0	6,000	6,000
25 Other Services	0	2,000	2,000
26 Supplies and Materials	0	2,000	2,000
31 Equipment	0	0	0
TOTAL	$10,000	$ 25,000	$ 35,000
Analysis of Total			
Pay Increases	0	0	0
Program	$10,000	$25,000	$35,000

Specification of Increase (Program):

Improved Event Notification Capability (1 position, $25,000)

The Center for Short-Lived Phenomena acts as a clearing house for the receipt and dissemination of information on rare natural events which might otherwise go unobserved or uninvestigated. Last year the Center participated in 146 geophysical, astrophysical, and biological events compared with 68 events in the previous year. Over 250,000 event notifications were sent to 2,252 correspondents in 122 countries. Forty-six federal agencies and departments are users of the Center's services. The Center has been successful in obtaining outside assistance for special projects, such as the Apollo flights, and it has started a subscription system for those individuals and organizations who are receivers, but not major contributors, of information. However, the success of the Center's regular operations depends heavily upon the core of federal support it receives. The volume of work has put a strain upon the limited resources of the Center. In order to meet this growing workload, the Center requires a publication specialist ($7,000) and funds for communications ($8,000), printing ($6,000), and supplies and other services ($4,000).

CENTER FOR SHORT-LIVED PHENOMENA

1969 Actual	0
1970 Estimate	$10,000
1971 Estimate	$35,000

The Center for Short-Lived Phenomena was established in fiscal year 1968 to serve as a clearing house for the timely receipt and dissemination of information concerning rare natural events which might otherwise go unobserved or uninvestigated. Rapid dissemination of event reports permits research teams to enter an area, often while the event is occurring, to gather information that otherwise would be lost to science. Reports are received from a wide range of sources, including news media, private citizens, individual scientists, and scientific observatories. These reports are made available to investigators and others who become correspondents of the Center and indicate their desire to receive them. Reports are transmitted by radio, cable, telephone, or air mail, depending on the correspondent's ability to receive the information and/or respond to the event.

An increase of $25,000 is requested to provide for a publications specialist and sufficient communications services to report the increasing number of events to a worldwide network of scientists and researchers.

Need for Increase--During 1969, the Center participated in 146 geophysical, astrophysical, and biological events as compared to 68 events in 1968, including 23 major earthquakes and other earth science events such as landslides, landrises, storm surges, and tsunamis; 51 ecological events including 11 animal eruptions, migrations, and colonizations; 17 major oil spills and pollution events; 21 astrophysical events including 16 major fireballs, 5 meteorite falls and their recovery; 7 urgent anthropological/archeological events including two new tribe discoveries. Other events of interest included a floating island in the Caribbean, a submarine volcanic eruption in the Solomon Islands, the Indo-Pacific starfish plague, and 44 events of transient lunar phenomena observed during the Apollo manned lunar missions. A partial list of the events reported by the Center for Short-Lived Phenomena during the first 10 months of calendar year 1969 is shown on the following page.

These events led to 54 actual onsite investigations. Twenty scientific publications have resulted from the Center's operations. The Center's work has received an enthusiastic response from the scientific community throughout the world. It has been besieged with requests from universities, foundations, Federal agencies, and scientific societies asking to become part of the Center's reporting system. Its number of correspondents has grown to 2,252 in 122 countries, representing every major scientific discipline. New requests continue to arrive at the rate of 50 a month. Forty-six Federal agencies and departments are users of the Center's services.

The Center has instituted every possible efficiency including automatic computer printouts of event notifications. However, the resources of the Center are severely limited and its current ability to cope with more than 250,000 event notifications is very inadequate. The Center has been successful in obtaining outside financial support for special projects, e.g. the Apollo flights, and has also started a subscription system for those individuals and organizations who are receivers, but not major contributors of information. While some $15,000 will be raised by this means, the success of the Center's regular operations depends heavily on the level of the core Federal funding it receives. The most essential need is for a publications specialist to handle the increased event traffic and for operations and communications services to assure that sufficient facilities will be available to maintain the required speed and level of event reporting ($25,000).

SMITHSONIAN INSTITUTION
CENTER FOR SHORT-LIVED PHENOMENA

INDEX TO EVENTS

EVENT NUMBER	NAME	LOCATION	DATE OF EVENT
1-69	SOLOMON ISLANDS EARTHQUAKE	SOLOMON ISLANDS	5 JANUARY 1969
2-69	SANTA FE PREHISTORIC CAMEL TRACKS	NEW MEXICO, USA	6 JANUARY 1969
3-69	OITA-TOKYO FIREBALL	JAPAN	7 JANUARY 1969
4-69	MT. MERAPI VOLCANIC ERUPTION	INDONESIA	8 JANUARY 1969
5-69	ATHENS FIREBALL	GREECE	16 JANUARY 1969
6-69	WAMA STONE AXE TRIBE DISCOVERY	SURINAM, S.A.	8 JUNE 1968
7-69	CEDAR RAPIDS FIREBALL	IOWA, USA	26 JANUARY 1969
8-69	MINDANAO EARTHQUAKE	PHILIPPINES	30 JANUARY 1969
9-69	SANTA BARBARA OIL SPILL	CALIFORNIA, USA	30 JANUARY 1969
10-69	ST. MARYS' DUCK KILL	MARYLAND, USA	23 JANUARY 1969
11-69	PUEBLITO DE ALLENDE METEORITE SHOWER	MEXICO	8 FEBRUARY 1969
12-69	GUNUNG IJA VOLCANIC ERUPTION	INDONESIA	27 JANUARY 1969
13-69	TELICA VOLCANIC ACTIVITY	NICARAGUA	11 FEBRUARY 1969
14-69	HOUSTON FIREBALL	TEXAS, USA	6 FEBRUARY 1969
15-69	ANCHORAGE MOOSE MIGRATION	ALASKA, USA	MID-FEBRUARY 1969
16-69	KILAUEA VOLCANIC ERUPTION (1969)	HAWAII, USA	22 FEBRUARY 1969
17-69	DECEPTION ISLAND VOLCANIC ERUPTION (1969)	ANTARCTICA	21 FEBRUARY 1969
18-69	MAKASSAR STRAIT EARTHQUAKE	INDONESIA	23 FEBRUARY 1969
19-69	MT. ERU LOBO VOLCANIC ERUPTION	INDONESIA	27 FEBRUARY 1969
20-69	PORTUGUESE EARTHQUAKE	PORTUGAL	28 FEBRUARY 1969
21-69	MALAWI FIREBALL	MALAWI, AFRICA	21 JANUARY 1969
22-69	PERUVIAN ANT IRRUPTION	PERU, S.A.	1 MARCH 1969
23-69	TECOLUTLA SEA ANIMAL DISCOVERY	MEXICO	6 MARCH 1969
24-69	COOK INLET OIL SPILL	ALASKA, USA	4 MARCH 1969
25-69	LOUISIANA OIL SPILL	LOUISIANA, USA	16 MARCH 1969
26-69	MINAMI-DAKE, SAKURA-ZIMO VOLCANO	JAPAN	8 MARCH 1969
27-69	CHICAGO RIVER OIL SPILL	ILLINOIS, USA	21 MARCH 1969
28-69	ICELAND POLAR BEAR KILL	ICELAND	22 JANUARY 1969
29-69	DIDICAS VOLCANO	PHILIPPINES	27 MARCH 1969
30-69	TURKEY EARTHQUAKE	TURKEY	28 MARCH 1969
31-69	HALMAHERA ISLAND EARTHQUAKE	INDONESIA	27 MARCH 1969
32-69	RED SEA EARTHQUAKE	RED SEA AREA	31 MARCH 1969
33-69	ETHIOPIAN RIFT EARTHQUAKE	ETHIOPIA, AFRICA	29 MARCH 1969
34-69	GREENVILLE FIREBALL	S. CAROLINA, USA	31 MARCH 1969
35-69	NORSALV LANDSLIDE	SWEDEN	12 APRIL1969
36-69	URKUT LANDSLIDE	HUNGARY	14 MARCH 1969
37-69	NAPA FIREBALL	CALIFORNIA, USA	15 APRIL 1969
38-69	NEW JERSEY FISH/CRUSTACEAN MORTALITY	NEW JERSEY, USA	SEPT/OCT 1968
39-69	DUTCH COAST OIL SPILL	NETHERLANDS	20 FEBRUARY 1969
40-69	BELFAST METEORITE FALL	IRELAND	25 APRIL 1969
41-69	RINCON DE LA VIEJA VOLCANIC ACTIVITY	COSTA RICA, C.A.	22 APRIL 1969
42-69	HOUSTON FIREBALL NO. 2	TEXAS, USA	3 MAY 1969
43-69	FARALLON DE PAJAROS SUBMARINE VOLCANIC ERUPTION	MARIANNA ISLANDS	11 MARCH 1969
44-69	POAS VOLCANIC ACTIVITY	COSTA RICA, C.A.	3 MAY 1969
45-69	GREAT BARRIER REEF STARFISH PLAGUE	AUSTRALIA	1968-1969
46-69	SAMAR SPONTANEOUS SOIL BURN	PHILIPPINES	20 APRIL 1969
47-69	SANDY HOOK FISH KILL	NEW JERSEY, USA	11 MAY 1969
48-69	AMCHITKA EARTHQUAKE	ALASKA, USA	14 MAY 1969
49-69	HAMILTON TRADER OIL SPILL	ENGLAND	30 APRIL 1969
50-69	ARISTARCHUS RED SPOT	MOON	1 APRIL 1969
51-69	LAKE MICHIGAN SALMON HIGH DDT RESIDUE DISCOVERY	MICHIGAN, USA	MARCH 1969
52-69	ARISTARCHUS BRIGHTENINGS	MOON	21 MAY 1969
53-69	MT. RAINIER SEISMIC ACTIVITY	ALASKA, USA	1968-1969
54-69	PISCATAQUS RIVER OIL SPILL	NEW HAMPSHIRE, USA	22 MAY 1969
55-69	SALO LANDSLIDE	FINLAND	19 MAY 1969
56-69	SHANTUNG TIDAL WAVE	PEOPLE'S REP./CHINA	23 APRIL 1969
57-69	JUNIN LAGOON MARINE POLLUTION	PERU, S.A.	12 MAY 1969
58-69	MEKONG VALLEY FLOODING	SOUTH EAST ASIA	1971-1986
59-69	IOWA FIREBALL	MIDWEST USA	5 JUNE 1969
60-69	WEYMOUTH OIL SPILL	MASSACHUSETTS, USA	7 JUNE 1969
61-69	MISSOURI MASTODON FOSSIL FIND	MISSOURI, USA	4 JUNE 1969
62-69	UBINAS VOLCANIC ACTIVITY	PERU, S.A.	1 JUNE 1969
63-69	BECEJ NATURAL GAS ERUPTION	YUGOSLAVIA	4 JUNE 1969
64-69	MEDITERRANEAN SEA EARTHQUAKE	MEDITERRANEAN SEA	12 JUNE 1969
65-69	RALEIGH BAY BIRD KILL	N. CAROLINA, USA	13 JUNE 1969
66-69	ARARAQUARA FIREBALL	BRAZIL	11 JUNE 1969
67-69	SOUTH CHINA FLOODING	CHINA	MAY 1969
68-69	ALMA OIL SPILL	WISCONSIN, USA	16 JUNE 1969

SMITHSONIAN INSTITUTION
CENTER FOR SHORT-LIVED PHENOMENA

INDEX TO EVENTS

EVENT NUMBER	NAME	LOCATION	DATE OF EVENT
69-69	RHINE RIVER FISH KILL	GERMANY-NETHERLANDS	21 JUNE 1969
70-69	RUAPEHU VOLCANIC ERUPTION	NEW ZEALAND	22 JUNE 1969
71-69	VICTORIAN TREMORS	AUSTRALIA	20 JUNE 1969
72-69	INDIANA FIREBALL	MIDWESTERN USA	26 JUNE 1969
73-69	CASTROVIRREYNA SINKING	PERU	25 JUNE 1969
74-69	COOK INLET OIL SPILL II.	ALASKA, USA	23 JUNE 1969
75-69	UTHAI THANI SITE DISCOVERY	THAILAND	14 JUNE 1969
76-69	CHILI RIVER CONTAMINATION	PERU	14 JUNE 1969
77-69	SACSAYHUMAN MINIATURE SCULPTURE FIND	PERU	14 JUNE 1969
78-69	TOLEDO CATTLE KILL	SPAIN	1968-1969
79-69	MAGHAR LANDSLIDE	ISRAEL	JAN./FEB. 1969
80-69	TUNIS FIREBALL	TUNISIA	6 JULY 1969
81-69	NEWPORT CLAM IRRUPTION	RHODE ISLAND, USA	JUNE 1969
82-69	TOLFA TREMORS	ITALY	2 JULY 1969
83-69	LEINE RIVER POLLUTION	GERMANY	3 JULY 1969
84-69	CHIRIMACHAS ADVANCE	PERU	1968-1969
85-69	SOOTY TERN HATCH FAILURE	FLORIDA, USA	MAY/JUNE 1969
86-69	WINDWARD PASSAGE FLOATING ISLAND	CUBA	4 JULY 1969
87-69	MASSACHUSETTS BIRD KILL	MASSACHUSETTS, USA	29 JUNE 1969
88-69	AMAZON RIVER PORPOISE DISAPPEARENCE	PERU	1968-1969
89-69	CORUSQUIRA LANDSLIDE	AZORES	25 JUNE 1969
90-69	JAPANESE BAMBOO KILL	JAPAN	1969
91-69	UNITED KINGDOM BIRD KILL	ENGLAND	6-9 JULY 1969
92-69	YELLOW SEA EARTHQUAKE	CHINA	18 JULY 1969
93-69	CHARLES RIVER FISH KILL	MASSACHUSETTS, USA	18-20 JULY 1969
94-69	TRANQUILITY BASE MOONQUAKE	MOON	24 JULY 1969
95-69	PERUVIAN TREMORS	PERU	24 JULY 1969
96-69	COLOMBIAN TRIBE DISCOVERY	COLOMBIA	MARCH 1969
97-69	SOUTHERN LAKE MICHIGAN ALEWIFE MORTALITY	MICHIGAN, USA	JULY/AUGUST
98-69	MOLUCCA PASSAGE EARTHQUAKE	INDONESIA	5 AUGUST 1969
99-69	OHIO-INDIANA FIREBALL	OHIO-INDIANA, USA	5 AUGUST 1969
100-69	NORTHEASTERN U.S. GYPSY MOTH INFESTATION	NORTHEAST U.S.	JULY/AUGUST 1969
101-69	KURIL ISLANDS EARTHQUAKE	KURIL ISLANDS, USSR	11 AUGUST 1969
102-69	LAS CRUCES FIREBALL	NEW MEXICO, USA	9 AUGUST 1969
103-69	SOUTH AFRICA: OILING OF PENGUINS	REP. OF S. AFRICA	10 AUGUST 1969
104-69	NORTH ISLAND (N.Z.) FIREBALL	NEW ZEALAND	3 JUNE 1969
105-69	WATERFOWL KILL/BOTULISM	UNITED STATES	AUGUST 1969
106-69	GUYANA ARCHAEOLOGICAL FIND	GUYANA	1969
107-69	TATARANYA MUD FLOW	HUNGARY	15 AUGUST 1969
108-69	GIRONDE OIL SPILL	ST. BRIEUC, FRANCE	19 AUGUST 1969
109-69	EASTERN U.S. HIGH AIR POLLUTION POTENTIAL	EASTERN U.S.	AUGUST 1969
110-69	GALAPAGOS ISLANDS TREMORS	GALAPAGOS ISLANDS	30 AUGUST 1969
111-69	HUEHUETENANGO LANDSLIDE	GUATEMALA	28 AUGUST 1969
112-69	PANAMA MOTH MIGRATION	PANAMA	13 AUGUST 1969
113-69	EUROPEAN BIRD MIGRATION SCARCITY	EUROPE	1969
114-69	MEIJE ROCKFALL	FRANCE	2 SEPTEMBER 1969
115-69	AMCHITKA PASS EARTHQUAKE	ALEUTIAN ISLANDS	12 SEPTEMBER 1969
116-69	ALEUTIAN ISLANDS VOLCANIC ERUPTION	LITTLE KISKA, AK.	12 SEPTEMBER 1969
117-69	DAVAO "LAND-RISE"	PHILLIPINES	MAY 1969
118-69	WEST FALMOUTH OIL SPILL	MASSACHUSETTS, USA	16 SEPTEMBER 1969
119-69	TRINIDAD BUTTERFLY INVASION	TRINIDAD	SEPTEMBER 1969
120-69	POLICE METEORITE FALL	CZECHOSLOVAKIA	16 SEPTEMBER 1969
121-69	MIAMA SNAIL INFESTATION	FLORIDA, USA	SEPTEMBER 1969
122-69	CAPE PROVINCE EARTHQUAKE	SOUTH AFRICA	29 SEPTEMBER 1969
123-69	SANTA ROSA EARTHQUAKE	CALIFORNIA, USA	2 OCTOBER 1969
124-69	PRINCE GEORGE METEORITE FALL	CANADA	21 AUGUST 1969
125-69	MURCHISON METEORITE FALL	AUSTRALIA	28 SEPTEMBER 1969
126-69	OZARKS FIREBALL	KANSAS, USA	9 OCTOBER 1969
127-69	GREAT BRITAIN BIRD MORTALITY	GREAT BRITAIN	OCTOBER 1969
128-69	HUANCAYO EARTHQUAKE	PERU	1 OCTOBER 1969
129-69	ST. LOUIS SPIDER INVASION	MISSOURI, USA	8 OCTOBER 1969
130-69	CANLAON VOLCANIC ERUPTION	PHILIPPINES	11 OCTOBER 1969
131-69	BANJA LUKA EARTHQUAKE	YUGOSLAVIA	26 OCTOBER 1969
132-69	CALIFORNIA CHANNEL IS. EARTHQUAKES	CALIFORNIA, USA	22 OCTOBER 1969
133-69	MT. TAAL VOLCANIC ERUPTION	PHILIPPINES	29 OCTOBER 1969
134-69	KOVACHI SUBMARINE VOL. ERUPTION	SOLOMON ISLANDS	30 OCTOBER 1969
135-69	BEZMIANNY VOLCANIC ERUPTION	U.S.S.R.	3 NOVEMBER 1969
136-69	WESTPORT SNAKE MORTALITY	CANADA	13 OCTOBER 1969

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

AMERICAN REVOLUTION BICENTENNIAL

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	0	5	5
11 Personnel Compensation	$ 0	$ 74,000	$ 74,000
12 Personnel Benefits	0	6,000	6,000
21 Travel & Transp. of Persons	0	20,000	20,000
22 Transportation of Things	0	20,000	20,000
23 Rent, Comm. and Utilities	0	1,000	1,000
24 Printing and Reproduction	0	10,000	10,000
25 Other Services	0	110,000	110,000
26 Supplies and Materials	0	90,000	90,000
31 Equipment	0	65,000	65,000
41 Grants	0	4,000	4,000
TOTAL	$ 0	$ 400,000	$ 400,000
Analysis of Total			
Pay Increases	0	0	0
Program	0	$400,000	$400,000

Specification of Increase (Program):

Bicentennial Planning, Research, and Exhibitions (5 positions, $400,000)

The Bicentennial presents an extraordinary opportunity to review national accomplishments and goals and renew public hope and confidence in the future. The Smithsonian can play an important role in this observance drawing upon its scholarly staff, collections documenting the history and growth of the United States, effective working relationships with museums across the country, and strong attraction for the visiting general public. A number of events and exhibits relating to the period of the Revolution have been held. With the additional $400,000 requested, the Smithsonian proposes to develop a comprehensive array of exhibitions, both for Washington and for circulation to other communities, publications, seminars, and advisory and technical services to assist other museums and state and local history organizations in their activities.

AMERICAN REVOLUTION BICENTENNIAL PROGRAM

1969 Actual	0
1970 Estimate	0
1971 Estimate	$400,000

The 200th anniversary of the United States will be an occasion for Americans to reassess the ideals which brought about the Revolution, to review our national achievements, to place in perspective ethnic, cultural, and religious diversities which have consistently contributed to our national development, to see where we have fallen short of maintaining the spirit of 1776, and to build a stronger base for hope and confidence in our future. The Bicentennial presents a unique opportunity for strong reaffirmation of the self-reliance, courage, and pursuit of worthy goals and high ideals which characterized the leaders of the Revolution.

With its scholarly staff, a large and broadly-based public participation in its activities, and as the national repository of objects documenting the history and growth of the United States, the Smithsonian Institution will play an important role in the observance of the Bicentennial of the American Revolution. In anticipation of increasing public interest, the Smithsonian Institution has initiated scholarly research and across-the-board planning to provide historical accuracy and latest technology to its projected exhibitions and other programs relating to the events leading up to the Revolution. This ground work will enhance the educational quality of our programs in later years. Some preliminary exhibitions and events have already been held, beginning in fiscal year 1965. A listing of these appears in Table 1. These preliminary activities have been funded by the Smithsonian's regular appropriations. Since the level of commemorative activity must increase as 1976 approaches, additional funds will become necessary.

Table 1

Smithsonian Projects Relating to the Bicentennial
through fiscal year 1970

Exhibition on George Mason and the Virginia Bill of Rights;

Exhibition on individual rights as dramatized by the 200th Anniversary of the Stamp Act;

Exhibition on the Townshend Acts;

Small exhibit of Charles Willson Peale silhouettes, an aspect of American graphic arts history;

Annual Folk Festivals on the Mall;

Performances of Americana in the Mall tent;

Exhibition on the history of American music making in colonial Boston, Mount Vernon, the Moravian colony, and folk music of the time;

Research opportunities at the graduate level in American studies, in American military and naval history, and in civil history;

Study programs at the National Portrait Gallery, National Collection of Fine Arts, Freer Gallery, and the Center for the Study of Man, which has extensive resources for the study of the American Indian;

Exhibition on printing and print making in the first 150 years of American life;

Research studies in museum administration, conservation, and exhibits;

Study programs at the Cooper-Hewitt Museum in New York.

These various Smithsonian activities have focused on the growing tensions between the New World settlers and the Mother Country; the development of a distinctive American culture; and the development of a technology responsive to our material requirements.

The responsibility of the Smithsonian in the 200th anniversary observances, the expectations of the President, the proper demands of the Congress and concerned private organizations and persons, will all be disappointed if the contribution of the Smithsonian must be limited to that possible within regular budgetary ceilings.

Intensified preparations must begin in fiscal year 1971 if the Smithsonian is to perform according to the letter and spirit of Congressional and public requests. The special budget request for the Smithsonian's participation in the Bicentennial of the American Revolution for 1971 is $400,000.

This initial funding, with gradual increases as activity is stepped-up, will be needed through fiscal year 1977, as indicated in Table 2. This special funding will not result in significant permanent increases in the Institution's staff or appropriations base. Collections, exhibitions, research, and publications, however, will continue to be a tangible result of this investment long after the close of the Bicentennial Era.

Table 2

Bicentennial Activities and Budget Forecast
(in thousands of dollars)

	1971	1972	1973	1974	1975	1976	1977
Exhibitions and Performances	$250	$405	$500	$500	$600	$650	$400
Research and Publications	50	100	125	125	125	125	100
Planning and Administration	100	100	100	100	100	75	50
Total	$400	$605	$725	$725	$825	$850	$550
Staff	5	8	12	14	16	18	18

1. Washington Programs $280,000

Current data indicate that every other visitor to Washington is also a visitor to the Smithsonian's museums and art galleries. Total attendance at the Smithsonian in calendar year 1969 was over 12.4 million. It is safe to assume that the number of visitors will continue to grow, and probably at an increasing annual rate, in the years leading up to 1976.

To provide these visitors with an accurate and dramatic review of the first 200 years of our national life, the Smithsonian is planning a number of new exhibitions. While every effort will be made to open many of these new exhibitions early in the Bicentennial period, scholarship and accuracy will not be sacrificed in the interest of haste, since these exhibits must serve to educate as well as inspire.

Through the application of audio-visual and design technology, we propose to project the visitor back in time to the second half of the 18th century. Using building space as a "time corridor," instead of the traditional exhibition hall, the visitor will be surrounded by objects, sights, sounds, smells, and other aspects of the period so that he can participate in the home, work, and leisure of the colonists on the eve of the Revolution. In subsequent years, this new technique may be applied to later periods in American history.

An innovative visitor participation exhibition on the price of independence is also planned. Using interactive devices, the visitor will test his skill in any of several roles--that of a Boston merchant, a Southern planter, etc.--against the known risks of sea trade, civil war between colonies, reluctance to engage in war, fear of defeat and reparations, possible loss of markets in Great Britain, freedom of manufacture, and removal of Mother Country controls over westward expansion.

An exhibition on the three-quarters of the United States not included in the Treaty of Paris of 1783 will relate the historical background, culture, ideas, and people and their daily life in the last part of the 18th Century is also in the planning stage. This exhibition will show that the 13 Colonies of the Revolutionary War shared experiences with what was destined to become a major part of the United States.

Smaller exhibitions will cast light on everyday life in America in the mid-1770's. For example, one is tentatively entitled "Three Meals a Day," showing the American menu in the various colonies, sources of foods, techniques of preparation, and tools used in the production and cooking of meals. Another exhibit will treat the physical and political structure of towns and cities in the colonial era, using artifacts, publications, and graphics to explain the wide variety of institutions created to serve the needs of the people. A third will deal with clearing land, building houses and public buildings, tools, architectural types, and borrowed techniques and modifications applied in the New World. We also plan an exhibition on the evolution of American educational systems in the 17th and 18th centuries.

The Smithsonian will continue to develop the design concept for the Revolutionary War segment of the proposed National Armed Forces Museum Park. Here, on the outskirts of Washington, adjacent to major travel routes between the North and South at Fort Foote, we are planning a facility where visitors will see reconstructions of Revolutionary War stockades, cantonments, and equipment. The displays under consideration will show how the citizen-soldier of 1776 lived while on active duty along the frontier and in garrison towns.

2. National Programs $120,000

Wherever practicable, these special exhibitions mentioned above will be designed to conform to the needs of our Traveling Exhibition Service. Currently the Smithsonian is circulating some 200 exhibitions among museums, universities, and public institutions throughout the United States. By making these special Bicentennial programs available in every state, we will support the decision of the American Bicentennial Commission that the observances should be national in scope. We expect to expand this service to include performances as well as exhibitions of artifacts.

Under authority of the National Museum Act, we are already counseling museums around the country on how best they can display their collections during the Bicentennial Era. We expect to receive an increasing number of this kind of request as we approach 1976. In addition, many of the requests now being received are seeking help in training museum personnel in restoration, conservation, and display of objects in anticipation of major exhibitions in the next few years. We should provide all the assistance we can, within the limits of authority established in the National Museum Act.

Several national organizations have requested our help in specific areas. For example, the American Association for State and Local History has asked us to help in preparing a handbook on Bicentennial display and events which will be distributed to the Association's 3,000 members in every state, and to others on request. We also anticipate additional requests for advice and technical assistance from the various State Bicentennial Commissions.

3. International Programs 0

While no funds are being requested in fiscal year 1971 for Bicentennial activities at the international level, some work has already begun in this area. For example, the Smithsonian is considering sponsoring and coordinating study programs, research activities, and symposia involving leading scholars from those countries which made the larger contributions to the American War for Independence--Great Britain, France, Poland, Spain, and Germany. It is anticipated that the Smithsonian will be able to borrow significant Revolutionary War period artifacts from private and public collections in these countries for display in the United States during the Bicentennial Era. The Smithsonian also expects to be asked for its advice by museums abroad which will be preparing their own exhibitions showing the history of relations between the United States and the respective host countries.

The preceding paragraphs summarize the concept of the Smithsonian's Bicentennial program, aimed at reaching the broadest possible audience at all levels of interest. To recast the two budget estimates given, $280,000 for Washington programs and $120,000 for national programs, into the three interrelated areas of activity, the following expenditure program is proposed for fiscal year 1971:

Exhibitions and performances	$250,000
Research and publication	50,000
Planning and administration	100,000

Exhibitions and Performances..... $250,000

Essential to Smithsonian participation in the Bicentennial is the display of artifacts from the collections, as well as the display of contemporary and period plays, musical works, and folk arts. Exhibitions and performances must be carefully planned to take full advantage of resources and research available. Exhibitions must be fabricated in such a way as to provide high visitor interest and education. They must be designed to conform to available space, both within the Smithsonian premises and for use as traveling exhibitions. To permit the fullest participation in the educational benefits resulting from the proper display of significant historical collections, $250,000 are needed. These funds will provide the raw materials and workmanship needed to design, produce, install, and circulate exhibitions and performances.

Research and Publication $50,000

Research is a basic function of the Smithsonian. As indicated above, we have already begun a comprehensive research program into the origins and impact of the American Revolution on American life and national development. Original source material is rapidly disappearing with the passage of time. If the research is to serve fully the needs of the Bicentennial, it must be completed well before 1976 to be reflected in exhibitions, in American scholarship, and in the curricula of our educational systems. An important aspect of this research will be the holding of symposia of leading experts in various aspects of American society, resulting in a distillation of national purpose. To make the most of this research, findings must be published. Some can be published by the Smithsonian; some will best be published commercially. The Smithsonian's collections and scholarship can be used to excellent advantage in the preparation of documentary films for use in classroom showing, on educational and commercial television, and in theatrical distribution. For these purposes a request of $50,000 is made for fiscal year 1971. The Institution intends to draw on the talents of outside organizations, such as universities and colleges. Special fellowships or limited term appointments will be used wherever possible. In this way any extended increase in staff will be held to a minimum.

Planning and Administration $100,000

Fiscal year 1971 will be the first year of major Smithsonian-wide involvement in Bicentennial planning. Much of the necessary planning, administration, and coordination of activity will take place in the Office of the Director General of Museums, but other elements of the Smithsonian--notably the National Museum of History and Technology--will need support in developing projects. In addition, increased costs will begin to be incurred by certain of the administrative and central support activities for library reference work, printing, and similar research and exhibition support services.

Funding by Category of Expense

Personnel	$80,000
Special assistant for Bicentennial planning	
Program assistant	Exhibits specialist
Clerk-typists (2)	
Travel	20,000
Advisory services	Training
Research	Consultation
Transportation	20,000
Borrowing and lending objects	
Traveling exhibitions and performances	
Rent, Communications and Utilities	1,000
Office and exhibit equipment	
Printing	10,000
Guides	Handbooks
Research publications	
Services	110,000
Exhibitions design and preparation	
Training of museum personnel	Consulting
Supplies and Materials	90,000
Exhibitions preparation	
Equipment	65,000
Cases for permanent and circulating exhibitions	
Insurance	4,000
Borrowed objects	

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

ENVIRONMENTAL SCIENCES PROGRAM

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	0	14	14
11 Personnel Compensation	$ 0	$ 186,000	$ 186,000
12 Personnel Benefits	0	14,000	14,000
21 Travel & Transp. of Persons	0	35,000	35,000
22 Transportation of Things	0	5,000	5,000
23 Rent, Comm. and Utilities	0	0	0
24 Printing and Reproduction	0	25,000	25,000
25 Other Services	0	210,000	210,000
26 Supplies and Materials	0	45,000	45,000
31 Equipment	0	80,000	80,000
TOTAL	$ 0	$ 600,000	$ 600,000
Analysis of Total			
Pay Increases	0	0	0
Program	0	$600,000	$600,000

Specification of Increase (Program):

Environmental Assessment, Monitoring, and Education (14 positions, $600,000)

The Smithsonian sees its participation in improving the quality of man's environment as three-fold: identification and assessment of the components of man's natural surroundings and of his cultural development; monitoring of change for predictive purposes; and education at all levels of public interest. In order to make a significant contribution in these areas, the Institution requests an appropriation of $600,000. The Institution would use these funds for five interrelated kinds of activity reinforcing and integrating our own resources of staff, collections, and natural land areas with carefully selected additional investigators and outside advisers. These activities are:

--identifying plants and animals as bioindicators and benchmarks. Funds for field studies and publications are requested ($100,000).

--monitoring rates and processes of change. Four additional scientists for special projects with funds for research support are requested ($150,000).

--undertaking research on social biology. Funds for an anthropologist, a historian, for fellowship offerings, and a series of seminars are requested ($75,000).

--communicating environmental knowledge to the public. Funds for a program planner, for continuing the preparations of the exhibition hall on environmental life, and for a seminar series are requested ($125,000).

--developing a national referral center. Funds for four data-handling technicians and three computer specialists and computer services are requested to speed up the preparation of collection data, and applying electronic data processing to its retrieval and analysis ($150,000).

ENVIRONMENTAL SCIENCES PROGRAM

1969 Actual	$ 0
1970 Estimate	$ 0
1971 Estimate	$600,000

For many years the activities of the Smithsonian Institution have been grouped together for purposes of budget submissions to the President and to the Congress under the headings of buildings: the Museum of Natural History, the National Collection of Fine Arts, the Air and Space Museum, and so forth.

These artificial and cramping categories tend to distort the essential meaning of the Institution. From this misleading listing comes an assumption in the public mind that the Institution has long since given up its mandate "for the increase and diffusion of knowledge among men", and has taken refuge in doing a purely administrative job of keeping public buildings open during prescribed hours of the day.

In the past year, the national mood of uneasiness has become focused on the threatened decline in the quality of the environment to danger levels which may negate the advances of our technology and make a mockery of our culture. Human memory is short. This is the "now" generation, and it is all as if warnings had never been signalled before. The subject is merely becoming urgent at the moment, and therefore all levels of our society are listening at last to what had been the voices in the wilderness, whether they speak of pesticides or of venal manufacturers.

In fact the Smithsonian has always been a single institution for research and publication, and for teaching through exhibits and public education. In the 1870s, the Institution pioneered in investigations of coal smoke (then the smog over cities). Its studies of commercial fisheries in this country paved the way for the massive federal support of everything from fisheries to oceanography. The Smithsonian's measurements of solar radiation in the middle of Washington began in 1907 from the tower of the "castle" on the Mall, presumably with the thought that this was a good clear place in which to operate, have, fortunately, continued down to the present, the longest continuous series of such measurements anywhere. As the data which is being assembled with the aid of computers has now shown, there has been a net decrease of solar radiation in Washington of 16 percent in that period. The unique point is that a widespread decrease of total incident light could have catastrophic consequences for agricultural crop development and maturation ultimately disturbing the life patterns of birds and insects and seed-carrying functions and pollination.

The Smithsonian's collections after years of being considered as collections in a museum, an "attic" bypassed by modern science, are now being projected into the forefront of the environmental crisis. Now, through data processing, science is beginning to realize the inherent value of natural history collections. The rates of change of animal populations along our coasts and in our streams, correlated with changing composition of plant species, provide a time scale and a predictable future. These rates of change are extremely complex and intricate but they can be measured and thus set against a probability curve. From its vast store of data, the Smithsonian is continually being asked by government agencies such as the Agency for International Development, the Corps of Engineers, the Bureau of Commercial Fisheries, and the Federal Water Pollution Control Agency to provide such information. Our collections are thus providing a reliable set of guidelines for tolerable rates of future deterioration, one of the few such in existence. Much more could be done, however, in making these collections fully accessible and useful.

Six years ago, the Atomic Energy Commission was queried about the after-effects of a possible Sea Level Canal across the Isthmus of Panama. The Smithsonian offered to perform an ecological assessment of this proposed momentous manipulation of the environment but was turned down because the climate of understanding of such issues, as recently as six years ago, was not conducive to the Smithsonian being heard. By January 1970, an onsite survey by a committee of the National Academy of Sciences agreed unanimously that continuing ecological monitoring and experimental studies are of critical importance in the whole question of the future of such a canal. In addition, committee members have urged the Smithsonian to continue the present follow-up studies of the oil spill in December 1968 of the tanker "Witwater" off the reefs at Balboa on the Atlantic side of the Canal Zone. These are the first such studies ever made in tropical waters, and one of the very few studies designed to follow the long-term progression of ecological changes resulting from oil pollution.

Since 1964 the Smithsonian has been assembling with private funds a tract of land on the western shore of the Chesapeake Bay, less than an hour from Washington. The Institution will thereby control one small watershed in the two thousand acres of this Chesapeake Bay Center for Environmental Sciences. Members of the Congress from Maryland such as Mr. Morton and Senators Tydings and Mathias, as well as the Chairman of the Anne Arundel County Council and the Mayor of Annapolis, have all acclaimed this move, not only because it presents an opportunity, the only one of its kind near Washington, to set up a demonstration ecological center for research in watershed and estuary control and monitoring, but also because it carries great appeal to the Maryland State Government in its current concern to develop all possible methods of cooperative action in tideland and estuarine studies, vital to the future of our fisheries, recreation, and life quality. This is also consistent with the President's concept of the new Federalism.

In the international sphere, the Smithsonian is active in basic ecological studies, especially in the tropics. Smithsonian staff are assessing environmental change from the Mediterranean to Southeast Asia, and in parts of the Pacific, the Caribbean, and Latin America. Our scientists have been called upon to study the new reef-destructive outbreak of the Crown of Thorns Starfish, and legislation has been introduced into the 91st Congress to support the Institution's research in this outbreak, jointly with that of the Department of the Interior.

For the past four years the Institution has been concerned with implementing the design of an education exhibit hall, to fill an existing space under redesign in the National Museum of Natural History, which will graphically detail the biological world which surrounds us, and relate the steady deterioration of our environment. This hall will contain a variety of visitor interaction devices to provide positive educational feed-back to an estimated four million visitors a year. Tests of such interactive devices in other museums show a 50 percent ratio of retention of the message contained in an exhibit hall designed for educational purposes. The development of this hall can be a significant contribution to environmental education. The recent concern of the Congress with the introduction of a number of bills calling for environmental education indicates a direct reflection of citizen concern. Environmental education is a subtle, complex problem. It strikes perhaps at the roots of what is wrong with education in the United States today. To a consumer-oriented, endless frontier-oriented culture, such as ours, it may be a generation before the present monolithic problems of American education can be assessed sufficiently to redirect our cultural course towards conservation and the limitation of the endless growth of the Gross National Product.

Other aspects of education concern the Smithsonian, whose contacts now span students at the graduate level from more than forty universities, all using Institutional facilities and working with our staff. Within the mix of our instructional activities at the graduate and postdoctoral level there is the opportunity, possessed at present by no single university, to create an interdisciplinary approach toward studies in the environment. As countless recent authors have lamented, there seems to be no room in most current programs on the environment for humanists and social scientists. This omission is serious since the solution to environmental degradation is not to be discovered exclusively in science but must come through an interaction between the sciences and the humanities. Many root causes of the degradation are to be found in social, political, and cultural traditions of our country, such as our ideas on standards of living. In the Smithsonian, unlike a university, departmental lines are not strictly drawn. As a result, current study groups such as our Center for the Study of Man can include primate specialists, anthropologists, social scientists, historians, and ecologists. Internal and external committees derived from this Center are currently considering how to plan for a potential Museum of Man, an educational exhibit demonstration in human ecology--man as part of the environment as opposed to the role of an observer.

If we have described at length some of the current and past activities of the Smithsonian, it is to show that the Institution has not come lately into the field of environmental studies. We have been ahead of the times by collecting the data on the basic elements of the environment that we knew or well suspected would constitute a vast resource for study and education. The Institution is thus an ecological powerhouse, producing basic research information relevant to the environment, as few other institutions can claim to be doing. As Philip Abelson, editor of Science, has said, "the goal of opinion-making should be constructive action. A prerequisite for this is thorough planning based on an adequate fund of knowledge. Scientists can make imaginative contributions to planning, and they can help ensure that the factual bases for decisions are as sound as possible." It is institutions such as the Carnegie Institution of Washington, Rockefeller University, the Marine Biological Laboratory at Woods Hole, and the Smithsonian which typify the special communities of environmental scientists which the National Academy of Sciences' Environmental Studies Board recommended should be set up to study the hazardous state of the nation's environment today.

The Smithsonian, then, sees its participation in improving the quality of man's environment as three-fold: identification and assessment of the components of man's natural surroundings and of his cultural development; monitoring of change for predictive purposes; and education at all levels of public interest. In order to make a significant contribution in these areas, the Institution requests an appropriation of $600,000. These funds would be used as follows, drawing upon the Smithsonian's own resources of professional staff, laboratories, and natural areas, but with a major effort to integrate and apply these resources by drawing upon the talents of outside investigators and advisers.

1. Identifying plants and animals as bioindicators and benchmarks

Plants and animals serve as excellent continuous sentinals that warn of impending danger in the same way as the "mine canary" was used to detect deadly gases in coal mines. Many plants and animals are sensitive to various dangerous pollutants produced by man and can be used to warn of critical impending changes, which may be irreversible. The very existence of certain organisms also may serve as benchmarks to measure the impact of civilization on the environment.

Studies at Smithsonian facilities would increase our knowledge of these management tools. The National Museum of Natural History and the Smithsonian Tropical Research Institute would be heavily involved in this effort. Funds in the amount of $100,000 are requested for field studies and publications that would identify and isolate those components of the environment of special significance as bioindicators.

2. Monitoring rates and processes of change

Selected natural communities would be studied to determine their productivity, variation, and the effect of man's pollution. Quantitative studies of comparable ecosystems would provide data for intelligent land use. The detailed studies of preserved natural areas are essential to measure the rates of change and thus to predict future changes. The Chesapeake Bay Center and the Smithsonian Tropical Research Institute would be central to this effort. In addition, our Radiation Biology Laboratory, in conjunction with the Center for Short-Lived Phenomena and the Smithsonian Astrophysical Observatory with its worldwide network of tracking stations provides us with some of the tools for environmental monitoring techniques and training in them, as well as providing strategically located centers for monitoring studies. Enhancement of current activity with key additional researchers would fill gaps in existing competence and draw together ongoing studies. Four additional scientists, with funds for equipment and research support, are requested ($150,000).

3. Undertaking research in social biology

The Smithsonian would step-up development of its nascent program of studies of man evolving and man today. Building on our own competence, knowledge, and collections data in the National Museum of History and Technology, the Center for the Study of Man, Anacostia Neighborhood Museum, and other units, the Institution would bring together additional humanities scholars and social biologists in fellowship offerings and a series of seminars. Funds in the amount of $75,000 are requested for a cultural anthropologist, a social historian, and for fellowship and seminar expenses.

4. Communicating environmental knowledge to a wider public

The Institution proposes to continue to produce its educational exhibit hall on the environment and to develop a seminar series for a continuing discussion and debate with ecologists, educators, and planners representing the interests of government and private decision makers. The Smithsonian has already conducted three such international seminars, the first on Science, Culture and Society (1965), the second The Fitness of Man's Environment (1967), and the third on Man and Beast (1969), a study of recent advances in the science of social behavior. All of these seminars have been or are being published. They can be enlarged easily to provide the forum for discussion which members of the Congress, as well as other groups, continually recommend. Funds in the amount of $125,000 are requested for a program planner, contract exhibits expenses, travel, and costs of program participants.

5. Developing a National Referral Center for environmental data

The Smithsonian would develop its electronic data processing program for monitoring, retrieving, and correlating ecological and environmental data. This would be patterned on and complementary to the gradual development of our Oceanographic Sorting Center. Staff would be assigned to speed up collection data input and processing of terrestrial and aquatic biological populations from which baseline data on predictive environmental models can be constructed. This activity is fundamental to all environmental assessment and should be recognized

as a special high priority program, supportive of many of the corrective projects of federal and state agencies. Funds in the amount of $150,000 for four data-handling technicians and three computer specialists and computer services are requested.

This proposed activity would enable the Smithsonian to respond in a way that is supportive of the concerns of the President, the Congress, and the nation as an extension of our underlying goal for many years, the story of man's relation to his environment. As stated in the Smithsonian's current Annual Report, "For the present phenomenon is that our culture and our environment are no more at war with each other on terms of rough equality, but that rather our material culture is in danger of destroying our old presumed enemy, nature." Thus we should live up to our original mandate for education and diffusion of knowledge.

Funding by Category of Expense

Personnel		$200,000
Program planner	Biologists (4)	
Cultural anthropologist	Social historian	
Data technicians (4)	Computer specialists (3)	
Travel		35,000
Field research	Seminar participants	
Transportation		5,000
Field expeditions		
Printing		25,000
Research reports	Seminar proceedings	
Services		210,000
Exhibit preparation	Computer processing	
Seminars and fellowships		
Supplies and Materials		45,000
Field research and laboratory projects		
Equipment		80,000
Exhibit cases	Laboratory needs	
Total		$600,000

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

ACADEMIC PROGRAMS

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	18	2	20
11 Personnel Compensation	$ 182,000	$ 19,000	$201,000
12 Personnel Benefits	14,000	1,000	15,000
21 Travel & Transp. of Persons	10,000	0	10,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	1,000	0	1,000
24 Printing and Reproduction	0	0	0
25 Other Services	322,000	60,000	382,000
26 Supplies and Materials	3,000	0	3,000
31 Equipment	3,000	0	3,000
TOTAL	$ 535,000	$ 80,000	$ 615,000
Analysis of Total			
Pay Increases	$13,000	$5,000	$18,000
Program	$522,000	$75,000	$597,000

Specification of Increase (Program):

Higher Education and Research Training ($60,000)

No better way to guarantee the quality of research has ever been found than to maintain an environment conducive to setting and attaining the highest intellectual goals. This is a major purpose of the Smithsonian higher education program which brings predoctoral candidates and junior postdoctoral investigators into close and productive research relationships with senior established Smithsonian scientists and historians. Some 25 universities are now represented by fellowship recipients working at the Institution. The professional research staff of 350 is willing to supervise over 150 students and investigators each year but only about 25 percent of this number can be accepted. Many outstanding applicants must be turned down. The Smithsonian is requesting an additional $60,000 to increase the number of fellowships it can award each year from 40 to 44.

Elementary and Secondary Education (2 positions, $15,000)

The Smithsonian's guided tours for school children are highly popular. Some 3,000 tours, serving 100,000 children, will be conducted this year by a volunteer docent staff. Two positions are required to improve the Institution's capacity to serve in museum areas it is not now offering: an instructor in the field of technology to develop scripts and tours in the National Museum of History and Technology, and an audio-visual services technician to provide films and sound tapes to school groups to supplement their tour activity.

ACADEMIC PROGRAMS

1969 Actual $544,000
1970 Estimate $535,000
1971 Estimate $615,000

A major Smithsonian objective is to make its learning resources available to the formal educational community and to the general public. At the higher education level, the Institution, through the Office of Academic Programs, develops and coordinates fellowship programs through a variety of cooperative agreements with the nation's universities. The Office promotes research opportunities and advanced study training for doctoral candidates and postdoctoral investigators. Seminars in various curatorial and disciplinary areas are conducted which are central to the interests of the students and the Smithsonian's research efforts. Formal educational activities below the university level are also a responsibility of the Office. These include the popular escorted tours for schools, the preparation of teaching guides, lectures, and audio-visual materials. Public use of the educational facilities of the Institution is growing rapidly at all levels of training. The Smithsonian is considered a significant supplementary educational resource by colleges and universities and by elementary and secondary school systems.

An increase of $75,000 is requested including $60,000 for higher education and research training in nine disciplines, and $15,000 for the expansion of escorted tours for school children. Also requested are $5,000 for necessary pay purposes.

Need for Increase

1. Higher education ($60,000)

The Smithsonian seeks to increase from 40 to 44 the number of stipends it is able to offer visiting investigators from the nation's colleges and universities to receive specialized training in research within its facilities. The disciplines to be served and the number of associated Smithsonian professional staff in each are as follows: American history, 26; anthropology, 18; environmental biology, 23; evolutionary and behavioral biology (tropical zones), 7; evolutionary and systematic biology, 65; history of art and music, 23; history of science and technology, 30; museum studies, 25; physical sciences, 47. The interaction of the Smithsonian graduate program with museum research, and how this interaction benefits the students, the Institution, and the nation, is demonstrated on the following page.

2. Elementary and secondary education (2 positions, $15,000)

The Institution also requests one position for an instructor in elementary education in the field of technology, to arrange for school tours of exhibits in the National Museum of History and Technology dealing with actual demonstrations of crafts and skills such as weaving or ginning, and with themes of great importance from our history, such as industrial research, the path of invention, and the history of science. One such staff member could develop about four tour patterns which could then be opened to approximately four school groups daily. No school tours can now be offered in these areas for lack of a staff member to research and prepare scripts.

A second position is required for an audio-visual services technician to set up films and sound tapes to be presented to school children to enrich and supplement their present tour activities. Such elements may be regarded as experiments for the eventual improvement of exhibits, to be tried out in the halls on actual audiences of school children. No such services are available at present, while the total number of tours has increased to an estimated annual total (for 1969-1970) of 3,000, serving almost 100,000 school children, with an unpaid volunteer "docent", or escort, staff of 140.

Academic Programs
Examples of Research Conducted Through the Graduate Fellowship Program

No better way to guarantee the quality of research has ever been found than to maintain an environment conducive to setting and attaining the highest intellectual goals. Junior investigators serving their apprenticeship in research jostle comfortable assumptions and insist on the unexpected, while giving freely of their enthusiasm and alert insights. In return, the senior established professional staff member helps to guide the development of research skills and offers counsel on the interpretation of published literature and observations that may be in doubt. Student and supervisor are like two knives that keep each other sharp.

One example of benefits to students, the nation, and the Institution, derived from the existence of this environment, is the work being generated by a doctoral candidate from the University of Kansas assigned to the Smithsonian's Department of Paleobiology. While at his home university, this student developed a strong interest in the systematic study of upper paleozoic invertebrate fossils. Because his interests were closely aligned to the research objectives of the Smithsonian's professional staff, because of the extensive collections here at the Institution, and because formal academic arrangements existed with his university, he was selected to receive a Smithsonian fellowship. At the present time, the student is working under the direct supervision of the curator of the Division of Invertebrate Paleontology, widely known as one of the experts on the usage of fossil remains for subsurface exploration.

Their collaborative effort is expected to yield an understanding of previously unknown relationships of specific ancient fossil colonies with today's living counterparts. Information on the size, shape, development, and distribution of fossil colonies will clarify further the existing knowledge of biostratigraphy--the discipline most directly related to the successful exploration of petroleum resources. Further, the publications resulting from this student's activity at the Institution will add to the scarce stockpile of current base-line information concerning the balance of a particular segment of the past and present ecological systems.

Another example would be a Smithsonian fellowship holder that is pursuing the study of the significance of American small boat building. He is a doctoral candidate from the University of Indiana. His dissertation, to be submitted to the University in late 1970, will deal with the cultural and technological necessity of the appearance of the small boat building tradition in the upper east coast of this country. The development and absorption by the hardy New Englanders of the precise measurements and complex knowledge required by this art is a reflection of man's capacities when faced with a need to gain a livlihood from the sea. The student's interests parallel the expertise of professional staff members in the Museum of History and Technology. In addition to the direct educational benefits accruing to the doctoral candidate, the Institution will gain because the information will be used in exhibits planned for the summer of 1970.

The Institution should take the initiative in extending the fellowship program. The Smithsonian professional research staff of 350 is willing to supervise over 150 students and investigators per year. Our actual ability to award stipends is far below this figure. This program is potentially one of the most beneficial to the nation in the entire array of Institutional investments.

A partial listing of the home universities of fellowship recipients in fiscal year 1970 include: the universities of Brown, California, Columbia, Duke, Florida State, George Washington, Harvard, Indiana, Johns Hopkins, Kansas, New Hampshire New York, North Carolina, Pennsylvania, Pittsburgh, Rhode Island, Southern California, Stanford, Tulane, Washington, Wisconsin, and Yale.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

OFFICE OF THE TREASURER

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	31	2	33
11 Personnel Compensation	$ 339,000	$ 14,000	$ 353,000
12 Personnel Benefits	26,000	17,000	43,000
21 Travel & Transp. of Persons	1,000	0	1,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	150,000	24,000	174,000
24 Printing and Reproduction	0	0	0
25 Other Services	20,000	5,000	25,000
26 Supplies and Materials	3,000	5,000	8,000
31 Equipment	3,000	0	3,000
TOTAL	$ 542,000	$ 65,000	$ 607,000
Analysis of Total			
Pay Increases	$29,000	$5,000	$34,000
Program	$513,000	$60,000	$573,000

Specification of Increase (Program):

Mail and Workmen's Compensation Costs; Improved Financial Management
(2 positions, $60,000)

The Office of the Treasurer provides analytical and technical support, such as planning, budgeting, accounting, and auditing, in financial management matters. Staff increases required, due to the rising workload, consist of a fiscal clerk to provide a direct access to fiscal information stored in the computer, and a clerk-typist for the Office of the Treasurer and the Internal Audit Office ($10,000). Additional funds are required for a reimbursement to the Workmen's Compensation Fund ($16,000), increases in the postal rate ($20,000), rental of a remote terminal device for the fiscal clerk ($4,000), supplies ($5,000), and other services ($5,000).

Administrative and Central Support Activities--Office of the Treasurer

1969 Actual	$558,000
1970 Estimate	$542,000
1971 Estimate	$607,000

This Office manages the income and expenditures of the Institution and provides the Secretary with recommendations related to the allocation of funds. It is composed of the Office of Programming and Budget, the Contracts Office, the Accounting Division, and the Internal Audit Office. These sections provide analytical and technical support in financial management matters. Planning, budgeting, accounting, auditing, and reporting center in the Treasurer's Office. Additional funding is required to meet a rising and more complex workload.

An increase of $60,000 is requested to cover additional workmen's compensation and public service mail, and for accounting purposes. An additional $5,000 are requested to cover necessary pay increases.

Need for Increase--Staff increases required consist of a clerk-typist in the Office of the Treasurer and a fiscal clerk. The Office of the Treasurer has only one secretary. This office also provides typing for the Internal Audit Office. An additional clerk-typist is requested to provide typing assistance for these offices.

The Accounting Division needs to acquire direct source data automation of accounting transactions. This would eliminate delays and costs of keypunching, and result in faster and better accounting control. The accounting transaction would be typed once and automatically punched on paper tape. The paper tape could then be put into the computer without further handling and the machine would also be used as a remote terminal device to the computer. A fiscal clerk would be needed to operate the machine, plus renting the machine, supplies and forms, and some related equipment.

As additional costs to this Office, the Department of Labor has requested $32,000 reimbursement to the Workmen's Compensation Fund. Of this amount, $16,000 are already in the base, and the Smithsonian is requesting $16,000 additional. Postal rate increases and a higher volume of Smithsonian mail require a projected additional $20,000 over the current expenses of about $150,000.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

DIVISION OF PERFORMING ARTS

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	(7)	(2)	(9)
11 Personnel Compensation	$ 92,000	$ 14,000	$ 106,000
12 Personnel Benefits	7,000	1,000	8,000
21 Travel & Transp. of Persons	3,000	0	3,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	9,000	5,000	14,000
24 Printing and Reproduction	0	0	0
25 Other Services	27,000	11,000	38,000
26 Supplies and Materials	7,000	10,000	17,000
31 Equipment	23,000	12,000	35,000
TOTAL	$168,000	$ 53,000	$ 221,000
Analysis of Total			
Pay Increases	$ 8,000	$ 3,000	$ 11,000
Program	160,000	50,000	210,000

Specification of Increase (Program):

Festival of American Folklife, American College Theatre Festival, and Other Programs (2 positions, $50,000)

Program support funds in the amount of $27,000 are requested to design and produce the American Folklife and American College Theatre festivals. The Folklife Festival was attended by 618,000 persons in July 1969, and the College Theatre Festival was very successful as a forum for the best achievements of ten of the nation's colleges and universities. In both cases, funds are required for staging, equipment rental, supplies, and related production costs. Two additional clerical assistants ($12,000) and funds for contractual services ($11,000) are also required to permit the Division to provide technical assistance and advice to state groups and other organizations interested in producing folk, craft, and other similar performances.

Administrative and Central Support Activities--Division of Performing Arts

1969 Actual	$204,000
1970 Estimate	$168,000
1971 Estimate	$221,000

The Division of Performing Arts plans and presents the annual Festival of American Folklife; programs in contemporary arts forms; many children's activities, including a highly acclaimed puppet theatre; touring performances which schedule folklife presentations, lectures, and concerts to universities, colleges, and community centers across the nation; the American College Theatre Festival; and other public presentations related to the growth of American popular culture. Its objective is to use music, theatre, and dance to illuminate and preserve the folk traditions that comprise the cultural heritage of this country--to add collections of performances and demonstrations to the Smithsonian's collections of artifacts. Enthusiastic public attendance and participation in these events have testified to the value of adding this new dimension to traditional museum visiting.

An increase of $50,000 is sought for 1971 in order to sustain this activity and to maintain high quality production standards. An additional $3,000 are requested for necessary pay increases.

Need for Increase--Increased funding of $15,000 is needed for the Festival of American Folklife. Public attendance at this living exhibition of traditional American culture has increased 25 percent per year since its inception in 1967, reaching an estimated 618,000 people in 1969. Significant outside funding for this event has been received in the past from private sources such as the Institute of Texas Cultures, the AFL-CIO, and the States of Pennsylvania and Arkansas; but these private donations cannot begin to meet all the necessary costs of production, staff, travel to search out and obtain native craftsmen, performers, and folk art objects, field research, and supplies and equipment. Private foundations have in fact, expressed the opinion that the Festival of American Folklife is no longer an experiment, but rather the most important popular presentation of American folk cultures regularly held in the United States and, as such, the Smithsonian should attempt to establish an adequate federal appropriation for its costs.

The American College Theatre Festival provides a forum for the presentation of the best achievements of the nation's colleges and universities in the arts. In the selection of the ten best productions chosen from participating institutions, this Festival offers national recognition and high incentive toward better standards of excellence and scholarship. Entrants have substantially increased over the first year of this event, and public response has substantially added to the Smithsonian's responsibility to provide an acceptable level of production support. The requested $12,000 will provide services for the design and fabrication of staging facilities, rental of equipment, and supplies.

Basic staff support is insufficient to meet the increased demands on the Division of Performing Arts for technical assistance and advice. Requests from state groups and other organizations have risen fivefold in the past two years, totaling more than 50 specific requests in the past year. The highly specialized nature of these inquiries demand detailed attention. For example, over the past two years the Division has developed the concept and plans for the performing and cultural programs for Summer in the Parks; helped plan the United States' participation in the cultural programs of the XIX Olympiad in Mexico City; and assisted in the planning of a national program in the arts for the Girl Scouts of America. Increased staff and consultant services are needed if the Division is to meet these responsibilities. Funds are requested for a fiscal clerk and a clerk-typist ($12,000) and for contractual services ($11,000).

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

OFFICE OF PERSONNEL AND MANAGEMENT RESOURCES

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	16	3	19
11 Personnel Compensation	$ 256,000	$ 37,000	$ 293,000
12 Personnel Benefits	19,000	2,000	21,000
21 Travel & Transp. of Persons	8,000	1,000	9,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	0	0	0
24 Printing and Reproduction	0	0	0
25 Other Services	7,000	10,000	17,000
26 Supplies and Materials	2,000	0	2,000
31 Equipment	1,000	4,000	5,000
TOTAL	$ 293,000	$ 54,000	$ 347,000
Analysis of Total			
Pay Increases	$18,000	$4,000	$22,000
Program	$275,000	$50,000	$325,000

Specification of Increase (Program):

Improved Personnel Management (3 positions, $50,000)

In the past several years, Congress has significantly broadened the Smithsonian's activities and programs. The number of personnel has risen from 500 to over 2,000. New Executive Orders and Civil Service directives have increased the workload of the personnel office to over 3,500 actions a year. In addition, the Office handled 51,000 telephone calls, 2,000 letters, and 7,000 visitors. Based on a comparative study of other agencies, the Smithsonian's personnel office staff is 50 to 100 percent below that of other offices, based on the number of employees served. To meet this workload and properly serve the employees, two personnel management specialists, a clerk-typist ($35,000), and funds for travel ($1,000), equipment ($4,000), and other services ($10,000) are requested.

Administrative and Central Support Activities--
Office of Personnel and Management Resources

1969 Actual $259,000
1970 Estimate..... $293,000
1971 Estimate..... $347,000

The Office of Personnel and Management Resources is responsible for a wide range of program functions including special studies; organizational development; manpower planning, utilization and control; and management evaluations. Additionally, this Office serves as a central staff office for job classification, recruitment and placement, employment relations and training, and wage and salary administration. Advice and technical assistance is provided to all levels of management, the professional staff, and to all employees in a wide range of specialized job categories.

An increase of $50,000 is requested to strengthen the personnel specialist and clerical staff in order to meet Institutional needs. An increase of $4,000 is sought also for necessary pay purposes.

Need for Increase--In recent years the Congress has significantly the Smithsonian's activities with the enactment of over twenty major programs. Appropriations have increased to $28,000,000 and manpower authorizations have increased from 500 to over 2,000. New museums, including the National Museum of History and Technology, the National Portrait Gallery, the National Collection of Fine Arts, and the Joseph H. Hirshhorn Museum and Sculpture Garden have been added. As a result of Congressional support, all Smithsonian bureaus, located from Massachusetts to Panama, are establishing new research, exhibit, and public service objectives and priorities. Their directors seek guidance from the Office of Personnel and Management Resources in the analysis and deployment of manpower and in better ways of achieving organizational effectiveness. These needs have placed great demands upon this Office.

Indicative of the Office's workload is the number of individual personnel actions, each requiring analysis and implementation. Over 3,000 personnel requests are submitted annually. For the six months period January through June 1969, approximately 1,800 actions were processed. In addition, the Office had over 7,000 visitors, 51,000 telephone calls, and 2,000 letters last year. This activity is expected to increase during the remainder of this fiscal year and next. The Civil Service Commission has greatly increased the number and variety of special programs in the personnel area. New Executive Orders and Commission directives require expanded programs for the disadvantaged, the socially deprived, promotions, awards, appeals, discrimination, and discipline. The additional positions requested are urgently needed to meet these needs. A comparative study of the ratio of personnel office staff in other agencies to the number of employees serviced reveals that the staffing in the Smithsonian's Office is 50 to 100 percent below that of other offices.

Two personnel management specialists and a clerk-typist and funds for travel, training, other services, and equipment are requested ($50,000).

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

HEALTH UNITS

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	2	1	3
11 Personnel Compensation	$ 31,000	$ 7,000	$ 38,000
12 Personnel Benefits	2,000	1,000	3,000
21 Travel & Transp. of Persons	0	0	0
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	0	0	0
24 Printing and Reproduction	0	0	0
25 Other Services	15,000	0	15,000
26 Supplies and Materials	2,000	3,000	5,000
31 Equipment	0	0	0
TOTAL	$ 50,000	$ 11,000	$ 61,000
Analysis of Total			
Pay Increases	$2,000	$1,000	$3,000
Program	$48,000	$10,000	$58,000

Specification of Increase (Program):

Improved Health Facilities for Visitors and Staff (1 position, $11,000)

The two small health units now in existence in the Natural History and History and Technology buildings are insufficient to meet the emergency needs of the employees and the more than 12 million visitors to the Smithsonian. This request is for a nurse ($8,000) and supplies and materials ($3,000) to establish a health unit in the Arts and Industries building.

Administrative and Central Support Activities--Health Units

1969 Actual $48,000
1970 Estimate $50,000
1971 Estimate $61,000

Smithsonian Health Units located in the museum buildings provide first-aid and medical assistance to employees and to visitors.

An increase of $10,000 is requested to establish a Health Unit for the buildings on the south side of the Mall. An increase of $1,000 is sought also for necessary pay purposes.

Need for Increase--The two small health units now in existence in the Natural History and History and Technology buildings are insufficient to meet the emergency needs of employees and visitors. Visitors to the air and space, art, and special exhibits on the south side of the Mall now number three million a year. There are no medical facilities in these buildings to offer first-aid and other medical assistance to either visitors or to employees. This request is for a nurse and supplies and equipment to establish a health unit in the Arts and Industries Building. Smithsonian responsibility to its visitors as well as staff requires that this facility be available as soon as possible.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

INFORMATION SYSTEMS DIVISION

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	10	4	14
11 Personnel Compensation	$ 130,000	$ 55,000	$ 185,000
12 Personnel Benefits	7,000	4,000	11,000
21 Travel & Transp. of Persons	3,000	2,000	5,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	12,000	12,000	24,000
24 Printing and Reproduction	0	0	0
25 Other Services	2,000	27,000	29,000
26 Supplies and Materials	2,000	0	2,000
31 Equipment	7,000	4,000	11,000
TOTAL	$ 163,000	$ 104,000	$ 267,000
Analysis of Total			
Pay Increases	$8,000	$4,000	$12,000
Program	$155,000	$100,000	$255,000

Specification of Increase (Program):

Improving Access to Collections Information (4 positions, $100,000)

The Institution, because of its stewardship of the National Collections and related reference documents, possesses an unmatched assembly of materials tracing man's physical, cultural, and technological development, and his natural surroundings. Information in these collections can have a direct bearing on the solution to present day cultural and biological problems. This information is not readily accessible because of its volume, different methods of filing, and wide variety of subject matter. Five years ago, the Smithsonian began to explore automation methods to make collections and research data more accessible and thereby more useful. Some progress has been made; for instance, a pilot project in the National Museum of Natural History. The Institution has the computer capacity to handle more data, but needs additional systems analysts and programmers to develop, test, and install specific systems. The request is for four such employees ($55,000) and support funds for travel, equipment rental, computer time, and related services ($45,000).

Administrative and Central Support Activities--Information Systems Division

1969 Actual..... $171,000
1970 Estimate..... $163,000
1971 Estimate..... $267,000

The Information Systems Division designs and applies computer technology to the Institution's data processing needs. Included in the Division's activities are the development of systems for indexing and retrieving data, especially that associated with objects and specimens in the collections; providing mathematical and statistical analysis techniques to aid Smithsonian researchers in interpreting and presenting data; and installing systems for library, accounting, personnel, property control, and other management purposes.

An increase of $100,000 is requested to modernize museum and laboratory information handling techniques in order to improve significantly the quality of research, access to data pertaining to the collections, and reference services to the public. An additional $4,000 are requested for necessary pay increases.

Need for Increase--The Institution, because of its stewardship of the National Collections and associated reference documents, possesses an unmatched assembly of materials tracing man's physical, cultural, and technological development and his natural surroundings. These collections in art, history, and science now number well over 60 million objects. The Smithsonian continues to acquire and protect new objects at the rate of one million a year. Not only are these collections the basic resource for the Institution's exhibit program, but each year thousands of schoolchildren, collectors, scientists, and historians ask questions pertaining to individual and groups of objects. Traditional indexing and recordkeeping systems cannot handle those questions which often cut across subject matter, time, and geographical lines.

The information contained in the collections can have direct bearing on the solution to cultural and biological problems. For instance, one project presently being conducted by outside investigators involves the study of 20,000 human skulls in the National Collections to determine if any correlation exists between dental disease and environment. The time it would take to complete this project, and others like it, would be greatly reduced if information was already stored in a data bank and available for retrieval and analysis.

Five years ago, the Institution first began to explore automation methods for collection information in order to make it more accessible. Some progress has been made. The feasibility and usefulness of automation has been demonstrated by the joint efforts of the National Museum of Natural History and the Information Systems Division in pilot studies (primarily on birds, crustacea, rocks, and minerals) of an information storage and retrieval system. These studies must be implemented and the system gradually extended throughout the natural history collections. In another museum, the National Portrait Gallery and the Division are developing a computer program based on the Gallery's Catalog of American Portraits to permit the retrieval of a great variety of research data about portraits of distinguished Americans, their subjects, and the artists. Already the Catalog lists more than 30,000 portraits.

The Division has the computer capacity for handling more data, but it has reached the limit of its capacity to analyze and design systems before actual computer processing is possible. Much of the effort of the present staff of six systems analysts and programmers must go to maintain and update computer programs that have been developed.

The greatest need of the Information Systems Division is for programmer/analysts to develop, test, and install new systems. Funding for four programmer/analysts ($55,000) and for travel, equipment rental, computer time, and other services ($45,000) is requested.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

SMITHSONIAN INSTITUTION LIBRARIES

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	44	8	52
11 Personnel Compensation	$492,000	$ 66,000	$558,000
12 Personnel Benefits	37,000	5,000	42,000
21 Travel & Transp. of Persons	5,000	2,000	7,000
22 Transportation of Things	1,000	0	1,000
23 Rent, Comm. and Utilities	4,000	9,000	13,000
24 Printing and Reproduction	23,000	15,000	38,000
25 Other Services	11,000	15,000	26,000
26 Supplies and Materials	49,000	29,000	78,000
31 Equipment	7,000	23,000	30,000
TOTAL	$629,000	$164,000	$793,000
Analysis of Total			
Pay Increases	$34,000	$14,000	$48,000
Program	$595,000	$150,000	$745,000

Specification of Increase (Program):

Correction of Serious Shortages (8 positions, $150,000)

Although the Smithsonian will continue to use the resources of other libraries through interlibrary loans and other ways, the availability of adequate in-house library materials and reference services is essential to the effective performance of the Institution's curation, exhibition, and research functions. Presently, the Smithsonian Libraries are not meeting staff needs. The request for fiscal year 1971 is meant to correct partially several deficiences. An increase in purchase funds of $52,000 is needed to permit purchasing only an average of three books and four journals a year for each professional employee. Only about $50,000 are now available. An additional $15,000 are needed for binding to preserve valuable books. ($15,000 are now available, but $50,000 a year are needed). A manager for the very important exchange program and three cataloger-index technicians are required ($39,000). Two additional technicians ($10,000) are required to cope with a steadily rising volume of reference questions--some 70,000 questions were posed to the library by staff and outsiders in 1969. An additional $15,000 are needed to pay for computer services to streamline the Libraries' operations. And lastly, a librarian and a technician ($19,000) are required to take care of a growing collection of rare and valuable books, many acquired by gift.

Administrative and Central Support Activities--
Smithsonian Institution Libraries

1969 Actual $586,000
1970 Estimate..... $629,000
1971 Estimate..... $793,000

The Smithsonian Institution Libraries are essential to the effective performance of the Institution's programs in research, exhibitions, and the curating of the National Collections. The Libraries' resources of some 750,000 volumes and periodicals in the fields of art, science, and history have come to be widely used also by the educational and research activities of Government agencies, schools, museums, and the general research community.

An increase of $150,000 is requested to raise the level of book and journal purchases, to improve reference services, and to manage rare book collections. In addition, $14,000 are sought to help meet necessary pay increases.

Need for Increase--The Libraries' program is devoted to only basic traditional functions. It offers retrieval and delivery services for book and journal materials, standard bibliographical cataloging, and reference and information services in all subjects. These activities are operating with about one-half the necessary financial and staff resources for basic services required by the Smithsonian's museums, galleries, and laboratories. The budget request for fiscal year 1971 provides for only partial attainment of an adequate basic library program. No new or advanced programs or facilities are sought. The Libraries have taken every opportunity to improve the quality of its operations. Emphasis has been given to streamlining portions of the collections and the curtailment of low-priority services.

Basic needs fall into the following complementary areas of library operations.

1. Acquisition and maintenance of books and journals (4 positions, $106,000)

This request includes $15,000 for the purchase of journals (860 titles), $37,000 for the purchase of monographs, technical reports, and documents (3,700 titles), and $15,000 for binding, filming, and other processing.

The Libraries should be acquiring about $175,000 worth of purchased documentary material a year to cover art, history, and science subjects. This estimate is based on known staff needs. In fiscal year 1969, only $47,000 were available for this purpose for a deficit of $128,000. By 1971, the $175,000 will be inflated by rising costs to $190,000. The requested budget for documentary material in 1971 is $99,000. With these requested funds, total buying power will be about 3,700 monographs (three titles per Smithsonian professional, technical, and administrative staff member) and 4,700 journals (four titles per such staff member).

The total annual requirement for binding and preservation is approximately $50,000 for 10,000 volumes. In fiscal years 1969 and 1970, $15,000 were available to do about 3,000 books each year. With the requested additional $15,000, 6,000 books can be bound and preserved in fiscal year 1971. This will leave some 18,000 volumes unprocessed for the three year period, or a cumulative backlog of $90,000 work.

The request for new positions includes a manager for the important gift and exchange program, which brings essential library materials to the Smithsonian at little cost, and three cataloger--indexer technicians. It is

estimated that each technician can assist with the cataloging and indexing of $10,000 of new documentary materials a year. The remaining material will be made available for limited use through gross inventory methods.

2. Reference and document delivery services (2 positions, $10,000)

The Libraries had 15 positions in fiscal year 1969 for information, reference, interlibrary borrowing and lending, photocopying, paging and messenger, and related services. This is one library staff member for each 78 Smithsonian staff members involved in research, exhibition, education, and administrative work. Two additional technicians would raise the Libraries' service staff to 17 positions, or one for every 69 Smithsonian staff members. This increase would also permit the Libraries to improve services to Government agencies and to non-Smithsonian scholars, students, and the general public. Some 70,000 reference questions were handled in fiscal year 1969.

3. Process management and improvement ($15,000)

An additional $15,000 are requested for computer services for purchasing, cataloging, and other library management functions. The Libraries estimate that $9,000 of computer time in fiscal year 1969 did the work of three library technicans that would cost $16,000. Further innovations in automation and process improvement should reduce the rate of growth of the Libraries' staff to accommodate increased budgets for library materials.

4. Special collection management (2 positions, $19,000)

A librarian and a technician are required to service rare and valuable books. The Smithsonian, because of the nature of its research and collections, has been required to acquire a number of publications issued in limited editions. These have greatly increased in monetary value over the years because of their rarity. Few libraries other than the Smithsonian now have these materials so they have become important as a national resource and more valuable as a marketable commodity. Many of these books are now interfiled on the open shelves in the general collections and need identification, preservation, and protection. The Institution also attracts gifts of books, many of which are rare. In 1969, the Smithsonian Institution received the Dwight-Tucker Ornithological Collection, valued at nearly $100,000, containing materials which should not be housed on open shelves in the generally accessible areas of the libraries.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

PHOTOGRAPHIC SERVICES DIVISION

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	18	2	20
11 Personnel Compensation	$ 189,000	$ 12,000	$ 201,000
12 Personnel Benefits	16,000	1,000	17,000
21 Travel & Transp. of Persons	0	0	0
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	0	0	0
24 Printing and Reproduction	10,000	5,000	15,000
25 Other Services	1,000	2,000	3,000
26 Supplies and Materials	19,000	5,000	24,000
31 Equipment	2,000	3,000	5,000
TOTAL	$ 237,000	$ 28,000	$ 265,000
Analysis of Total			
Pay Increases	$17,000	$3,000	$20,000
Program	$220,000	$25,000	$245,000

Specification of Increase (Program):

Laboratory Technicians and Funds for Commercial Services and Equipment Replacement (2 positions, $25,000)

The work of the photographic laboratories is an integral part of the Smithsonian's publication and exhibit programs and of its ability to respond to public requests for photographs. The Division has not had a significant program increase in several years despite rising costs of goods and services and has not had a staff increase in five years despite a growing workload. Two laboratory technicians ($10,000) are requested to relieve the photographers of routine duties amounting to about 17 hours a day. Funds in the amount of $5,000 are needed to purchase specialized commercial services which the laboratories are not equipped to perform. Supplies, repairs, and the purchase of equipment to replace 10-year old processing and printing items require an additional $10,000.

Administrative and Central Support Activities--Photographic Services Division

1969 Actual	$218,000
1970 Estimate	$237,000
1971 Estimate	$265,000

The Photographic Services Division supplies photographic services required to meet research, documentation, conservation of collections, exhibition, and publication needs, and to help in answering public inquiries. This work involves still and motion picture photography, developing and printing, obtaining specialized commercial photographic services, and providing technical assistance and training in field photography to staff members.

An increase of $25,000 is requested to add essential laboratory technicians, to augment the funds available for commercial services, and to repair and replace obsolete equipment. Funds in the amount of $3,000 are also requested for necessary pay.

Need for Increase--The growth of Smithsonian curatorial, exhibits, and research activities has increased the requirements and requests for quality photographs and slides. In fiscal year 1969, the Photographic Services Division produced 21,000 negatives, 14,000 color slides, 50,000 microframes, and 111,000 prints. The Division contributed to the completion of 73 new exhibit units in eight main exhibition halls and 42 special temporary exhibitions. Of special note was the photographing of a major portion of the recently acquired Lilly Collection of some 6,000 gold coins.

Despite these accomplishments many important photographic requests could not be met. The staff has not grown in five years despite an increasing workload. Several reassignments have been made within the Division resulting in greater productivity and a reduced service timetable.

Two lab technicians are needed to relieve the twelve photographers in the three laboratories (serving the National Museum of History and Technology, the National Museum of National History, the National Air and Space Museum, and other units) who spend a total of approximately 17 hours each day on low level duties including microfilming; print washing, drying, straightening, sorting and reconciling with orders; negative filing; and transporting and setting up equipment. Relieving these highly skilled employees of these simple, but time-consuming tasks, would enable them to reduce the backlog of several hundred orders. There are no technicians in the Division.

The photographic laboratories are not equipped to perform color and motion picture film processing, nor the preparation of mural-size prints, xerographic prints, duplicate transparencies, etc. Requests for commercial services of this type in support of the exhibits and other programs are increasing and prices are rising. Several thousand dollars' worth of work requests could not be met in fiscal year 1969 because of the lack of funds.

Many of the pieces of darkroom processing and printing equipment, purchased at the time of the Division's establishment in 1959, have deterioriated to the point where repairs no longer produce satisfactory operations. New equipment should allow five to seven years of trouble-free service. One enlarger, one printer, and one print straightener are required.

Funds are requested for two laboratory technicians and for commercial photographic services, repairs, supplies, and the replacement of wornout equipment ($25,000).

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

SMITHSONIAN INSTITUTION PRESS

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	21	2	23
11 Personnel Compensation	$ 271,000	$ 18,000	$289,000
12 Personnel Benefits	20,000	1,000	21,000
21 Travel & Transp. of Persons	3,000	0	3,000
22 Transportation of Things	0	0	0
23 Rent, Comm. and Utilities	1,000	0	1,000
24 Printing and Reproduction	353,000	63,000	416,000
25 Other Services	5,000	0	5,000
26 Supplies and Materials	3,000	0	3,000
31 Equipment	2,000	0	2,000
TOTAL	$ 658,000	$ 82,000	$ 740,000
Analysis of Total			
Pay Increases	$23,000	$7,000	$30,000
Program	$635,000	$75,000	$710,000

Specification of Increase (Program):

Preparation of Exhibition and Collection Catalogs and Research Reports (2 positions, $75,000)

The Smithsonian prepares, prints, and distributes three basic kinds of publications which are used by the general public, students, and specialists around the world. These publications are collection catalogs, exhibition catalogs, and research studies in the fields of art, history, and science. Additional museums and galleries, new collections such as Hirshhorn, the Lilly coins, and space artifacts, and improved research productivity have dramatically increased the number of important manuscripts and created printing backlogs. Deliberate efforts by the Press to cut costs by revised procedures and use of new printing techniques have helped stretch printing funds but higher printing costs and a rising volume of work require an increase of $63,000 in printing funds. A secretary and an indexer ($12,000) are also needed to assist the editorial and design staff.

Administrative and Central Support Activities--Smithsonian Institution Press

1969 Actual	$577,000
1970 Estimate	$658,000
1971 Estimate	$740,000

The Smithsonian Institution Press publishes the results of the Institution's research, education, and exhibits programs. It issues numerous research studies in the fields of anthropology, anthropology, biology, history, and technology. It produces catalogs that document special and permanent exhibitions and popular information booklets that describe and illustrate the National Collections. Press functions include the approval and editing of manuscripts, design of publications, procurement of printing, and distribution of 100 works annually. Over 300,000 copies of publications were distributed in fiscal year 1969.

An increase of $75,000 is requested to meet a growing workload of exhibition and collection catalogs and research reports. Funds will be used for additional technical and clerical employees and for printing costs. An amount of $7,000 is requested also for necessary pay purposes.

Need for Increase--Catalogs of exhibits extend the informational and educational content of exhibits beyond the walls of the museum long after the exhibits are closed. Catalogs of collections are a basic reference for persons all over the world who are unable to examine the collections directly. The Smithsonian recently has opened the National Collection of Fine Arts and the National Portrait Gallery. The Renwick Gallery will add an additional exhibit catalog workload. A number of major collection catalogs are pending in the National Museum of History and Technology. These are national museums, devoted to the display and commemoration of American history and culture, and their catalogs should rank with the quality of those issued by other leading museums. Funds for these catalogs are unavailable from other publications programs, because resources are insufficient already to publish research reports.

Support of Smithsonian research is wasted when that research remains unreported. This is especially true of scientific results which are typically basic data used for the advancement of applied research in Government agencies, industry, and universities. An expanded staff of scientists and historians and greater research productivity has caused large backlogs of unpublished research in the recent past. Smithsonian authors have been forced to attempt to publish outside of the Smithsonian. Sources of outside publishing are difficult to find for descriptive museum publications.

A continuing rise in the volume of manuscripts ready for submission is expected in fiscal year 1971 as well as further inflation in printing costs. The Press has increased its efficiency through revised procedures and has reduced the per-page cost of printing by using improved technologies. Revised formats and standardization of style in five series (Smithsonian Contributions to Earth Sciences, Zoology, Paleobiology, Botany, and History and Technology) produced economies and a substantial gain in effectiveness. Economies obtained through such means have leveled off and the printing workload can be met only by increasing Press funds. An additional $63,000 in printing funds is requested.

For fiscal year 1971, two additional employees are needed in the Press: a secretary to assist five professionals in the production and design sections, and an indexer to assist authors and editors in the task of preparing indices to books and monographs. Funding in the amount of $12,000 is requested for these employees.

SMITHSONIAN INSTITUTION--"Salaries and Expenses," Fiscal Year 1971

BUILDINGS MANAGEMENT DEPARTMENT

Object Class	1970 Base	Increase Requested	1971 Estimate
Number of Permanent Positions	857	20	877
11 Personnel Compensation	$ 5,578,000	$ 233,000	$5,811,000
12 Personnel Benefits	434,000	18,000	452,000
21 Travel & Transp. of Persons	2,000	0	2,000
22 Transportation of Things	1,000	0	1,000
23 Rent, Comm. and Utilities	1,355,000	163,000	1,518,000
24 Printing and Reproduction	2,000	0	2,000
25 Other Services	675,000	23,000	698,000
26 Supplies and Materials	275,000	10,000	285,000
31 Equipment	100,000	6,000	106,000
TOTAL	$8,422,000	$453,000	$8,875,000
Analysis of Total			
Pay Increases	$324,000	$126,000	$450,000
Program	$8,098,000	$327,000	$8,425,000

Specification of Increase (Program):

Maintain, Operate, and Protect New Building Spaces (20positions, $327,000)

The request for Buildings Management Department is a very selective one aiming at meeting known needs of additional buildings spaces and related service costs. An increase of 20 positions and $180,000 are requested to provide an adequate staffing level for the Renwick Gallery of Art scheduled for a public opening in mid-fiscal year 1971. Included in this dollar amount are funds for utilities, communications, security and fire detection systems, and custodial and maintenance supplies and equipment required in this building. The balance of the request, $147,000 is to meet the higher costs of utilities, communications, and the repair and maintenance of mechanical equipment for some three million square feet of space in eight major buildings and nine other facilities serving some 13 million visitors a year. Costs of these services have increased some 50 percent over the last five years, from $1,000,000 to about $1,500,000 based on higher unit costs and more consumption. Included in the request are: $65,000 for electricity based in part on the airconditioning needs of the renovated Smithsonian Building; $20,000 for communications as estimated by the GSA for the Federal Telecommunications System; $43,000 for steam; and $19,000 for contract maintenance of a wide range of security and fire detection systems and some 50 elevators and escalators.

BUILDINGS MANAGEMENT DEPARTMENT

1969 Actual	$7,451,000
1970 Estimate	$8,422,000
1971 Estimate	$8,875,000

The Buildings Management Department protects, maintains, and operates eight major buildings, including the original Smithsonian Institution building, the National Museum of Natural History, the National Museum of History and Technology, the Arts and Industries building, the Freer Gallery of Art, the National Air and Space building, the Fine Arts and Portrait Galleries building, and the Renwick Gallery of Art. It is also responsible for serving nine other research, collection, and service facilities, including the Oceanographic Sorting Center and the Silver Hill Facility which provides for the restoration, preservation, and storage of air and space objects and houses reference collections of objects of science, technology, art, and natural history.

A program increase of 20 positions and $327,000 are required in fiscal year 1971 to provide basic services to the Renwick Gallery of Art; to meet increased costs of utility, communications, fire, security, and detection systems; and to repair and maintain elevators and escalators. An additional $126,000 are requested for necessary pay increases.

Need for Increase--The increases requested are required for the operation, maintenance, and protection of 3,300,000 square feet of exhibition and public areas, special laboratories, reference collection areas, libraries, offices, and supporting facilities located at 17 different sites in the Washington area.

The operations of the Buildings Management Department are carefully geared to meet the extraordinary uses which the buildings serve. The Smithsonian museums and galleries accommodate as many as 13 million visitors, researchers, and students annually; serve both as national depositories and as exhibition facilities for objects of great historical, scientific, and artistic value; and provide the necessary laboratories, workrooms, curatorial, administrative, and support spaces for the programs and activities of the Institution. The services of this Department are required during regular work and visiting hours, and for special events, public service, and educational programs during evenings, weekends, and holidays.

This Department must supplement its staff and program support funds to meet the increasing demand for services. The increases requested are related to the acquisition by the Smithsonian of authorized additional renovated building spaces and exhibition halls during fiscal years 1969 and 1970; to added costs of utilities and communications; to the escalation of materials and labor costs in the repair and maintenance of the elevators and escalators; and to the installation and maintenance of security and fire detection systems.

The Renwick Gallery of Art, located at 17th Street and Pennsylvania Avenue, was turned over to the Smithsonian by the contractor in February 1969, although essential restoration and renovation work remained to be done in fiscal years 1970 and 1971. The Buildings Management Department is required to give initial basic services to safeguard the building and its contents, including guard protection, custodial and laboring services, and mechanical maintenance to the heating, air conditioning, and humidity control systems in the building, on a 24-hour basis, seven days a week. This Gallery will be undergoing museum development work beginning late in fiscal year 1970, and is scheduled for opening to the public in fiscal year 1971. A small staff of five guards, one laborer, and one operating engineer is now deployed from other Institution buildings in order to provide initial support services before development work begins. The additional positions required to provide an adequate staffing level during fiscal year 1971 are

12 guards, five operating engineers, and three mechanics (electrician, painter, and carpenter). Funds are also requested for related expenses such as utilities, communications, the installation of some security and fire detection systems, custodial supplies and materials, and equipment items. This is a requested increase of $180,000 for the building operation costs of this new museum activity.

Additional air conditioning, heating, lighting, and communications systems for all the Smithsonian buildings as well as increasing numbers of visitors and exhibit spaces, and expanding educational, research, and cultural programs, have resulted in a higher consumption of utilities and communications as indicated in the following table. Increased unit costs for the utilities are reflected along with an upward trend in consumption.

Type of Expense	1968	1969	1970 Est.	1971 Est.
Electricity	$534,000	$595,000	$640,000	$705,000
Steam	299,000	322,000	373,000	416,000
Communications	209,000	235,000	265,000	285,000
Gas	20,000	31,000	40,000	40,000
Total	$1,062,000	$1,183,000	$1,318,000	$1,446,000

Smithsonian buildings and operations are not normal office-type activities. Air conditioning, heating, and lighting must be provided for visitors, during day and evening hours. Continuous operations of environmental control equipment are required to protect the objects in the collections from damage by changes in temperature and humidity. Greater public interest in the Smithsonian has increased communications costs.

An increase of $147,000 is required to meet the following forecasted additional utility and related costs.

--$65,000 for the cost of electricity required for the phased development of public exhibit and collection spaces in the Fine Arts and Portrait Galleries building; an additional 20,000 square feet of space in the Smithsonian building; and for full operating costs of the 500-ton capacity air conditioning equipment installed in the Smithsonian Institution building as part of the restoration and renovation program which will be completed in fiscal year 1971.

--$43,000 to fund the cost of steam which has risen approximately 10 percent per thousand pounds over the past year.

--$20,000 to meet the increasing costs for communications. Of this amount, $18,740 are needed for the Federal Telecommunications System intercity telephone services as projected by the General Services Administration.

--$19,000 for contract services for the installation and maintenance of security and fire detection systems, and for the repair and maintenance of approximately 50 elevators and escalators. This estimate is based on known higher labor and material costs.

Background on Workload in the Buildings Management Department

The Buildings Management Department provides utilities (water, gas, steam, electricity, and compressed air) to the Smithsonian's buildings and facilities. It services, repairs, and operates a wide variety of mechanical and

and electrical systems including: refrigeration, heating, temperature, humidity control, elevator and escalator, fire and smoke detection, and security devices. It furnishes communications, transportation, custodial, and checkroom services and is responsible for the protection and physical security of the buildings, exhibits, and collections of the Institution and for the safety of visitors and employees. The Department performs repairs, improvements, and alterations to the buildings and facilities. Engineering and construction services for Smithsonian projects, and the supervision of contract construction work, are part of the Department's responsibility. On specific building projects, the Department coordinates work performed by architects and engineers, handles contract supervision, and acts as liaison with contractors, the General Services Administration, and the Smithsonian staff. On a work order request basis, the Department also provides special custodial, protection, and fabrication services in support of the Institution's research, exhibition, and education programs and the care of the National Collections.

The number of work orders requesting the assistance and support of skilled mechanics and craftsmen and for special custodial services continue to increase as indicated below, placing heavy demands on the Department's manpower resources. In fiscal year 1969, the number of work orders increased by 25 percent over fiscal year 1968.

Fiscal Year	Number of Work Orders
1968	6,470
1969	8,180
1970	9,500 est.
1971	10,500 est.

These requests covered such needs as: improving space for exhibit, office, and laboratory purposes; installing special lighting in exhibit halls; extensive interior and exterior building repairs and modification including the repair or replacement of roofs, gutters, and flashings on all Smithsonian buildings to prevent damage or further deterioration; renovating and restoring antique furniture for exhibition purposes or use; and the design and fabrication of special scientific equipment, not obtainable on the open market, for research purposes. This equipment is used in such fields as anthropology, sedimentology, underwater archeology, and mineral sciences.

In addition to the regular duties of custodial service employees, which include cleaning restrooms, public lounges, offices, workrooms, laboratories, and exhibition areas, these employees provide many special requested services in connection with public service and educational programs during regular hours and on weekends and holidays. These employees are also responsible for office moves, transporting museum objects, operating elevators, and pest-control measures.

The Department provides physical security for the Smithsonian's museum and art gallery buildings, for the National Collections housed therein, and is responsible for the safety of all personnel, including general public visitors, staff, and visiting students and researchers.

Minimum acceptable security standards require specialized techniques and extensive installations to assure protection against fire, theft, and vandalism. An increasing burden is being put on the Smithsonian for the maintenance of adequate protective standards. New design concepts in exhibit halls and galleries result in a minimum amount of large open space which can be effectively protected by a single guard. In addition, many new exhibits are being presented in a fashion that prevents the use of protective devices such as barriers, cases, and enclosures which might intrude between the objects and the viewer. These

innovations, while desirable for public enjoyment and education, result in an ever-growing requirement for alert guards, each with a lesser area for proper surveillance. The increased use of sophisticated electronic protection devices only partially compensates for the absence of an onsite guard. In case of trouble or emergency, the response and action of a trained guard are still required.

In spite of rising crime rates across the nation, there was an actual decrease in the number of occurrences of theft, pilferage, and vandalism at the Smithsonian. The statistics covering such incidents show that the number decreased by about 14 percent from 240 in fiscal year to 211 in fiscal year 1969. This reversal of the former upward trend can be attributed to closer supervision at all levels, a continuing examination and improvement of security procedures, a more comprehensive and concentrated training program, and the increased use of electronic protection devices and communication equipment wherever practicable. The recent general upgrading of nonsupervisory guard positions undoubtedly contributed to this improved condition since it enhances recruiting and aided in the retention of better qualified guards.

In recognition of the need to insure that the operations of the Buildings Management Department are performed effectively in the most economical manner, a preliminary study by a reputable management consultant firm has been made of the organizational structure, financial management, and work control systems of this Department. The recommendations in this preliminary study are under review at the present time.

NECESSARY PAY INCREASES

Mrs. HANSEN. $531,000 is requested for pay increases. How much of the total pay increase were you able to absorb?

Dr. RIPLEY. The Smithsonian, exclusive of the National Zoological Park, absorbed $165,000 of the July 1969 general schedule pay increase and of the October 1969 wage increase.

LAPSE IN PERMANENT POSITIONS

Mrs. HANSEN. What is the total amount of lapse in permanent positions you have experienced to date in fiscal year 1970?

Dr. RIPLEY. Would it be permissible to insert that in the record? I don't have that figure right here.

(The information follows:)

LAPSE IN FULL-TIME PERMANENT POSITIONS

	1970 authorized positions	BOB June 30, 1970 ceiling	Employment, Apr. 3, 1970	Lapse, Apr. 3, 1970	End of year lapse
"Salaries and expenses"	2,077	1,953	1,889	188	124
Zoo	246	227	220	26	19
Total	2,323	2,180	2,109	214	[1]143

[1] 6.2 percent.

NUMBER OF CURRENT VACANCIES

Mrs. HANSEN. You were authorized 2,077 positions in the 1970 appropriations. How many vacancies did you have as of the last reporting date?

Mr. BRADLEY. Madam Chairman, against the 2,077 authorized positions this year, our actual employment just a few days ago was 1,889 positions, or a current lapse of 188 positions now vacant.

Mrs. HANSEN. Is this due to retirement?

Mr. BRADLEY. Retirement, turnover; exactly.

BUREAU OF THE BUDGET CEILING ON PERSONNEL

Mrs. HANSEN. What personnel limitation, if any, has been imposed on you by the Bureau of the Budget?

Mr. BRADLEY. We have a year end ceiling as a target figure of 1,953 positions. That is actual employment, 1,953.

TRANSFER OF THE NATIONAL ZOOLOGICAL PARK OPERATING BUDGET

Mrs. HANSEN. You say $131,000 of the pay increase relates to employees of the National Zoological Park which were previously financed from funds advanced from the District of Columbia. I think this would be a good place for you to give the committee a complete explanation of the transfer of the maintenance operations of the zoo from the District of Columbia to your budget.

Dr. RIPLEY. Madam Chairman, the question of the transfer of the Zoo previously funded in the District of Columbia budget has been requested by the President. We are very much aware of the potential

financial impact on this committee's appropriation act, but we believe that this transfer reflects the fact tht the Zoo is a national zoo established in the Smithsonian by an Act of Congress in 1890. In addition, during the past year we have conducted a visitor survey showing that approximately 80 percent of the visitors to the Zoo, which numbered well over 3 million people at least last year, come from outside the District of Columbia, so that we believe that it is a national zoo.

Mrs. HANSEN. How many visitors were from the adjoining States of Maryland and Virginia?

Dr. RIPLEY. Of that 80 percent, probably 20 percent. In other words, over 50 percent are from outside the suburbs of the District of Columbia.

TOTAL BUDGET REQUEST FOR ZOO OPERATIONS

Mrs. HANSEN. What is the total amount included in your 1971 budget estimate for maintenance operations at the zoo?

Dr. RIPLEY. $3,125,000, and 252 positions.

Mrs. HANSEN. Has the District of Columbia budget estimate for 1971 been reduced accordingly?

Dr. RIPLEY. We believe so. In the District of Columbia budget message of the President, the statement is included, Madam Chairman, that the $3 million estimated for fiscal year 1971 has been included in Federal budget totals, thus providing equivalent relief to the city government.

EXPERIMENTAL EXHIBITS AND MUSEUM EDUCATION AND TRAINING

Mrs. HANSEN. Justify your increase of $75,000 for the Office of Director General of Museums.

Dr. RIPLEY. This increase includes two items. One is two positions, and $43,000 for experimental exhibits and museum education. The Smithsonian believes that we can do a better job of supplementing and reinforcing formal education at all levels, especially at the elementary and secondary levels by developing and testing and getting visitor reaction to new exhibit techniques. This is part of the program which I have already mentioned, Madam Chairman, as being one which we feel we are going to be called upon more and more to do, and we don't want to find ourselves going by default, and not being able to measure up to the educational demands put to us. The request includes an exhibit specialist and a psychologist, and supporting funds to plan and evaluate exhibition techniques. In addition, another item, one position and $32,000 are requested for museum training under the National Museum Act. The museum receives about a thousand requests a year from other museums and national and international associations to provide training of museum personnel in some of these subjects we have mentioned before, conservation, exhibition, preservation of rare and valuable materials, and other museum practices. Although we can provide advice and informal on-the-job training, 500 persons came last year to the Smithsonian for this purpose; we cannot meet these growing requirements in an adequate way. A program assistant and $26,000 for cooperative training grants in museum surveys and studies are requested and included in the $75,000 request.

DATA PROCESSING FOR COLLECTIONS MANAGEMENT

Mrs. HANSEN. Justify your requirements for an additional $200,000 for the National Museum of Natural History.

Dr. RIPLEY. This museum is in a pressing strait for the addition of more technicians and specialists. We are requesting eight positions and $105,000 for data processing for collections management.

As the Chairman will recall, we have described over the past 3 years the evolution of our data processing assemblage. We are pressed to the greatest degree to serve as a basis for important research projects, many of them involving access to environmental data. Electronic data processing provides the only means by which we feel this can be done effectively. Our collections in botany, vertebrates, and fossils are especially important. We need to be able to relate the data contained in them effectively to the needs of oil geologists, forest breeders, oceanographers, conservationists, and, of course, to environmental studies.

We require eight museum technicians and specialists and funds for supplies, materials, equipment, and other services. In addition, we are requesting two positions and $95,000 for special projects in archeology, biology, and marine sciences.

SEISTAN ARCHEOLOGICAL AND ECOLOGICAL PROJECT

Mrs. HANSEN. You are proposing a $40,000 expenditure for a project in Seistan. Justify this request.

Dr. RIPLEY. Yes. We are very anxious to make an archeological and ecological exploration of the Seistan region which is a special desert area in southern Afghanistan, because it has a parallel, an extremely interesting comparison, to certain drastic changes which have occurred, especially in our own southwest. We are all familiar with the extraordinary changes that have occurred in certain desert-like areas in North America. This is an opportunity to find out how perhaps a permanently affected area has evolved in Asia. We feel that this area is of sufficient significance that an expedition will really contribute to the national interest.

(Discussion off the record.)

Dr. RIPLEY. It is particularly interesting that this area has effectively lost its water table, and yet at one time it had ample agriculture. There are very important connotations for the world at large in the future.

Mrs. HANSEN. Is any other country participating in this work?

Dr. RIPLEY. We would be working with the Afghan Government, of course. They would demand equal participation, but no other nation. We think this could be a pioneering study.

SPACE ARTIFACTS PROGRAM

Mrs. HANSEN. Justify your increase of $50,000 for the National Air and Space Museum.

Dr. RIPLEY. This is essentially to support our space artifacts program, Madam Chairman. We would like to request four positions and $50,000. More than 2 million persons a year, as you know, are visiting our air and space displays. Since the lunar rock has gone on display I think we have had over 900,000 visitors.

VISITORS TO THE NATIONAL MUSEUM OF HISTORY AND TECHNOLOGY

Mrs. HANSEN. Does this exhibit have the largest visitation within the framework of the Smithsonian?

Dr. RIPLEY. No, Madam Chairman; the largest visitation is the National Museum of History and Technology. This museum celebrated its 30 millionth visitor last month. We estimate that during the hours of the day that the Museum of History and Technology is open, somebody goes into those doors every 3 seconds.

Mrs. HANSEN. Why does this museum have the largest visitation?

Dr. RIPLEY. I think there are two reasons really. Aside from the fact that it is the sort of the heartland of American history, it is our newest and showiest building on the Mall, and it has very good facilities, including ample space, and, of course, a cafeteria and eating facilities, which we sadly lack in the other buildings. It just has become fantastically popular. I would, of course, put the American heritage theme first, but the fact that it is there, that it is terribly efficient and it works well and it is big contribute to its popularity. We had 81,000 people in it one particular day. All of this is enormously important.

NATIONAL ZOOLOGICAL PARK

Mrs. HANSEN. An additional $180,000 is requested for maintenance of the National Zoological Park. What is the justification for this?

Dr. RIPLEY. I think I would like to ask Dr. Reed if he will speak to this, Madam Chairman, because it is his first appearance before this committee as Director of the National Zoological Park.

Dr. REED. Thank you, sir.

Mrs. HANSEN. I was sorry to hear about the sudden death of the white tiger cub.

Dr. REED. I was there, we think, about 2 hours after it occurred, at which time you could have bought the Zoo for 25 cents. There was a good used Director for sale. It was a terrible tragedy. However, the remaining cub is doing well under the care of a very good keeper.

The specific request that we are requesting of $180,000 is primarily to strengthen programs throughout the Zoo. We are requesting a planning and design unit to assist us in modernizing and increasing the educational value of the exhibits as they now stand in our modernization program. We are requesting some equipment and one steamfitter. In the Department of Scientific Research we are requesting one keeper for the care of additional animals. We are trying to increase the all-around effectiveness and use of the Zoo, particularly along the lines of public education, graduate education, and in medical and veterinary research.

RHEUMATOID ARTHRITIS STUDIES

This past year, I might say, that we have had very fortunate cooperation with George Washington University in developing a rheumatoid arthritis program. One of our little gorillas—little, he is 6 years old and weighs several hundred pounds—came down with an acute case of rheumatoid arthritis, classical of what children have.

In cooperation with Dr. Thomas Brown, of George Washington, we were able to make the diagnosis serologically, using culture from the joints, and then effect a clinical cure to the point where in 4 months he gained something like 40 pounds, has completely dominated his female and has recently bred her, so that it is a clinical cure, a symptomatic cure. We don't know whether it is a complete cure yet. But this is the first time an animal model has been developed for this disease, and this is very important because we at the zoo, in cooperating with other medical units, and at no additional cost to the Government, have provided a lead and an insight into this particular distressing disease, especially in children.

Whereas, you know, arthritis was formerly considered a disease of condition, a theory is developing that some forms of arthritis are infective diseases and can be cured. We are working on this and this is only part of our cooperative studies. We are going into chromosome counts with Dartmouth University. We have supplied 97 sets of chromosomes. They have never been recorded before by man, and we are developing along all lines of medical, zoological science. We are trying to develop our public education at the graduate level—we have five graduate students who are working at the Zoo toward their advanced degrees—as well as in the public education area.

Mrs. HANSEN. Your work on arthritis is very interesting because it has such a detrimental effect on so many people.

Dr. RIPLEY. This is a potential breakthrough.

Dr. REED. Having seen how the gorilla suffered, and I have seen some young children suffer with it, too, it is remarkable.

OFFICE OF DIRECTOR, NATIONAL ZOOLOGICAL PARK

Mrs. HANSEN. You are requesting an increase of $62,000 for the Office of Director, National Zoological Park. Describe the requirements for this increase.

Dr. REED. This is primarily for the planning and design unit. This request is for an architect, a draftsman, and a secretary. We need this particular position to further our developmental program at the Zoo, the physical renovation of the old plant. We need this architect, not to design buildings and exhibits, but to program the construction requirements at the Zoo so that outstanding architects can then do the actual design. The designing of the Zoo is so peculiar that programatically it has to be much further developed than in other types of buildings, like a school or an office building. We need this unit in order to make a proper and effective use of the construction money that we are given.

We also need a librarian for the hospital and research building. We do not have a librarian at the present time and we have some 30,000 books. We are developing the medical, zoological library, as well as the library for the general public, so that children and other users can effectively use the Zoo's resource material.

In addition there is a request for funds to meet the increased costs of operating items like utilities and that sort of thing.

INCREASED FOOD COSTS

Mrs. HANSEN. You are requesting an increase of $68,000 for operation and maintenance. What has been your yearly food costs?

Dr. REED. The increase in food cost of the animals is running about 10 percent but it will fluctuate with individual animals. I believe that I have, if you so desire, information on how the cost of feeding individual animals has fluctuated.

Mrs. HANSEN. Please insert the information in the record.

Dr. REED. Yes; I will insert this in the record.

(The information follows:)

NATIONAL ZOOLOGICAL PARK COST FOR FEEDING CERTAIN ANIMALS

Animal and year	Number	Cost per animal			Total cost	
		Daily	Percent increase	Yearly	Daily	Yearly
Leopard:						
1956	5	$1.06		$331	$5.30	$1,654
1965	5	1.77		552	8.85	2,761
1969	6	2.29	29.3	714	13.74	4,287
Lion:						
1956	6	2.48		774	14.88	4,643
1965	3	4.13		1,289	12.37	3,860
1969	2	4.67	13.1	1,457	9.34	2,914
Tiger:						
1956	3	2.83		883	8.49	2,649
1965	7	4.72		1,473	33.04	10,308
1969	3	6.24	32.2	1,947	18.72	5,841
Jaguar:						
1956	3	1.06		331	3.18	992
1965	2	1.77		552	3.54	1,105
1969	2	2.16	22.0	674	4.32	1,348
Gorilla:						
1956	2	1.21		442	2.42	883
1965	4	1.80		657	7.20	2,628
1969	3	1.98	10.0	722	5.94	2,168
Orangutan:						
1956	3	.45		164	1.35	493
1965	3	.61		223	1.83	678
1969	4	1.77	90.2	646	7.08	2,584
Elephant:						
1956	2					
1965	4	3.75		1,369	15.00	5,475
1969	4	3.97	5.9	1,450	15.88	5,796
Rhinoceros:						
1956	3					
1965	6	1.25		456	7.00	2,738
1969	7	1.87	49.6	683	13.09	4,778
Reindeer:						
1956	0					
1965	15	.28		102	4.20	1,533
1969	9	.52	85.7	190	4.64	1,694
Pigmy hippo:						
1956	6					
1965	9	.32		117	2.88	1,051
1969	8	.68	112.5	248	5.44	1,986
Cape buffalo:						
1956	3					
1965	5	.90		329	4.50	1,643
1969	8	1.10	22.2	402	8.80	3,212
Giraffe:						
1956	6					
1965	3	1.20		438	3.60	1,314
1969	6	1.87	55.8	683	11.22	4.095
Nile hippo:						
1956						
1965		2.34		854		
1969	3	2.79	19.2	1,018	8.37	3,055
Kiwi-bird:						
1956						
1965						
1969	2	1.76	new	642	3.52	1,285

DEPARTMENT OF LIVING VERTEBRATES

Mrs. HANSEN. An increase of $23,000 is requested for the Department of Living Vertebrates at the zoo. Please give us your justification.

Dr. REED. An amount of $10,000 is for the cost of food increase, which is a 10-percent increase in the past year. An amount of $5,000 is for sundry supplies and equipment that are needed for this particular department. This is the backbone of the Zoo. This is where we have 800-and-some-odd species of animals, 3,000 individual animals, and this takes care of all the sundry supplies, knives, wiping cloths, knife sharpeners, and equipment such as small swimming pool pumps. This is the miscellaneous material that we need to run such a remarkable city as we do have. An additional $8,000 is for animal purchases to meet rapidly rising prices.

RENOVATION AT THE ZOO

Mrs. HANSEN. I think you must improve and update the environment of the zoo.

Dr. REED. It is our desire that we will update it and make it much more useful to the people. When I consider the Zoo's bear pits are 1901, 1910, I get fairly distressed with the condition. The bears seem to like their housing, they can live in an old-fashioned house, but I would like their exhibit to be more meaningful.

Mrs. HANSEN. More habitable?

Dr. REED. Yes.

PORTLAND, OREG., ZOO

Mrs. HANSEN. The Portland Zoo has been redone. They have a very beautiful park.

Dr. RIPLEY. They have a wonderful zoo.

Dr. REED. I am very proud to hear you say that because I started as a veterinarian at Portland. Dorothy Lee appointed me and I was in on the original designs and foundations of that zoo and I got so interested I gave up practice and came to Washington.

Mrs. HANSEN. It is a beautifully designed zoo.

Dr. REED. Yes, it is nice. I was just up in Seattle. I am very pleased with the new house they have up there, the reptile house.

Mr. WYATT. I shouldn't let this opportunity pass without mentioning that the Portland Zoo is in my congressional district.

Dr. REED. I was a constituent of yours, or at least of your district, for 7 years.

Mr. WYATT. If you lived on the west side, you were.

Dr. RIPLEY. As you know, Madam Chairman, this is the 4th year we have put off the reconstruction program in the Zoo.

Mrs. HANSEN. I am well aware that reconstruction has been postponed. I was flabbergasted when I first came to Washington to see the condition of the pens and the lack of habitat. The Salt Lake City, Portland, and Seattle zoos are in much better condition.

Dr. REED. Many times I am called to consult with these zoos to help build and advise them on their exhibits, and I can't get it done on my own zoo.

Mrs. HANSEN. You can't say "Please use ours as a standard model," can you?

Dr. REED. No, but I can show them some antique examples.

SCIENTIFIC RESEARCH DEPARTMENT

Mrs. HANSEN. You have requested another increase of $9,000 for the Scientific Research Department at the zoo. Justify this request.

Dr. REED. Yes. The Scientific Research Department at the Zoo is leading primarily into behavior and ecology of the animals. Now, the Zoo is in a very, very fortunate position of having animals in its collection that can be studied as groups intimately. These animals, while they are not tame, are used to mankind so they react naturally in their own social habits without being terrified every time they see a man. In the wilds these animals would be dashing madly off.

Dr. RIPLEY. Or in the hospital, I might add.

Dr. REED. Yes, but these animals in the Zoo can be studied in depth and supplement the field studies. I might say we have five graduate students who are working on their advanced degrees at the Zoo. These people are doing very, very good work but with minimal support from the Zoo. This is where we are extending the Zoo's usefuless to the Nation through training young men and young women. We are also contributing basic knowledge about animals as it relates to their care and well-being in zoos, and this means that your zoo, the Portland zoo and all the rest of them, will benefit from our knowledge. Most recently there was a rather extensive field trip into Ceylon studying the ecology of the wild elephant. No one in Ceylon knew what the elephants were doing in the jungles. Now, they know all about them in captivity. Incidentally, we did an awful lot of work with the Portland Zoo, too, since they are the elephant capital of the United States.

Dr. RIPLEY. Elephants appear on the cover of the first issue of our magazine. This is the article in our magazine about which Dr. Reed is talking, by the research chief of this project, Dr. John Eisenberg.

Dr. REED. But our particular research unit will be developing more understanding of animals for the sake of contributing to man's knowledge without becoming a large unit, because we are relying upon visiting scientists, graduate students, and this sort of thing. We need one or two men on the staff but the rest of the staff will be graduate students coming in and out, making great use of the Zoo's resources.

ANIMAL HEALTH DEPARTMENT

Mrs. HANSEN. You are requesting an increase of $18,000 in the Animal Health Department at the zoo. What is the need for this increase in funds?

Dr. REED. The Animal Health Department is the veterinary section and it is connected with the pathologist. We are requesting a simplified data storage and retrieval system to make maximum use of the information pertaining to the animals that are in the collection. I mentioned already our work with the gorilla on rheumatoid arthritis. We have other examples. When an animal dies there are 97 tissues taken from it. All of these are examined and, while the animal may die of, let's say, a broken neck if he hits a fence, or some other accident, he may have some pathological lesions or anatomical lesions that we don't know about. These anatomical factors could be keyed into the retrieval system, and made available at a later date for further studies. This is the requirement for information storage and retrieval we should have

at the Zoo to make maximum use of the animals. I am not happy when an accident or a death happens, but we must make maximum use of everything that we have at the Zoo for general medical knowledge, particularly veterinary medicine, and this will help the animals. This knowledge feeds right back into the care of the animal collections, which, of course, through our associations with other zoos throughout the Nation and the world helps all animals everywhere. This knowledge will get back to the field, too, and help the animals in their natural habitats.

SUMMARY OF BUDGET REQUEST FOR THE ZOO

Mrs. HANSEN. For the convenience of the committee, would you please insert a tabulation in the record at this point, showing the amounts available for the various activities of the zoo we have just discussed in 1970, and indicating your total requests for 1971, with a third column showing the increase for 1971. This tabulation should be broken down between increased program costs and increased pay costs.

(The information follows:)

	1970	1971	Increase	
			Pay	Program
Office of Director	$799,000	$917,000	$56,000	$62,000
Operations and Maintenance Department	989,000	1,099,000	42,000	68,000
Living Vertebrates Department	888,000	939,000	28,000	23,000
Scientific Research Department	68,000	79,000	2,000	9,000
Animal Health Department	70,000	91,000	3,000	18,000
Total	2,814,000	3,125,000	131,000	180,000

ANACOSTIA NEIGHBORHOOD MUSEUM

Mrs. HANSEN. An increase of $75,000 is requested for the Anacostia Neighborhood Museum. What are the requirements here?

Dr. RIPLEY. We feel, Madam Chairman, that the museum does need some increased Federal funding because outside general support for general purposes has come to a halt. I have a sheet which I might, if you wish, introduce into the record telling the story about our funding from foundations and outside support in total to the Anacostia Museum during the fiscal years 1967 through 1970, if Madam Chairman would care to have that. It gives a comparative figure of our funding and where we stand.

We have received some 11 general-purpose grants totaling $95,400 in the first 3 years of fund raising. Last year these stopped and I think that there are perhaps more than one reason. We have already discussed the sudden decline in general purpose grant funding. It is true, however, that we have had new grants totaling $115,000 since fiscal year 1969. But these have all been for specific projects, which do not help our personnel and general operating costs. If anything, it places an added burden on them. This remains the situation today. We do have good prospects of receiving about $150,000 in combined Government-private foundation grants for exhibits and accompanying community programs demonstrating urban problems, again a very worthwhile project, but it will be an overload on our regular staff. The effect of this seems to be that the foundations are saying, "We

helped you to start a successful experiment. We will help you take on new experiments but the basic responsibility of running the Anacostia Neighborhood Museum must now be up to the Smithsonian".

Our request is for four positions and $75,000. This is because the community demands on the museum for classes, workshops, school participation groups and other museum-related education services have increased steadily since the museum opened. Since opening, 117,000 children and other community residents have participated in the museum's activities. Part time and volunteer help from the community have been used, but we do need two full-time instructors to put the class and workshop activities on a more regular basis. An assistant director and clerk-typist are requested to help develop programs, assist with administrative matters, plan exhibits that meet community needs, and work with other groups interested in setting up similar museums. Funds in the amount of $45,000 are requested also for space rental and custodial, exhibit, and workshop supplies and equipment.

DECLINE IN CRIME AS A RESULT OF THE MUSEUM

Mrs. HANSEN. Has there been any decline in crime in that area as a result of this museum?

Dr. RIPLEY. We noticed during the disturbances, Madam Chairman, in April 1968 that the museum seemed to exercise a beneficent effect and created a kind of ambiance around it for several blocks in every direction. I don't think I am exaggerating when I say that this was the case. The museum stayed open in the evening. The disturbances happened to be during evening opening hours, you know, and there was no trouble and no windows were broken or shops broken into in that immediate neighborhood. It was perfectly fascinating.

Mrs. HANSEN. Hasn't this museum had a great influence on rebuilding community pride in that area?

Dr. RIPLEY. I think that the District Council representative, Stanley Anderson, will agree with me when I say that this is so. It has had a tremendous amount.

RENWICK GALLERY OF ART

Mrs. HANSEN. An increase of $100,000 is requested to prepare the Renwick Gallery for a public opening in fiscal year 1971. What is the current status of this phase of your activity?

Dr. RIPLEY. Would you like to speak to that, Mr. Blitzer? May I ask Mr. Blitzer?

Mr. BLITZER. Madam Chairman, we are still in the process of trying to refurbish the building in preparation for an opening. We have a construction request for that purpose. We are hoping now that we will be able by, say, the winter of this year to open parts of the museum, namely, the entrance hall, the stairway, the grand gallery on the top floor, and another room on the top floor that a private donor has offered to refurbish for us. The situation now is that we are close enough to an opening of the gallery that it seems to us that it is necessary to start assembling a small staff. It is not a museum that will ever have a large staff or that will ever have a collection of its own, but we need technicians and exhibit specialists in order to use all the resources that the Smithsonian will contribute toward completing exhibits.

Specifically, what we are asking for is four positions: an exhibit specialist, two technicians, and a clerk-typist for $21,000; and other funds to assist in the preparation of exhibits and the purchase of equipment, cases, and lighting, and so forth, for exhibits.

TOTAL FUNDING FOR THE REHABILITATION OF THE RENWICK GALLERY

Mrs. HANSEN. Will you please insert in the record the total funds applied to date for the rehabilitation of the Renwick Gallery?

Mr. BLITZER. Certainly.

(The information follows:)

An amount of $1,870,000 was appropriated in fiscal year 1967 for the rehabilitation of the Renwick Gallery. An additional $100,000 was appropriated in fiscal year 1970 and in December 1969 a further $100,000 was made available by an approved reprograming action. In total, $2,070,000 has been made available.

NATIONAL COLLECTION OF FINE ARTS PROGRAM

Mrs. HANSEN. Approximately $1,055,000 of your request is for the National Collection of Fine Arts. Please summarize for the committee the current status of this gallery as far as collection of paintings, availability to the public, and overall administration is concerned.

Dr. RIPLEY. That is for the National Collection of Fine Arts?

Mrs. HANSEN. Yes.

Dr. RIPLEY. Yes, we will do so. May we insert that in the record, or would you like me to speak to it now?

Mrs. HANSEN. I think you may place it in the record.

(The information follows:)

The collections of the National Collection of Fine Arts currently contain approximately 13,000 objects: 3,500 paintings; 6,500 prints, drawings and watercolors; 1,000 pieces of sculpture; 350 miniatures; 1,600 decorative art objects. Since these objects were acquired over more than a century, and since for much of this time there was no clear policy regarding the role of the NCFA, the collection covers a broad range of subject matter and of quality. Its greatest strength is in the field of the history of American art, and it is now the policy of the Smithsonian to build in particular upon this strength.

In May of 1968, the National Collection of Fine Arts was opened to the public for the first time in its own quarters in the old Patent Office building. At present, 11 galleries are open; nine additional galleries will be open when necessary work has been completed. All the collections of the NCFA are available to scholars and students.

On January 1, 1970, Dr. Joshua C. Taylor, Harper professor of humanities and professor of art at the University of Chicago, became Director of the National Collection of Fine Arts. Upon assuming this position, Dr. Taylor immediately embarked upon a program for improving the storage and management of the collections in order to insure better control and to make the collections more accessible. At the same time, Dr. Taylor began a program for improving the exhibition of the permanent collection, including both rearrangement of existing galleries and opening of additional galleries. Dr. Taylor is also taking steps to strengthen the scholarly staff of the NCFA and to acquire important works of art for the collection.

EXCHANGE OF PAINTINGS

Mrs. HANSEN. There was an article that appeared in the local newspapers recently relative to the exchange of paintings that took place, and it was alleged that you people did not get the better of the bargain. May we have your complete comment in this connection?

Dr. RIPLEY. In March 1969, David Scott, the former Director of the National Collection of Fine Arts, came to the Graham Gallery in New York at 1014 Madison Avenue and he saw hanging on the wall there an important painting called "Helen Brought to Paris" by the 18th century American master, Benjamin West. Mr. James Graham of the Gallery quoted Dr. Scott a price of $10,000 for this work because that price happened to be on the tag on the back of the painting. He did not realize at the time that the price had been on that tag for some 6 years and was the wrong price tag. Actually, at the time the price was quoted to Dr. Scott the West was probably already worth some $35,000 or more. In other words, the man who showed Dr. Scott the painting made a mistake. It was one of those things that happened. At that point Dr. Scott said that he was very much interested, naturally, because the price seemed to be very low and that he would attempt to raise the money privately to pay for the painting. When the mistake was discovered, the Graham Gallery decided that the ethical thing for them to do was to stand behind the mistake and say, indeed, that they had made a mistake but we could have the painting for the $10,000. It was very important in their estimation, as well as in that of the National Collection of Fine Arts, that a Benjamin West should be represented in this gallery of American artists because we did not have a comparable one. The collection had had no such paintings by West and it is a very large painting, nearly 5 by 6 feet, an impressive painting, and, of course, well worth $35,000.

Later on Mr. Robert Davis, who succeeded Dr. Scott as the Acting Director of the NCFA after Dr. Scott's resignation, telephoned the Graham Gallery and advised that the Institution had been unable to obtain a private donor for the purchase of the West painting and asked if the Gallery would agree to exchange a painting by a non-American, a foreigner, which could be said to be of equivalent value.

The Graham Gallery agreed to the arrangement and when they came to Washington Mr. Davis showed a number of paintings which were of foreign origin and which by the terms of the receipt of the paintings in the National Collection, had no legal tie on them; that is, we could dispose of them. Included in these was a Flemish painting which the Graham Gallery eventually decided to accept. This was a respected painting attributed to Jan Massys, a minor 16th century work, a master, and it was felt that this would be probably worth today about $35,000; in other words, equivalent in price to the price that they really wanted to get for the West. The upshot of this whole affair is that the Graham Gallery and the Smithsonian, the National Collection of Fine Arts, have come out with equivalent value. We have obtained a very important work by an American, important to us because it is by an artist of great importance in the 18th century, not well represented in our collection, and they have received a painting which they are going to be able to sell.

So those are the facts of the story.

Mr. BLITZER. We have an unsolicited letter, I may say, as a result of this newspaper article from Edgar Richardson, a leading American art historian, and former Chairman of the National Collection of Fine Arts Commission. It was his opinion that we came out very well indeed.

Mrs. HANSEN. Please insert a copy of that letter in the record.
Mr. BLITZER. Yes.
Dr. RIPLEY. We will place Dr. Richardson's letter in the record.
(The letter follows:)

The pertinent portion of Dr. Richardson's letter of January 3, 1970, is as follows:

"I think that the Museum (the National Collection of Fine Arts) got the better of the bargain. The Massys is a hard picture to sell today whereas the Benjamin West is quite salable."

Dr. RIPLEY. He at one time had been the Chairman of the Fine Arts Commission, and, of course, is the author of the leading book on American artists.

POLICY ON THE ACQUISITION OF OBJECTS

Mrs. HANSEN. Describe for the committee your general policy with regard to acquisitions of art objects for this gallery.
Dr. RIPLEY. Would you like to speak to that, Mr. Blitzer?
Mr. BLITZER. Certainly. It is our feeling, and it has been increasingly the feeling, I believe, of the Regents, the Secretary, the Advisory Commission, and the staff of the gallery, that the proper role of that art museum is to be a museum about the history of American art and the acquisition policy is to acquire as many important historical works of American art as possible.

POLICY ON THE DISPOSITION OF ART WORK

Mrs. HANSEN. What is your general policy on disposition of any art work now in possession of the gallery?
Dr. RIPLEY. Our general policy has always been extremely reserved in this connection. All museums, art museums particularly, tend to keep the collections that are given them. Of course when they are given under terms of a legal bequest which is binding on the museum, that they must be kept, they do keep them. In normal practice, museums may from time to time have objects which are not so bound, and in fact very many donors who are anxious to enhance the collections of the museum give pictures or other objects with the suggestion that at such time as a better example comes on the market, or some better object which the museum would rather have, they can trade or exchange the object. So you get both kinds of treatment, as it were, of museum objects by their donors. Some donors are very restrictive and ask, for example, that a room or a wing be named in their honor, and that all objects must also be on permanent exhibition. The Smithsonian has fallen heir to this kind of restrictive policy in the past. Other donors say, "I want to give you objects from my collection and if at some time you wish to dispose of them, you may."
So that we have both kinds of agreements. The only objects which we have disposed of from our art collections have been ones which are the type that by request or by gift are open. That is, they may, in our own judgment, do the sorts of things which have been done in these four cases, by the administrator of the collection. This will only be with cognizance of the Commission and the curators deciding to exchange a picture, or offer one in order to raise funds to buy objects more appropriate for the collection.

Mrs. HANSEN. Do you have a Commission on Fine Arts?

Dr. RIPLEY. We have a National Collection of Fine Arts Commission.

Mrs. HANSEN. Insert in the record the membership of that commission. Is the membership thoroughly familiar with all the activities of the gallery?

Dr. RIPLEY. Yes. Under our present regulations, they must approve in advance all acquisitions, exchanges, and sales. I may add, Madam Chairman, that this Commission makes its reports to the Board of Regents, who then must pass on the reports of the Commission.

(The information follows:)

NATIONAL COLLECTION OF FINE ARTS COMMISSION

Mr. Leonard Baskin, department of art, Smith College, Northampton, Mass.
Mr. William A. M. Burden, 630 Fifth Avenue, New York, N.Y.
Mr. H. Page Cross, 157 East 75th Street, New York, N.Y.
Dr. David Edward Finley, 1616 H Street NW., Washington, D.C.
Mr. Martin Friedman, director, Walker Art Center, 1710 Lyndale Avenue, Minneapolis, Minn.
Mr. Lloyd Goodrich, advisory director, Whitney Museum of American Art, 945 Madison Avenue, New York, N.Y.
Mr. Walker Hancock, Lanesville, Gloucester, Mass.
Mr. Bartlett H. Hayes, Jr., director, Addison Gallery of American Art, Andover, Mass.
Mr. August Heckscher, 830 Fifth Avenue, New York, N.Y.
Mr. Thomas C. Howe, 2709 Larkin Street, San Francisco, Calif.
Mrs. J. Lee Johnson III, 1200 Broad Avenue, Fort Worth, Tex.
Mr. Samuel C. Johnson, 1525 Howe Street, Racine, Wis.
Dr. Wilmarth S. Lewis, Main Street, Farmington, Conn.
Mr. Henry P. McIlhenny, 1914 Rittenhouse Square, Philadelphia, Pa.
Mr. Ogden M. Pleissner, 35 East Ninth Street, New York, N.Y.
Dr. Edgar P. Richardson, 285 Locust Street, Philadelphia, Pa.
Dr. Charles H. Sawyer, University of Michigan Art Museum, Ann Arbor, Mich.
Mrs. Otto L. Spaeth, 120 East 81st Street, New York, N.Y.
S. Dillon Ripley (ex officio), Secretary, Smithsonian Institution, Washington, D.C.
Executive committee: Dr. Finley, chairman; Mr. McIlhenny, Mr. Pleissner, Dr. Sawyer, ex officio, Dr. Hancock, ex officio, and Mr. Ripley, ex officio.
Member emeritus: Dr. Alexander Wetmore, and Dr. Leonard Carmichael.
Honorary members: Dr. Gilmore D. Clarke, Mr. Paul Mellon, Mr. Stowe Wengenrath, and Mr. Andrew Wyeth.

APPRAISING THE VALUE OF ART WORKS

Mrs. HANSEN. Describe fully for the committee the procedures you follow in appraising the value of art works you currently own or art works that you wish to obtain for this gallery.

Dr. RIPLEY. Maybe you would like to speak to that, Mr. Blitzer. I am less familiar with that.

Mr. BLITZER. Yes. It is our feeling that part of the job that is done by a professional appraiser has to do with studying the history of a painting and examining very carefully the condition of a painting. It is our feeling that our staff is probably better equipped to do that than the staff of any professional appraiser that we know of.

The place where we feel we need outside advice has to do with the market which is a constantly changing business in the art world. In every case that I know of, we have gotten the advice of people who are very close to the market to tell us what a painting, either that we own and might dispose of or that we might want, should be worth on the market. I may say, if I may revert to the question of the Benjamin

West, we have a letter dated April 23, 1969, from Mr. C. Hugh Hildesley of the Parke-Bernet Galleries in New York, stating that in his estimation the Massys painting that we owned would bring at auction between $6,000 and $8,000.

Mrs. HANSEN. Please insert the letter in the record?

Mr. BLITZER. I would be delighted to.

(The letter follows:)

PARKE-BERNET GALLERIES, INC.,
New York, N.Y., April 23, 1969.

Mr. WILLIAM TRUETTNER,
National Collection of Fine Arts,
Old Patent Office Building,
Washington, D.C.

DEAR MR. TRUETTNER: On the attached sheets I have listed the paintings which I examined for the National Collection of Fine Arts. I hope that my comments will explain the estimates in most cases.

We would be glad to offer the paintings which are not marked with an asterisk or cross at Parke-Bernet next autumn. Our commission on a sale of $5,000 or less is 15 percent, and 12½ percent on a sale of more than $5,000. We would be glad to receive pictures from you at any time during the summer.

Please let me know if you have any further questions. I look forward to hearing from you again.

Yours sincerely,

C. HUGH HILDESLEY.

PAINTINGS—NATIONAL COLLECTION OF FINE ARTS

Guardi, Lagoon Scene: Sky damaged and repainted, $15,000 to $20,000.
Guardi, View of the Bacino di San Marco: Extensive repaint, $2,000 to $3,000.
Venetian School (Tiepolo), Baptism of Christ: Bad condition, $1,500 to $2,000.
*Bonnington, Barges, School work; damaged, $150 to $200.
Steen, Doctor's Visit, Signature wrong; school work, $1,500 to $2,000.
Drost, Young Girl, Possibly a late Nicolaes Maes; half cleaned, $800 to $1,000.
Davidson, Portrait of a Woman, $1,200 to $1,500.
Janssens Van Ceulen, Portrait: Said to be Madam Thep, $2,000 to $2,500.
Massys, Madonna and Child: Good example of his Italianate work, $6,000 to $8,000.
Gainsborough, Lord Mulgrave, Cut down; some restoration, $4,000 to $6,000
Beechey, Duke of Sussex, $1,500 to $2,000.
*Francia, Mystic Marriage of St. Catherine: Mostly, if not all, 19th century.
*Titian, Cardinal: Roman School (?); needs more research.
Romney, Miss Kirckpatrick: Heavy restoration on face, $1,800 to $2,200.
†Richard Wilson, Roman Landscape: Value damaged by existence of second version, $8,000 to $10,000.
*Turner, View of Edinburgh: I do not believe this attribution is right, but suggest that a photograph of the picture be sent to Martin Butlin, Tate Gallery, London, for a further opinion.

ACQUISITION POLICY

Mrs. HANSEN. The allegiation has been made that the procurement of pieces of art for this gallery has been purposely limited so as not to provide too much competition for the art collection that will eventually be housed in the Hirshhorn Museum. In view of this allegation, I think it would be proper for you to have an opportunity to declare straightforwardly what the Smithsonian policy is in this connection.

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†Suggest sale in London, commission: 10 percent. Remaining paintings to be sold at Parke-Bernet.
*Not for auction.

Dr. RIPLEY. I can answer at once, Madam Chairman, that we deny the allegation completely. The only restrictions on the acquisition policies of the National Collection of Fine Arts that I can think of are two. One is the amount of funds or the ability of the staff to procure gifts or donations of contemporary or historic objects, and the second is the fact that in our general policy we prefer to think of the National Collection as a museum of the history of American art, and so we would prefer not to acquire works by foreign contemporary artists or historic foreign artists, if possible. We would not necessarily turn them down, but our preference would be to continue the development in the Nation's Capital of this National Collection in the field of American art.

Mrs. HANSEN. How about a portrait of King George?

Dr. RIPLEY. In terms of the National Portrait Gallery, King George was one of the most influential people in the formation of the United States of America. We should certainly have one in the National Portrait Gallery. As Dean Atcheson remarked in a talk at our Portrait Gallery this week, it was only by his effective stupidity that we were able to develop a country which came to the rescue of his country in World War II.

Mr. BLITZER. Not at a policy level, but at a practical level, there is a problem of acquiring works of art without sufficient funds to purchase them. This has been a problem.

Mrs. HANSEN. You don't have adequate acquisition funds?

Dr. RIPLEY. We have very limited acquisition funds.

Mrs. HANSEN. Another limiting factor is the amount of funds that you are required to spend for maintenance and security.

Dr. RIPLEY. Yes; this is true.

Mrs. HANSEN. You have had limited acquisition funds for many years because of budgetary restrictions.

Dr. RIPLEY. This is very true, and we, of course, have tried, as you know, prior to the opening of the National Collection of Fine Arts new quarters to build up a phased program of care, conservation, and maintenance, so that when the collection finally was placed on view, we would have a fairly respectable museum to start with. This has been a difficult project for all of us.

OPERATION OF THE NATIONAL COLLECTION OF FINE ARTS

Mrs. HANSEN. What is your evaluation of the operation and administration of the National Collection of Fine Arts to date? Has it reached its optimum potential?

Dr. RIPLEY. No. I would say that it has come along quite nicely, but that we have suffered from the fact that for the last 2 years there have been no increases requested for this collection of fine arts. It has been a static item in our budget, maintained at the program level of 1968. We have not been able to increase in the normal way that we would like this collection to do so.

JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Mrs. HANSEN. $726,000 is requested for the Joseph H. Hirshhorn Museum and Sculpture Garden. Give us a complete description of the fund requirements in this connection.

Dr. RIPLEY. This is a continuation of the gradual development of the collection for exhibition. I know that Mr. Bradley, Madam Chairman, and Mr. Blitzer will want to speak further on these points, but I can point out that in our testimony before your committee of the past 2 years, we have described the need to bring the Hirshhorn collections into museum status from what is essentially the fantastic collection of one man. That is, there is a considerable amount of cataloging, documenting, conservation, framing, and the like which must be phased into, if we are to be prepared to occupy the building and the sculpture garden. That is why we have requested seven positions and $375,000 for next year, to attempt to prepare some 1,200 of the choicest paintings and pieces of sculpture from the more than 7,000 items in the gift collection for exhibit when the museum opens.

These paintings and pieces of sculpture, valued at $20 million, must be examined, framed, cleaned, and in some cases restored prior to exhibit. The total cost of this effort, not including any additional paintings that might be contributed along the way by Mr. Hirshhorn, is estimated to cost $460,000, of which $160,000 are requested in fiscal year 1971.

In addition to the restoration effort, the staff must receive and process the more than 500 new works of art being added to the collection each year by Mr. Hirshhorn, conduct research and documentation for the opening, catalog the collection, and meet public inquiries which are, of course, continual. To do this, the museum requires an increased staff consisting of a curator, two exhibit technicians, three museum technicians, and a clerk-typist. Additional funds are requested for travel, transportation of objects, rental of storage space, printing, supplies and materials, equipment, and other services.

I may point out that the bulk of the collection, as the Chairman knows, is still housed in New York and Connecticut, because it is less expensive to maintain it near to the conservators and the exhibit technicians who can work on it. We can get better work for our dollar by leaving it on the spot and framing, working on it, cataloging it there. Also Mr. Hirshhorn continues, of course, to pay very substantial sums for insurance and maintenance and warehousing in addition. So that this, plus the fact that he is adding approximately $1 million worth of objects each year means that although we in effect have the collection to prepare for the opening, we are getting an extraordinary amount of service from Mr. Hirshhorn and his facilities there.

LEGAL ASPECTS OF THE HIRSHHORN MUSEUM

Mrs. HANSEN. Some Members of Congress have questioned the outlay of funds for the Hirshhorn museum during the interim time since the museum was authorized.

In 1968 the Hirshhorn museum received a Federal appropriation for salaries and expenses of $62,000 to take care of its works of art. In 1969 the Federal appropriation was $159,000 and in fiscal 1970 it was $236,000.

The contention has been made that the museum as such does not legally exist, because it has not yet been built, has no board of trustees, and does not have a collection. The works of art are contended to be in the private collection of Mr. Hirshhorn. Would you please comment on this?

Dr. RIPLEY. We would like very much.

Mr. BRADLEY. Madam Chairman, I will try to be brief. You mentioned a number of points there. Taking them up as I recall, first does the Hirshhorn museum legally exist. The answer is "Yes." There is an Act of November 7, 1966, that creates the Hirshhorn Museum, and in the pattern of other museums that we have had, such as the National Collection of Fine Arts, which was authorized in 1846, not by that name, but then reauthorized and reborn in 1938 by the Congress. It still did not then have a museum building, but it existed, and it served as an art gallery and an art function, a place to exhibit, to care for a collection, to study, to correspond with people and to curate a collection. So the Hirshhorn Museum does exist legally, because it was created by the Congress.

The fact that it does not yet have a building around it is certainly no reason why we should not be prepared to move into a $16 million building when we do have it, 2½ years from now. We now have an excavation underway. It is about 20 feet below grade there and dirt is flying.

OWNERSHIP OF THE HIRSHHORN COLLECTION

Now, as to who owns the collection, the collection is owned by Mr. Hirshhorn, subject to certain conditions when he gave it. He has the title, but it is as if a house had a mortgage on it. There is a very substantial lien on his collection in favor of the Smithsonian Institution. Mr. Hirshhorn offered the collection. The President of the United States accepted the collection, both agreeing to certain conditions. The conditions were in a very few words that we produce a museum building in Washington to house it. But there were a lot of other conditions and we have met everyone of them. We have one more to meet, namely construction, and now thanks to this committee in no small part, we are about to meet the last one. The museum is under contract. The museum is under construction. Mr. Hirshhorn at the last minute made that possible.

We have a letter dated March 23, 1970, that we would like very much to introduce in the record wherein Mr. Hirshhorn gave the last $1 million, in order to make it possible to sign a construction contract after the General Accounting Office found that it was possible to admit, under the rules of the General Services Administration, an error of three-quarters of a million dollars in the low bid.

(The letter follows:)

MARCH 23, 1970.

Hon. S. DILLON RIPLEY,
Secretary, the Smithsonian Institution,
Washington, D.C.

DEAR MR. SECRETARY: We refer to your letter of March 9, 1970, in which you request, on behalf of the Smithsonian Institution, that the agreement between it, Joseph H. Hirshhorn and the Joseph H. Hirshhorn Foundation, Inc., dated May 17, 1966, be modified so as to permit the $1 million cash gift which was to be used as an art acquisition fund to be used instead, to the extent necessary, to meet costs of completing the building.

The proposal as set forth in your letter of March 9, 1970, is acceptable to the undersigned; and the above-mentioned agreement of May 17, 1966 shall be deemed amended accordingly.

Under the agreed amendment to the basic agreement of May 17, 1966, the Joseph H. Hirshhorn Museum and Sculpture Garden will no longer begin its operations with an art acquisition fund of $1 million. The purpose of that fund

was to augment the collection as described in the inventory of works of art which was set forth in the agreement of May 17, 1966. It is our hope that this purpose may be served by the contribution of additional works of art and to that end we wish to inform you of our intention to transfer to the Joseph H. Hirshhorn Museum and Sculpture Garden, upon its construction and completion. additional works of art having a total value of approximately $1 million.

We appreciate that the Institution has been doing its utmost to meet the letter and spirit of our agreement and we are pleased to cooperate in a kindred manner to bring the project to fruition.

Sincerely yours,

THE JOSEPH H. HIRSHHORN FOUNDATION, INC.
JOSEPH H. HIRSHHORN.
By SAM HARRIS, *Secretary.*

Mr. BRADLEY. We have secured Congressional authorization, we have secured a site, Fine Arts Commission approval, and Planning Commission approval.

Mrs. HANSEN. Was the increase in construction costs funded entirely by Mr. Hirshhorn?

Mr. BRADLEY. Yes, Madam Chairman, by Mr. Hirshhorn. Mr. Hirshhorn also has agreed that if the Smithsonian satisfies these conditions, which we have satisfied no less than six or eight times by various actions, and we are in the process of satisfying the last one by constructing the building; Mr. Hirshhorn is legally bound to completely turn the collection over to the Smithsonian as he has already agreed to in 1966. Mr. Hirshhorn has also been occupying his time since 1966, 4 years, in acquiring additional works of art. These will be offered over and above the inventory that was presented to the Congress at the time of authorization. This is a project that is a joint venture. We have every reason to expect that Mr. Hirshhorn will present these works of art or a substantial portion of them to the Smithsonian for the Hirshhorn gallery.

Mr. Hirshhorn has agreed by the cited letter of March 23, 1970, that in exchange for the $1 million which was going to be set up as an endowment fund upon completion of the building for the purchase of additional works of art. We had to pull that forward in order that there be a building, and sign a construction contract. He has agreed to that in writing. In exchange for the $1 million trust fund to buy works of art, Mr. Hirshhorn has also agreed to present to the Smithsonian not less than $1 million worth of additional art in furtherance of his earlier pledge to present money to buy art with. So you see we are in the position of defending what truly is a splendid gift to the American people, and it is a continuing, a living gift, because Mr. Hirshhorn believes that to continue the value of a collection of both older and contemporary art, one must work at it. What we need this staff for, even as we did for the National Collection of Fine Arts is because we have a responsibility to the Congress to be ready 2½ years from now, when we have a building down there, to put approximately 20 percent of his holdings brought up to exhibit standards, resplendent and ready for the American public to take a look.

TABULATION OF FUNDS FOR HIRSHHORN OPERATIONS

Mrs. HANSEN. Insert in the record a tabulation, by fiscal year, of all moneys, other than construction funds, expended for the Joseph H. Hirshhorn Museum. Please indicate in each instance the purpose for which the funds were expended.

(The information follows:)

	Fiscal year 1968	Fiscal year 1969	Fiscal year 1970 estimate
Personnel compensation	$44,312	$66,450	$129,000
Personnel benefits	2,738	4,108	9,000
Travel and transportation of persons	1,756	1,500	11,000
Transportation of things	0	1,044	8,000
Rent, communications, and utilities	7,130	30,172	29,000
Printing and reproduction	0	0	4,000
Other services	0	24,301	124,000
Supplies and materials	3,753	9,619	16,000
Equipment	2,150	11,754	17,000
Total	61,839	148,948	347,000
Total (rounded)	62,000	149,000	347,000

Personnel Compensation and Personnel Benefits are used to employ the Director and his staff. This staff is currently working on cataloging and matters relating to the curatorial responsibilities for the art collection under the agreement to give the collection to the Smithsonian. The staff also is involved in photographing all the paintings and other works, identifying those works which must be restored for public display, and performing research on the works of art and their creators.

Travel and transportation funds have been spent on administrative travel between Washington, D.C., and New York. Trips are also made to perform the research and to view modern display techniques which could possibly be used in the new museum.

Transportation funds are used to move the objects from the warehouse to the various restorers and back to the warehouse.

Rent is paid for offices for the staff in New York City and for several rooms in the warehouse where the collection is stored. These rooms are used to view the collection, to examine the works in need of restoration and to do the photographing and to take care of the additions.

Printing funds are for rent of a Xerox copier.

Other services funds are used to pay for the restoration and conservation of the collection. Some funds are also used for contracts to photograph the collection, train personnel, bookbinding, equipment, and repair.

Supplies and materials funds are used for various office supplies, to purchase auction catalogs which will become a part of the library. These catalogs make up an important reference tool for this kind of work. These funds are also used to purchase film and supplies for the photography that is done in-house.

Equipment funds were used for the initial equipping and furnishing of the offices and to purchase books and reprints for the reference collection.

CERTIFICATION OF USE OF HIRSHHORN FUNDS

Mrs. HANSEN. Can you certify to the committee that funds appropriated for this purpose were used for no other activity? For example, we understand most of this preliminary work is done in Connecticut. Is there any possibility that personnel or equipment being used for the preparation of the Joseph H. Hirshhorn collection could have been engaged in other activities not related to this preparation?

Dr. RIPLEY. We will be glad to certify to that and provide that for the record.

(The information follows:)

I hereby certify that the Hirshhorn Museum personnel, funds, and equipment have been used for the purposes of preparing the collection or for other activities directly related to the establishment and planned operation of a new art museum and sculpture garden. I know of no instances of uses for other purposes.

Signed S. Dillon Ripley, 22 April, 1970.

Mrs. HANSEN. I want a legal opinion on this, and if you are not prepared to give it at this time, I want you to have your General Counsel start work on it immediately so that it can be included in this record. The question has been raised as to the legality of expending Federal funds on the Hirshhorn art objects before they actually became the property of the United States.

If I recall the agreement correctly, title to the art collection would not be transferred to the United States until construction of the museum to house it had been completed.

Dr. RIPLEY. Yes; it will be provided.

(The information follows:)

USE OF FEDERAL FUNDS IN PREPARING WORKS OF ART FOR THE OPENING OF THE JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Public Law 89–788, 20 United States Code, sections 76aa–ee, established the Joseph H. Hirshhorn Museum and Sculpture Garden, effective November 7, 1966, under the basic authority of the Board of Regents for "the increase and diffusion of knowledge among men." 20 United States Code, sections 41, 42. Appropriations were specifically authorized for the operation of the museum, and the Regents were empowered to employ a director, an administrator, and two curators for the "efficient administration" of the museum. 20 United States Code, sections 76dd, 76ee.

Contemporaneously with the passage of Public Law 89–788, and pursuant to this express congressional mandate to open and operate the museum, the Smithsonian submitted to the Bureau of the Budget a request for the first increment of funds for the 5-year program necessary to staff the museum and prepare for the opening. These funds, as well as those requested and appropriated for fiscal years 1969 and 1970, were clearly identified in the budget submissions to the Appropriations Committees, specifying the purposes, including cataloguing, research, and the selection, conservation, and restoration of about one-sixth of the collection for the initial opening to the public.

This interpretation and implementation of the requirements of Public Law 89–788 has been accepted by the Smithsonian from the outset and has been consistently reaffirmed by the Congress in the 3 years following the passage of the act. Any other course of action would have required a finding that Congress intended the museum building, constructed at public expense, to remain closed to the public for as much as 5 years after its completion. Such a view is without any support whatever in the language of the act or in its legislative history.

On the narrower question of the legality of expending appropriated funds for preparing for exhibit a portion of the collection before legal title thereto is fully vested in the Smithsonian, such expenditures are proper where they "reasonably appear to be incident to and essential in the accomplishment of the authorized purposes of the appropriation." 42 Comp. Gen. 480 (1963) at p. 485; See also 46 Comp. Gen. 25 (1966). Clearly the preparation of the works of art is essential to the opening of the museum to the public. A case in point is the opening of the National Gallery of Art, where, during construction of the building and prior to the transfer of the Mellon collection to the Smithsonian in 1941, appropriations were authorized and expended for these same purposes in 1939 and 1940.

In summary, there is no legal bar to the appropriation and expenditure of funds for the expeditious opening and operating of the Hirshhorn Museum and Sculpture Garden, including the preparation of selected works of art for exhibition.

22 APRIL 1970.

PETER G. POWERS,
General Counsel, Smithsonian Institution.

APPRAISING THE HIRSHHORN COLLECTION

Mrs. HANSEN. I would also like you to insert in the record a complete description of the procedures which were followed in appraising the potential value of the Hirshhorn collection. This information should contain the names of the appraisers doing the work with a summary background description of their qualifications.

Dr. RIPLEY. We would be very happy to do this. This, of course, is all in the original inventory of the collection when it was accepted, and it was gone over very carefully by more than one appraiser as I recall. We had a very elaborate inventory.

(The information follows:)

The diversification of the art of our time makes it impossible for a single appraiser to possess specialized knowledge of the current value of the paintings, sculpture, drawings, and graphics of all periods and historical schools. Thus, to insure expertise and firsthand knowledge of the art market, the method used to determine the current market value of the Hirshhorn collection was that used by established auction houses, dealers' associations, and appraisers in the fine arts, as well as the Department of Internal Revenue, all of whom receive precise, current data from the respected representatives of individual artists and schools of art.

The great magnitude and scope of the collection made it necessary to obtain appraisals from 148 independent sources. It would have been far easier to enlist a single appraiser, who, in turn, would have consulted the same primary sources of information— the specialized dealers.

Since the appraisal was made, from September 1965 to April 1966, art prices have continued their spectacular rise. Newspaper and television coverage of auction sales have publicized this upsurge. A reliable estimate indicates that in the field of American painting alone prices have risen 30 percent over the past 2 years.

In the field of sculpture this rise in values over the same period can be illustrated by a recent sculpture sale at Parke-Bernet Galleries, Inc., the Nation's leading auction house. On February 26, 1970, a "Standing Figure" by Alberto Giacometti, bronze, 41¼ inches high (catalog No. 62) was sold for $150,000; a Giacometti "Standing Figure," bronze, 79 inches high, in the Hirshhorn collection, was appraised in 1965–66 at $40,000. A second Giacometti, "Head of Diego," bronze, 11 inches high (catalog No. 40) was sold in the same sale for $25,000; a "Head of Diego," bronze, 24¼ inches high, in the Hirshhorn collection was appraised in 1965–66 at $15,000. In the same sale a bronze sculpture "Bourgeon D'Eclair," by Hans Arp, 23¼ inches high (catalog No. 65) sold for $19,000; an Arp in the Hirshhorn collection, "Griffon," bronze, 22½ inches high, was appraised in 1965–66 at $7,000.

One can only conclude that our 1965–66 evaluations were, if anything, conservative and that the value of the Hirshhorn collection has risen substantially since the gift was made by Mr. Hirshhorn to the Government of the United States.

SOURCES FOR APPRAISAL OF THE JOSEPH H. HIRSHHORN COLLECTION AND THE JOSEPH H. HIRSHHORN FOUNDATION

Sidney L. Bergen, director, A C A Gallery, 63 East 57th Street, New York, N.Y.
Charles Alan, the Alan Gallery, 766 Madison Avenue, New York, N.Y.
Joan Ankrum, Ankrum Gallery, 910 N. La Cienega Boulevard, Los Angeles, Calif.
Michael St. Clair, director, Babcock Galleries, Inc., 805 Madison Avenue, New York, N.Y.
Mrs. William Baziotes, 90 La Salle Street, New York, N.Y.
Esther Bear, Esther Bear Gallery, 1125 High Road, Santa Barbara, Calif.
Claude Bernard Haim, Galerie Claude Bernard, 5–7 Rue Des Beaux-Arts, Paris, France.

E. Beyeler, director, Galerie Beyeler, 4001 Basel, Baumleingasse, Switzerland.
Bernard Black, Bernard Black Gallery, 1062 Madison Avenue, New York, N.Y.
Alfredo Bonino, Galeria Bonino Ltd., 7 West 57th Street, New York, N.Y.
Richard Sisson, assistant director, Grace Borgenicht Gallery Inc., 1018 Madison Avenue, New York, N.Y.
Elie Borowski, director, Archeologie Classique et du Proche-Orient, Angensteinerstrasse 7, Basel, Switzerland.
Gandy Brodie, West Townshend, Vermont.
Robert Lewin, director, Brook Street Gallery, Ltd., 24 Brook Street, London, England.
Charles A. Byron, Byron Gallery, Inc., 1018 Madison Avenue, New York, N.Y.
Dorothy Cameron Moes, president and director, Dorothy Cameron Gallery Ltd., 840 Yonge Street, Toronto, Canada.
Leo Castelli, president, Leo Castelli, Inc., 4 East 77th Street, New York, N.Y.
Mrs. Madeleine Chalette-Lejwa, director, Galerie Chalette, 9 East 88th Street, New York, N.Y.
Rochelle M. Wexler, director, Cober Gallery, 14 East 69th Street, New York, N.Y.
Cecil Victor Comara, director, Comera Gallery, 8475 Melrose Place, Los Angeles, Calif.
Karl Lunde, director, The Contemporaries, 992 Madison Avenue, New York, N.Y.
Arne H. Ekstrom, Cordier & Ekstrom, Inc., 978 Madison Avenue, New York, N.Y.
Mr. Roy Davis, director, the Davis Galleries, 231 East 60th Street, New York, N.Y.
Peter Deitsch, Peter Deitsch Gallery, 24 East 81st Street, New York, N.Y.
Mr. John Myers, director, Tibor De Nagy Gallery, 149 East 72d Street, New York, N.Y.
Harold Diamond, 300 Central Park West, New York, N.Y.
Terry Dintenfass, Terry Dintenfass, Inc., 18 East 67th Street, New York, N.Y.
Mrs. Edith Gregor Halpert, director, The Downtown Gallery, 465 Park Avenue, New York, N.Y.
George E. Dix, director, Durlacher Bros., 538 Madison Avenue, New York, N.Y.
Mr. Charles Egan, Egan Gallery, 41 East 57th Street, New York, N.Y.
Mr. Robert Elkon, Elkon Gallery, 1063 Madison Avenue, New York, N.Y.
Andre Emmerich, Andre Emmerich Gallery, Inc., 41 East 57th Street, New York, N.Y.
Rex Evans, Rex Evans Gallery, 748½ North La Cienega Boulevard, Los Angeles, Calif.
Irving Blum, director, Ferus Gallery, 723 North La Cienega Boulevard, Los Angeles, Calif.
Richard Feigen, Richard Feigen Gallery, 24 East 81st Street, New York, N.Y.
Charles Feingarten, Feingarten Galleries, Inc., 324 N. Camden Drive Beverly Hills, Calif.
Donald Droll, director, Fischbach Gallery, 799 Madison Avenue, New York, N.Y.
Mrs. Bella Fishko, director, Forum Gallery, Inc., 1018 Madison Avenue, New York, N.Y.
Mr. Robert Fraser, Robert Fraser Gallery, Ltd., 69 Duke Street, London W1, England.
Mrs. Rose Fried, Rose Fried Gallery, 40 East 68th Street, New York, N.Y.
M. Prevot-Douatte, director, Galerie De France, 3 Faubourg St. Honore, Paris VIII, France.
Mr. Paul Haim, director, Galerie Europe, 22, Rue de Seine, Paris 6, France.
Beatrice Monti, director, Gallerie dell'Ariete, Via S. Andrea 5, Milano, Italy.
Alex Maguy, director, Galerie de L'Elysee, 69, Rue du Faulbourg St. Honore, Paris VIII, France.
Madame Denise Rene, Galerie Denise Rene, 124 Rue La Boetie, Paris, France.
B. Kernerman, director, Galerie Israel Ltd., 63 Ben Yehuda Road, Tel-Aviv, Israel.
Mr. Lawrence Rubin, Galerie Lawrence, 13 Rue de Seine, Paris VI, France.
Otto Kallir, director, the Galerie St. Etienne, 24 West 57th Street, New York, N.Y.
Allen Frumkin, the Frumkin Gallery, 41 East 57th Street, New York, N.Y.
Mack Gilman, director, Gilman Galleries, 103 East Oak Street, Chicago, Ill.
Peter Gimpel, Gimpel Fils Ltd., 50 South Molton Street, London, W1. England.
Miss Anne Rotzler, director, Gimpel & Hanover Galerie, Zurich, Claridenstrasse 35, Zurich 8002, Switzerland.
Noah Goldowsky, 1078 Madison Avenue, New York, N.Y.

James Goodman, James Goodman Gallery, The Park Lane, 33 Gates Circle, Buffalo, N.Y.
Robert Graham, The Graham Gallery, 1014 Madison Avenue, New York, N.Y.
Richard Bellamy, director, the Green Gallery, 15 West 57th Street, New York, N.Y.
Miss Ann Ross, director, the Greenross Gallery, 41 East 57th Street, New York, N.Y.
Joseph Grippi, Grippi & Waddell Gallery, Inc., 15 East 57th Street, New York, N.Y.
Stephen Hahn, Stephen Hahn Gallery, 960 Madison Avenue, New York, N.Y.
Nathan Halper, Nat Halper Gallery, 90 La Salle Street, New York, N.Y.
Victor J. Hammer, Hammer Galleries, 51 East 57th Street, New York, N.Y.
David Hare, 34 Leroy Street, New York, N.Y.
Mrs. Lily Harmon, 151 Central Park West, New York, N.Y.
Norman Hirschl, Hirschl & Adler Galleries, Inc., 21 East 67th Street, New York, N.Y.
Miss Erica Brausen, director, the Hanover Gallery, 32A St. George Street, Hanover Square, London, W.1, England.
Miss Semiha Huber, Galerie Semiha Huber, Talstrasse 18, Zurich 1, Switzerland.
Leonard Hutton, Leonard Hutton Galleries, 787 Madison Avenue, New York, N.Y.
Brooks Jackson, director, Alexander Iolas Gallery, 15 East 55th Street, New York, N.Y.
A. Isaacs, the Isaacs Gallery, 832 Yonge Street, Toronto 5, Canada.
Martha Jackson, Martha Jackson Gallery, 32 East 69th Street, New York, N.Y.
Sidney Janis, Sidney Janis Gallery, 15 East 57th Street, New York, N.Y.
Paula Mailman, director, Paula Johnson Gallery, 11 East 78th Street, New York, N.Y.
Alan Brandt, director, Galerie Kamer, 965 Madison Avenue, New York, N.Y.
Paul Kantor, Paul Kantor Gallery, 348 North Camden Drive, Beverly Hills, Calif.
Mrs. Tirca Karlis, Tirca Karlis Gallery, 1 Bank Street, New York, N.Y.
Rudolf G. Wunderlich, director, Kennedy Galleries, Inc., 13 East 58th Street, New York, N.Y.
Dong Kingman, 21 West 58th Street, New York, N.Y.
Mr. J. J. Klejman, Klejman Gallery, 982 Madison Avenue, New York, N.Y.
Mr. E. Coe Kerr, president, Mr. W. F. Davidson, executive vice-president, M. Knoedler & Co., Inc., 14 East 57th Street, New York, N.Y.
Lionel Prejger, diretcor, M. Knoedler & Co., 85 Rue Du Fg. St. Honore, Paris 8E, France.
Samuel M. Kootz, Samuel M. Kootz Gallery Inc., 655 Madison Avenue, New York, N.Y.
Jill Kornblee, Kornblee Gallery, 58 East 79th Street, New York, N.Y.
Oscar Krasner, director, Krasner Gallery, Inc., 1061 Madison Avenue, New York, N.Y.
Antoinette Krauschaar, Kraushaar Galleries, 1055 Madison Avenue, New York, N.Y.
G. Blair Laing, G. Blair Laing Ltd., 194 Bloor St. West, Toronto 5, Canada.
Mr. Flex Landau, The Felix Landau Gallery, 702 North La Cienega, Los Angeles, Calif.
Richard K. Larcada, Richard K. Lacada Gallery, 23 East 67th Street, New York, N.Y.
Plinio De Martiis, director, La Tartaruga Galleria D'Arte, Piazza Del Popolo 3, Rome, Italy.
Eva Lee, Eva Lee Gallery, Inc., 450 Great Neck Road, Great Neck, Long Island, N.Y.
John Lefebre, Lefebre Gallery, 47 East 77th Street, New York, N.Y.
Nicholas E. Brown, director, the Leicester Galleries, 4 Audley Square, London W.1, England.
Florence Lewison, Florence Lewison Gallery, 35 East 64th Street, New York, N.Y.
Albert Loeb, Albert Loeb Gallery, 12 East 57th Street, New York, N.Y.
Edward R. Lubin, Edward R. Lubin Inc., 17 East 64th Street, New York, N.Y.
Francis K. Lloyd, president, Marlborough-Gerson Gallery, Inc., 41 East 57th Street, New York, N.Y.
Mrs. Carla Panicali, director, Marlborough Galleria d'Arte, Via Gregoriana 5, Rome, Italy.

Pierre Matisse, Pierre Matisse Gallery Corp., 41 East 57th Street, New York, N.Y.
Alan D. Gruskin, director, Midtown Galleries, 11 East 57th Street, New York, N.Y.
Harold C. Milch, the Milch Galleries, 21 East 67th Street, New York, N.Y.
Boris Mirski, Boris Mirski Gallery, 166 Newbury Street, Boston, Mass.
Miss Lilly T. Stern, director, Molton Gallery, 44 South Molton Street, London W. 1, England.
Gallery, Moos, 169 Avenue Road, Toronto, Canada.
Jerrold Morris, Jerrold Morris International Gallery Ltd., 130 Bloor W., Toronto 5, Canada.
Lee Nordness, Lee Nordness Gallery, 831 Madison Avenue, New York, N.Y.
Federico Quadrani, director, Galleria Odyssia, 41 East 57th Street, New York, N.Y.
Arnold B. Glimcher, director, the Pace Gallery, 9 West 57th Street, New York, N.Y.
Betty Parsons, president, Jock Truman, director, Betty Parsons Gallery, 24 West 57th Street, New York, N.Y.
Mr. Louis Pollack, director, Peridot Gallery, 820 Madison Avenue, New York, N.Y.
Mr. Klaus Perls, Perls Gallery, 1016 Madison Avenue, New York, N.Y.
Mr. Frank Perls, Frank Perls Gallery, 32 Avenue Matignon, Paris 8, France.
Elinor F. Poindexter, Poindexter Gallery, 21 West 56th Street, New York, N.Y.
Bernard Rabin, Rabin & Krueger, 47 Halsey Street, Newark, N.J.
Steven Radich, the Steven Radich Gallery, 818 Madison Avenue, New York, N.Y.
John Clancy, director, Frank Rehn Gallery, 36 East 61st Street, New York, N.Y.
Graham H. Reid, the Reid Gallery, Ltd., Mousehill House, Sandy Lane, Milford, Surrey, England.
L. J. Wildridge, director, Roberts Gallery, Ltd., 641 Yonge Street, Toronto 5, Canada.
Esther Robles, Esther Robles Gallery, 665 North La Cienega Boulevard, Los Angeles, Calif.
Madame C. Goldscheider, conservateur, Musee Rodin, 77 Rue de Varenne, Paris VII, France.
Michael Leon Freilich, director, Roko Gallery, 867 Madison Avenue, New York, N.Y.
Alexandre Rosenberg, director, Paul Rosenberg & Co., 20 East 79th Street, New York, N.Y.
Mrs. Eleanore Saidenberg, Saidenberg Gallery Inc., 1037 Madison Avenue, New York, N.Y.
Harry Salpeter, Salpeter Gallery, 42 East 57th Street, New York, N.Y.
Sarah H. Kendall, director, Bertha Schaefer Gallery, 41 East 57th Street, New York, N.Y.
Theodore Schempp, Ted Schempp Gallery, 50 East 58th Street, N. Y., 7 Rue Gauguet, Paris 14, France.
Robert Schoelkopf, Robert Schoelkopf Gallery, 825 Madison Avenue, New York, N.Y.
Dr. J. Schoneman, Schoneman Galleries, Inc., 64 East 57th Street, New York, N.Y.
Jane Wade, Jane Wade Gallery, 45 East 66th Street, New York, N.Y.
Maynard Walker, Maynard Walker Gallery, 117 East 57th Street, New York, N.Y.
Mrs. Gertrude Weyhe Dennis, Corporation Secretary, Weyhe Gallery, 794 Lexington Avenue, New York, N.Y.
John Marin, Jr., director, Willard Gallery Inc., 29 East 72nd Street, New York, N.Y.
A. Robert Whyte, director, World House Galleries, 987 Madison Avenue, New York, N.Y.
Virginia M. Zabriskie, Zabriskie Gallery, 36 East 61st Street, New York, N.Y.
Miss Dorothea Denslow, director, Scultpure Center, 167 East 69th Street, New York, N.Y.
Herbert A. Kende, director, Selected Artists Galleries, Inc., 903 Madison Avenue, New York, N.Y.
Mr. Abris Silberman, E. & A. Silberman Galleries, Inc., 1014 Madison Avenue, New York, N.Y.
Charles E. Slatkin, Charles E. Slatkin Inc., Galleries, 115 East 92nd Street, New York, N.Y.
Robert S. Sloan, Robert S. Sloan Gallery, 1078 Madison Avenue, New York, N.Y.
Mrs. Eleanor Ward, director, Stable Gallery, 33 East 74th Street, New York, N.Y.

Philip A. Bruno, director, Staempfli Gallery, 47 East 77th Street, New York, N.Y.
Allan Stone, the Allan Stone Gallery, 48 East 86th Street, New York, N.Y.
Ira Spanierman, Spanierman Gallery, 1109 Lexington Avenue, New York, N.Y.
Mr. Jon Streep, Streep Gallery, 1050 Fifth Avenue, New York, N.Y.
David Stuart, David Stuart Galleries, 807 North La Cienega, Los Angeles, Calif.
Mr. Hyman Swetzoff, the Hyman Swetzoff Gallery, 119 Newbury Street, Boston, Mass.
Mr. Eugene Thaw, E. V. Thaw & Co., 50 East 78th Street, New York, N.Y.
E. J. Van Wisselingh, E. J. Van Wisselingh Gallery, Rokin 78–80, Amsterdam, Holland.
Catherine Viviano, Catherine Viviano Gallery Inc., 42 East 57th Street, New York, N.Y.
Victor Waddington, the Waddington Galleries, 2 Cork Street, London W. 1, England.

CONTROL OF THE COLLECTION

Mrs. HANSEN. Describe for the committee what control you have over the content of this art collection to date. In other words, we would be interested in knowing whether the donor has complete latitude to substitute paintings and other works of art for any of those listed in the inventory at the time the agreement was consummated.

Mr. BRADLEY. Madam Chairman, the terms of the agreement between the Smithsonian and Mr. Hirshhorn provide that in the interim, before title passes, Mr. Hirshhorn may add or sell or trade, but here is the part of it that should not be overlooked. This is critical to the understanding of this duality of interest, the legal, serious interest in that collection that the United States has. Mr. Hirshhorn, should he sell, and I understand he has sold very little, but to be responsive to your question, yes, he may sell or trade or add to, but in the event of any sale, or in the event of any trade, if there are any funds that come as a result of any differential in the collection, the agreement provides clearly that Mr. Hirshhorn, if there should be a balance, must turn the full balance over to the Smithsonian along with the collection. In other words, his role is that of a principal curator, where he worries about his collection, he tries to improve it, and if there is any money that happens to accrue as a result of those operations, which are really curatorial in effect, that comes to the Smithsonian along with the rest of the collection.

Dr. RIPLEY. This is in the agreement, so we don't lose anything on it. In fact, the chances are that we are going to gain a great deal by it. For example, if I could just detail one thing. In one or two cases his collection has so many examples of a particular artist that he may wish to trade or exchange one or two of these examples. If he has 60 paintings by one artist, he may trade or exchange in order to get two or three of another artist to enhance the value of the whole collection. In this sense, he is acting as our agent, because he is improving our own collection, but it is all specifically stated in the agreement that no moneys or no net profit can be retained by the donor.

Mrs. HANSEN. Please insert the agreement in the record.

Dr. RIPLEY. Yes; we certainly will.

(The information follows:)

That portion of the May 17, 1966, agreement between Joseph H. Hirshhorn and the Smithsonian Institution which refers to the use of funds from the sale of items in the collection, is quoted below:

"Eighth. Anything herein contained to the contrary notwithstanding, from and after the date of this Agreement and until title of the collections of works of art

shall pass to and be vested in the Institution, (a) the donor may transfer any of the works of art listed in exhibits A or A–1 to the Hirshhorn Foundation, and all works of art thus transferred shall remain subject to this agreement as if originally listed in exhibits B or B–1 instead of exhibits A or A–1 hereto; and (b) the donor and the Hirshhorn Foundation may loan or sell (for such consideration as the donor or the Hirshhorn Foundation, as the case may be, shall in his or its sole discretion deem appropriate) any of the works of art listed respectively in exhibits A, A–1, B and B–1 hereto and may also exchange the same for other works of art. No loan of such works of art shall be made for a period in excess of 180 days. The donor and the Hirshhorn Foundation respectively may invest and reinvest the net proceeds arising from any such sale of his or its works of art by acquiring additional works of art and/or purchasing obligations of the U.S. Government. All works of art so acquired by purchase or exchange shall become subject to the terms of this agreement as if originally listed in exhibits A, A–1, B or B–1 in the place and stead of the works of art sold or exchanged as aforesaid. After title to the collections of works of art shall pass to and be vested in the Institution, any obligations of the U.S. Government acquired as aforesaid and the balance, if any, of net proceeds not used for the acquisition of works of art or obligations of the U.S. Government shall be transferred and paid over to the Institution to be used solely for the purpose of acquiring works of art for the Joseph H. Hirshhorn Museum and Sculpture Garden, and pending such use, such funds and obligations shall be administered as provided in paragraph fifth hereof. Any insurance proceeds realized under policies carried by the donor and the Hirshhorn Foundation in accordance with the provisions of paragraph fourth hereof shall be treated in the same manner as net proceeds arising from the sale of the works of art of the donor and the Hirshhorn Foundation as provided in this paragraph eighth."

CHARGES AGAINST MR. HIRSHHORN

Mrs. HANSEN. I have before me a letter to a public agency which indicates certain charges against Mr. Hirshhorn.

Has inquiry been made by the Government of the United States as to the accuracy or relevancy of such charges?

Dr. RIPLEY. Yes, Madam Chairman. Inquiry has been made by an agency of the Government. At the time that the collection was presented to the United States and accepted by President Johnson, an inquiry was instituted and a report was made as a result of which President Johnson accepted the collection.

If I may, I would like to go off the record.

(Discussion off the record.)

Mrs. HANSEN. Mr. Wyatt.

Mr. WYATT. Let me ask this, Madam Chairman. I was on the Interior authorizing committee when we discussed this at one time, several years ago. Has the basic Hirshhorn contract been in the record of the hearings in full in the past?

Dr. RIPLEY. I am not sure.

Mr. BRADLEY. Yes, sir; the entire agreement. It was in three pieces. First, there was an Act of Congress authorizing the museum.

Mr. WYATT. In 1966?

Mr. BRADLEY. Yes; then there was an agreement between the Smithsonian and Mr. Hirshhorn where we included things that did not seem to have to be before the Congress. Then there was an extensive piece-by-piece inventory list which was testified to with an appraisal of the value of the collection we were talking about. This is in both House and Senate authorization hearings.

Mr. WYATT. The authorizing committee has it in the record?

Mr. BRADLEY. Yes.

Mr. WYATT. So we can say this has all been laid out publicly. I just wanted to be sure that it has been published and is available.

Dr. RIPLEY. I believe that the prior record is complete. Off the record.

(Discussion off the record.)

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

Mrs. HANSEN. Please justify your request for an increase of $100,000 for the Smithsonian Tropical Research Institute.

Dr. RIPLEY. Would you like to speak to this, Dr. Galler?

Dr. GALLER. Yes, sir; Mr. Secretary.

Madam Chairman, the Barro Colorado Island facility at the Tropical Research Institute has been gathering some very valuable information with regard to tropical ecology for many, many years. In the light of increasing interest and the need for these kinds of data there is here an opportunity to measure the frequency, predictability, and the importance of a number of environmental fluctuations, and to pull all of this information together into a coherent body of data that can be used to assess changes in the tropical environment.

This would require increasing the staff by employing a forest ecologist on the staff and providing some additional support of supplies, materials, and equipment. In addition to that, the Tropical Research Institute has as part of its facilities two marine laboratories, a very unique situation, one on the Atlantic side and another on the Pacific side, and I might say that these two laboratories collectively have been carrying out some very interesting studies.

One study related to the ecological aspects of the proposed sea-level canal and another study related to the biological effects of an oil spill that occurred on the Atlantic side. We are beginning to discover some very interesting data that heretofore has not been reported. There seems to be more rapid ecological recovery that takes place in that tropical and semitropical domain than in temperate and north temperate regions, but we have here an unmatched opportunity to study on a comparative basis the marine biology and the oceanography of two oceans, a fresh water body; namely, Gatun Lake, all within a distance of a little over 40 miles from one central location.

I don't think there is another place like it anywhere in the world. So what we are asking for here is an additional marine biologist and one laboratory technician to man the Atlantic marine station. Finally I am sure I don't need to emphasize the relatively rapid deterioration that takes place in the tropics of both equipment and materials. We depend largely on surplus equipment, especially vehicles, obtained from the Canal Company, the Corps of Engineers, the Army, and the Navy. Since most of the time these vehicles are already on their last legs or their last wheels, we find that it is very important to have a trained machinist who will help us maintain these vehicles in reasonable condition so that they can be used by our staff as well as by visiting scientists.

I should say that we have had over 465 scientists, students, and other interested parties and investigators from the United States who have

come to the Tropical Research Institute, averaging about 5,090 visitor-days recorded through this year. Between 1969 and 1970 over 58 scientific publications have been derived from the research activities of our staff alone, and there are probably more than 100 publications that are associated with investigations that have been carried out by visiting scientists during that year.

It turns out, Madam Chairman, and please understand that we are not trying to toot our horn but it happens to be a fact, that the Smithsonian Tropical Research Institute today is the only nonapplied marine biological and, indeed, terrestrial biological tropical station available for U.S. scientists anywhere in the new world tropics, and the pressure, the demands from scientists in the United States and their graduate students for its use are increasing very rapidly.

RADIATION BIOLOGY LABORATORY

Mrs. HANSEN. Thank you. An increase of $200,000 is requested for the Radiation Biology Laboratory. Give us the details on this request.

Dr. RIPLEY. A major portion of the laboratory's relocation from the basement of the Smithsonian building to its new site in Rockville has been completed. With the exception of the experiments in the greenhouse in the area south of the Smithsonian building, all of the staff, experiments, and usable equipment are now in the new building. The experiments that are left in the greenhouse will be moved as soon as adequate facilities are available. Presently, the activities of the staff are being devoted to unpacking, checking, calibrating, and reinstalling equipment, and supervising the construction and installation of growth chambers and other environmental-control facilities. It is hoped that a major portion of the research can be resumed by midsummer.

Fiscal year 1971 will be the first year of actual operations in the new laboratory building. For the first time since the laboratory's establishment in 1929, it has available, thanks to the Congress, a properly configured space of adequate size. The increased funding provided in the fiscal year 1970 appropriation will meet the basic costs of the building's rental and part of the mechanical and support staff required at the new location. Other building and operating costs, however, cannot be met with the current appropriation. Briefly summarized, these are the following.

Around-the-clock service support is needed to maintain the planned 11 cold rooms, 40 plant growing chambers, 8 walk-in environmental rooms, and a greenhouse. Basic custodial supplies, materials, and equipment are needed to clean an area of 50,000 square feet to prevent safety hazards and maintain the degree of cleanliness needed for precision experiments. Substantial utility costs will be incurred to operate the laboratory and electrical equipment required for 24-hour experiments. Library services must be provided since the already hard-pressed Smithsonian Institution libraries cannot provide services at this remote location. As many as possible of the laboratory's equipment items are being moved to the new location, but 50 percent of the equipment is more than 8 years old and in need of replacement. Security of the building, which has five outside entrances, must be provided using alarm systems to insure protection.

For these needs, we are requesting two operating engineers, an electrician, and a library technician at a cost of $41,000, and an additional $159,000 for utilities, contractual services, supplies, and equipment.

OFFICE OF ECOLOGY

Mrs. HANSEN. You are requesting an additional $55,000 for the Office of Ecology. What are the requirements in this instance?

Dr. RIPLEY. This request, Madam Chairman, is for our Chesapeake Bay Center for Environmental Studies, an area we believe has unusual significance for the undertaking of important environmental baseline studies as well as providing fundamental knowledge to be used in community and resource planning in the areas adjacent to the Chesapeake Bay. This area has had considerable historical, recreational, and economic importance. Yet, it is being subjected to vast changes in its ecology due to industrialization, house development, and thermal and chemical pollution. Basic to any understanding of these changes or their solution is a comprehensive study of the Bay watershed, including investigations of energy output, biological productivity of the land and water areas, and pollution effects upon terrestrial and aquatic life.

Working closely with other agencies and universities concerned with these problems, the Smithsonian would acquire fundamental information using the facilities of the Chesapeake Bay Center as a base to better understand this valuable area. To do this, the Smithsonian needs to strengthen the program of the Center's activities by adding a resident ecologist and a program assistant. We also need funds for travel, research, and maintenance supplies and equipment, and other services. This is a request for two positions and $49,000.

Simultaneously, we must improve security at the Bay Center in order to protect the natural conditions and balances as they now exist. The Center's utility to scientists depends upon the land and water areas remaining in an undisturbed state. While we are encouraging full use of the Center's natural areas by all individuals and groups, including members of the public who are generally interested in the environment, poachers, vandals, and other trespassers have on frequent occasion disturbed the environment as well as carefully designed experiments set up in the area. To prevent such occurrences, we are requesting a security officer at $6,000 to patrol the area and the Center's buildings.

OFFICE OF OCEANOGRAPHY AND LIMNOLOGY

Mrs. HANSEN. Describe your needs for an additional $150,000 for the Office of Oceanography and Limnology.

Dr. RIPLEY. This request, Madam Chairman, is for the Smithsonian Oceanographic Sorting Center which we believe is providing an unusual and valuable service to researchers concerned with marine resources and their use and protection. The Sorting Center receives and processes marine biological and geological samples, for use at their request, by more than 300 scientists in 27 countries in their research projects ranging from basic taxonomic studies to pollution control. In the past year, the Center sorted 3,500,000 specimens for 289 researchers, 5 of whom were in Federal agencies. In addition, the Center pro-

vides advice and assistance on specimen-related activities such as proper field collection of specimens.

The Center has made concerted efforts through the use of improved data-handling techniques and specimen-handling devices to increase its productivity and efficiency. However, the increased number of samples sent to the Center, some 10,000 samples a year each with the potential of many thousands of specimens when coupled with an increased demand for specimens, has created a growing backlog of unsorted materials. Unless these samples are processed and distributed quickly, many of them will become useless for research purposes. In order to raise the capacity of the Center to the point where it can meet the demand for specimens, we are requesting an additional seven sorter-technicians and a chemist, along with supporting funds for travel, preservation supplies, materials and equipment, and contractual and other services.

CENTER FOR THE STUDY OF MAN

Mrs. HANSEN. What is the requirement for an additional $50,000 for the Center for the Study of Man?

Dr. RIPLEY. Madam Chairman, this request has two aspects. First, we are ready to begin the actual production work on the Handbook of North American Indians. For this we are requesting an editor, a research assistant, and a clerk-typist along with a small amount of supporting funds for travel, equipment, and contractual services.

We have spent the last 2 years largely on preliminary planning activities. We have compiled a master list of some 2,000 potential contributors to this handbook, which will be an encyclopedia of 15 or more volumes, summarizing the best current knowledge of prehistory and history of all Indian groups north of Mexico. We have held consultations and meetings to develop the handbook's format and contents. It is quite obvious that this project must be a nationwide, indeed an international, project because it must involve some people abroad who might be the only known or principal specialist in certain parts of this effort. We are including American Indians, anthropologists, historians, educators, and other specialists in research and anthropology. We have been carrying on considerable correspondence with these people. This work is finally placing the Center in a position where it is ready now to assemble a small staff of technical personnel to do the many editing tasks associated with the handbook.

The second part of our request is to obtain a small amount of Federal funds to continue an important small-grants program in urgent anthropology. We are seeking $5,000 for this. The primary purpose of this program is to gather data on cultures and subcultures that are rapidly changing or disappearing as a result of economical or technical pressures. We have used a small amount of Foundation funds to award small grants from $100 to $1,000 each to qualified on-the-spot investigators to enable them to carry out research before the local changes become so pronounced as to make research difficult if not impossible. The ability to continue this small-grants program will enable the Smithsonian to continue an important aspect of what is its basic responsibility, that is the gathering of fundamental anthropological data and making this data available to the general public. For instance, one of our most recent grant recipients has reported that as a

result of the Center's assistance, he has discovered a new Pithecanthropus specimen which he has tentatively labeled "Java Man 8." This is a unique specimen since it is the first to be recovered with the upper jaw intact. The discoverer has informed the Center that as soon as he is able to get the specimen cleaned, he will be most happy to forward a detailed description to the Smithsonian for publication.

CENTER FOR SHORT-LIVED PHENOMENA

Mrs. HANSEN. Please justify the increase of $25,000 for the Center for Short-Lived Phenomena.

Dr. RIPLEY. The Center for Short-Lived Phenomena acts as a unique clearinghouse for the receipt and quick dissemination of information on rare natural events which might otherwise go unobserved or uninvestigated. Last year, the Center participated in 146 geophysical, astrophysical, and biological events, compared with 68 events in the previous year. Over 250,000 event notifications were sent to 2,252 correspondents in 122 countries. Forty-six Federal agencies and departments are users of the Center's services.

The Center has been successful in obtaining funding for special projects, such as the Apollo flights, and it has started a subscription system for those individuals and organizations who are receivers, but not major contributors, of information and other supporting services. The success of the Center's regular operations, however, depends heavily upon an assured level of direct Federal appropriations in order to provide an assured and consistent level of reporting activity. In order to meet a growing workload, we are requesting a publication specialist at $7,000 and funds for communications, printing, and computer services, the backbone of the Center's quick-alert capability.

MERIT OF THE CENTER FOR SHORT-LIVED PHENOMENA PROGRAM

Mrs. HANSEN. The committee has received informal information to the effect that the merits of this program are questionable. It has been alleged that this program duplicates the activities of several other scientific organizations and the urgency of acquiring this information is not as great as has been propounded. Do you have any rebuttal to these remarks?

Dr. RIPLEY. I can only say, Madam Chairman, that I am astonished by any such allegation. We know of none. We know of no equivalent organization. I have here the Annual Report for 1969 which is available for sale as a facility to the scientific community and which has sold 300 copies. The fact that the report was financed out of grants means that it is possible for us to attempt to recoup some part of the cost of producing these reports. We know of no comparable organization, Dr. Galler?

Dr. GALLER. I was going to ask, Mr. Secretary, if Madam Chairman would like, we can furnish for the record letters from more than 40 Federal agencies and departments of the United States who are coming to us.

(The information follows:)

LETTERS OF MERIT FOR THE CENTER FOR SHORT-LIVED PHENOMENA

FEDERAL COUNCIL FOR SCIENCE AND TECHNOLOGY,
Washington, D.C., May 14, 1968.

Dr. S. DILLON RIPLEY,
Secretary, Smithsonian Institution,
Washington, D.C.

DEAR DILLON: I was delighted to see the progress report from the Smithsonian Center for Short lived Phenomena. It is most impressive to see what the Center has been able to accomplish in its first three months.

The establishment of the Center certainly fills our need for a prompt, real time response to short-lived events such as volcanic eruptions, meteorites, and fireballs. The investigations of the Center, in cooperation with those of other Federal agencies, will provide a broad base of fundamental data for scientists throughout the world.

These studies are of great interest to all of us. I will ask the relevant committees of the Federal Council for Science and Technology; that is, the Interdepartmental Committee for Atmospheric Sciences, and the Committee on Solid Earth Sciences to include discussions of the Smithsonian Center for Short Lived Phenomena in their future agendas.

With best regards,

Sincerely,

DONALD F. HORNIG,
Chairman.

U.S. DEPARTMENT OF THE INTERIOR,
Washington, D.C., May 17, 1968.

Dr. SIDNEY R. GALLER,
Assistant Secretary, Science,
Smithsonian Institution, Washington, D.C.

DEAR SID: Thank you for forwarding copies of your reports on short-lived phenomena to us at the U.S. Geological Survey. The reports on Metis Shoal and the Mount Mayon eruptions have been very helpful to us. These reports have provided the most current assessment available of these natural phenomena. Your communications channels have been of special help during the Mount Mayon eruptions. Dr. Dallas Peck, Assistant Chief Geologist for Experimental Geology, has been in telephone contact with Mr. Citron several times to obtain the latest information on the Mayon eruptions.

I was pleased to note that you concur with the idea of coordinating Federal participation in the investigation of natural disasters through the Solid Earth Sciences Committee. I feel that this is of particular importance when teams of scientists make field investigations of natural phenomena in foreign countries. The important aspects of such investigations are a proper balance of scientific talent and equipment for the investigation, and a coordinated team approach to the investigation. I think we are very fortunate in the investigations being conducted by Melson and Moore on Mount Mayon. They are acting as a team and appear to complement each other's capabilities. In this case the success can probably be attributed to the caliber of men and the willingness of these men to work together as a team rather than to pre-planning of a team effort prior to their departure. There have been investigations on foreign soil during the past few years where the coordination in the field has not been as good and where inadequate capability was present for the investigation. These inadequately coordinated or staffed teams are the type that I hope can be avoided by coordination through the Solid Earth Sciences Committee.

The Center for Short-Lived Phenomena has already demonstrated its significant value in providing prompt and reliable information. A communications capability such as you have developed and are utilizing has the potential of providing the Solid Earth Sciences Committee with important information that is needed for coordinating investigations of natural disasters. I think it would be an excellent idea for you and Mr. Citron to make a presentation on the Center for Short-Lived Phenomena at the next meeting of the Solid Earth Sciences Committee so that all agencies can become aware of your activity.

Sincerely yours,

BILL, *Director.*

ACADEMY OF SCIENCES OF THE U.S.S.R.,
June 9, 1969.

DR. ROBERT CITRON,
Project Administrator, Center for Short-Lived Phenomena, Smithsonian Institution, Cambridge, Mass.

DEAR DR. CITRON: I am glad to inform you that we have reached an agreement with the Central Seismic Station Moscow and with the Schmidt Institute of Physics of the Earth, Academy of Science of the U.S.S.R., that this station from now on will immediately be sending you cables concerning large earthquakes recorded at the station (with magnitude 7 and more and with about nine units of intensity in the epicenter and more). These cables will contain the following information: coordinates of the epicenter, its geographical region, magnitude, supposed unit of intensity, time (by Greenwich).

I take this opportunity to express my high opinion of the work done by your Center. The various manifestations of activity of our planet have not as yet been accumulated by anybody, they were not recorded and often escaped the attention of scientists. Now this gap is being bridged by your Center. The cards which you circulate are systematically received here and collected at the World Data Center where they are available to the Soviet community of specialists in different fields of science.

Sincerely yours,

Prof. V. V. BELOUSSOV, *President.*

U.S. DEPARTMENT OF THE INTERIOR,
Washington, D.C., October 14, 1969.

DR. ROBERT CITRON,
Smithsonian Institution,
Center for Short-Lived Phenomena,
Cambridge, Mass.

DEAR BOB: The Center for Short-Lived Phenomena deserves a vote of thanks for doing a remarkably good job at an important but rather thankless task. At the IAVCEI Symposium at Oxford, I was impressed by the interest and enthusiasm in your service by a great number of volcanologists from observatories, universities, and other laboratories throughout the world.

I would like to congratulate you particularly for the recent card-777 by Dr. Rittman. Occasional summaries such as this are very useful supplements to the typical event reports. A similar card summarizing Kilauean activity for the last 8 months might also be of interest. I'll suggest this to Don Swanson at HVO.

Sincerely yours,

DALLAS L. PECK,
Assistant Chief Geologist Geochemistry and Geophysics.

AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES,
Washington, D.C., March 30, 1970.

MR. ROBERT CITRON,
Director, Center for Short-Lived Phenomena,
Smithsonian Institution,
Cambridge, Mass.

DEAR MR. CITRON: Thank you for your letter of March 24, 1970 concerning the Center for Short-Lived Phenomena. I feel remiss in not writing to you sooner about the values of the Center to the scientific community. I and my colleagues at the AIBS find your notifications of the biological events to be very helpful. We have used information from the notifications in our bimonthly journal, BioScience. and also have used the notifications to alert appropriate people in many of our 42 Adherent Scientific Societies to the event.

We think the philosophy behind the Center is sound and the benefit of the recording of these events will become more and more evident in future years. One of the things that has been lacking, especially in ecology, for many years is the recording of what might appear at the time to be minor occurrences that bear on eventual major phenomena.

If there is any way in which we can aid you in the continuation of your project, please don't hesitate to call upon us.

Sincerely yours,

DONALD R. BEEM,
Assistant Director.

IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY,
Ames, Iowa, October 20, 1969.

DIRECTOR,
Smithsonian Institution,
Center for Short-Lived Phenomena,
Cambridge, Mass.

DEAR SIR: Since early October, we have been receiving your notifications of short-lived phenomena. We think this is one of the finest services to the geologic profession to have been initiated. It gives us a badly needed continuum of information regarding contemporary events that we can pass on to our students as graphic proof of the dynamism of earth processes.

In order to maximize our use of your fine publication series, we would like to know if you plan irregular distribution based on accumulation of some predetermined number of information pieces or if each event is to be currently and individually reported. In any event, we would hope to remain on this best of mailing lists.

Very truly yours,

DONALD L. BIGGS,
Professor, Department of Earth Science.
KEITH M. HUSSEY,
Professor and Head, Department of Earth Science.

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH,
Boulder, Colo., August 12, 1968.

DR. ROBERT CITRON,
Smithsonian Institution Center for Short-Lived Phenomena, Cambridge, Mass.

DEAR DR. CITRON: I am writing this because I thought you might be interested in the extent to which we are using the excellent and up-to-date information which you have been sending us concerning short-lived phenomena. As you know, we sampled particles in the fume from the Mayon eruption and have obtained some very interesting information from our analysis of the samples. The information which you sent to us concerning Mayon subsequent to our sampling has been very helpful in interpreting the results. Particularly useful is the report by Dr. Melson. We will probably write up a paper for publication describing our results in the near future and I would appreciate your letting me know whether we can use some of the data in that report to aid in the interpretation of our findings. Of course, Dr. Melson and his associates at the Smithsonian would be given full credit for any such data we might include.

While no one from NCAR actually visited Arenal Volcano during its series of eruptions, we arranged to have the Air Force make flights into the fume and sample the particles in the fume using both Air Force filters and our own polystyrene fiber filters. The reports which you have been sending us concerning this eruption have been most valuable. These filters have now been returned to us and will be analyzed in the near future.

Again, thank you very much for the information which you have been sending. I feel that your center and its activities are filling a need that has long existed in the scientific world.

Yours very truly,

RICHARD D. CADLE,
Head, Chemistry and Microphysics Department.

U.S. DEPARTMENT OF THE INTERIOR,
Washington, D.C., March 31, 1970.

MR. ROBERT CITRON,
Director, Center for Short-Lived Phenomena, Smithsonian Institution, Cambridge, Mass.

DEAR MR. CITRON: It is a pleasure for me to acknowledge the very fine service offered to the geological community by the Smithsonian Institution Center for Short-Lived Phenomena. Our chief interest here in the Geological Survey deals with volcanoes and volcanic eruption and your event cards give us a swift and accurate picture of what is happening in all parts of the world. Recently, we were especially concerned with the swarm of earthquakes and surface deformation that took place near Pozzuoli, Italy. Mr. David Squires, of your office, aided us greatly by telephoning us the most up-to-date information. And, as usual, the Center's event cards describing the Pozzuoli events carried shortly thereafter, providing us with considerable background information.

In short, we commend you and the Center for the effective job that you've done, and we look forward to the continuation of your valuable service.

Sincerely yours,

RICHARD S. FISKE,
Field Geochemistry and Petrology Branch.

U.S. DEPARTMENT OF THE INTERIOR,
FISH AND WILDLIFE SERVICE,
Highlands, N.J., March 26, 1969.

DIRECTOR,
Smithsonian Institution, Center for Short-Lived Phenomena, Cambridge, Mass.

DEAR SIR: I have been very impressed with your early-alert system. It has permitted this laboratory to remain abreast with several events in which we have comparable research interests, i.e., the offshore oil leakage in Santa Barbara.

As you may know, the International Biological Program (IBP) has recently formed several new subsections within its existing Marine Productivity (PM) section. One of these is called Theme B—The Impact of Man's Activities on the Marine Environment. Dr. L. A. Walford and I were named coordinators of this theme. The objects of the subsection are spelled out in the enclosure accompanying this letter.

It appears to me that your Smithsonian endeavor and the IBP program compliment each other; the early-alert system brings sudden catastrophic changes to the attention of the research community and the IBP program serves to insure that there is cooperation and coordination between scientists working in similar areas of interests with regard to environmental change.

My question to you is: is there any way that you could distribute the enclosed notice in one of your news releases or via a 3 x 5 card release? I have requested of the editor of the Marine Pollution Bulletin that he include a notice of your early-alert system in a forthcoming issue. This would bring the program to the attention of many scientists, particularly marine scientists, in Great Britain and Europe.

Thanking you for your kind attention to this correspondence and looking forward to hearing from you in the near future, I remain,

Sincerely yours,

JACK B. PEARCE,
Research Biologist.

CENTRO REGIONAL DE SISMOLOGIA PARA AMERICA DEL SUR,
Lima, Perú, October 10, 1968.

DR. ROBERT CITRON,
Smithsonian Institution, Cambridge, Mass.

DEAR DR. CITRON: The Center for Short-Lived Phenomena had filled the hopes of many scientist who wished to be up to date in all the world important events, and we warmly gratulate you and your institution for this worthy idea.

We will continued giving you all information that could be of your interest and we will like very much to be included in your list. No. 8, receivery information for all events.

Father German E. Saá, from Carnegie Institution is not longer working in Lima, then you could change his address to: R.P. German E. Saá, Programa Sismológico, Universidad de Chile, Casilla, Antofagasta, Chile.

Sincerely yours,

ENRIQUE GAJARDO W.,
Associate Director.

DARTMOUTH COLLEGE,
Hanover, N.H., May 6, 1968.

Mr. ROBERT CITRON,
Administrative Officer, Smithsonian Institution Center for Short-Lived Phenomena, Cambridge, Mass.

DEAR MR. CITRON: As indicated to you in earlier correspondence, I am very interested in the concept of the Center for Short-Lived Phenomena. The observation of volcanic activity on a worldwide basis has been very haphazard—excellent in some areas, nonexistent in others; and most often too little, too late. In my beginning efforts as editor of the Catalog of Active Volcanoes of the World, the most glaring problems are the vast differences in the quality of data from various areas, and the number of missed opportunities for collecting important data on the processes of active volcanism while it is taking place.

Your handling of the Mayon eruption in the Philippines has confirmed my hopes for the usefulness of your Center. You have sorted out a most complete narrative of the eruption from reliable sources, cross-checked these reports, and presented them in an accurate and interesting fashion while the eruption is still taking place. This is a real first in my estimation, and not only provides a valuable scientific document, but also a narrative which on daily posting has been enthusiastically followed by our geology students at Dartmouth.

You are also to be commended for not just taking a passive role in reporting the eruption at Mayon. Your actions were most effective in getting Dr. Melson and Dr. Moore to the Philippines as official scientific observers in time to witness critical phases of the eruption. Your apparent success in prompting and coordinating the military services to provide systematic aerial photography during the eruption will provide very valuable data on the details of visible phenomena of the eruption. These photos will also be of value in making quantitative estimates of the eruption products. Most of our records of volcanic eruptions suffer from having too many adjectives and not enough numbers.

Congratulations on an excellent job. You're off to a fine start. Keep it up.

Sincerely,

ROBERT W. DECKER,
Professor of Geophysics.

ADVANCED RESEARCH PROJECTS AGENCY,
Washington, D.C., July 25, 1968.

Dr. SIDNEY R. GALLER,
Assistant Secretary for Science,
Smithsonian Institution,
Washington, D.C.

DEAR DR. GALLER: I was quite interested in the work being undertaken by the Smithsonian Institution in supporting a Center for Short-Lived Phenomena, as reported at the meeting of the Committee on Solid Earth Sciences on July 23, 1968. This is an extremely worthwhile activity and one where major scientific benefits can accrue from a very modest amount of organizational activity.

As you may know, ARPA supports an active program in seismic research for the purpose of increasing the U.S. capability to detect, locate, and identify underground nuclear explosions. Part of this work consists of operating a Large Aperture Seismic Array in Montana. Data from the several hundred short-period seismometers in this array are sampled periodically, digitized, and, by this September, will be transmitted in real time to an analysis center in Washington. At the Center, the data will be automatically analyzed and a bulletin of seismic events prepared. This capability for rapid detection and location of earthquakes and aftershocks may be a useful adjunct to the Center. I would be happy to discuss this possibility with you further, at your convenience.

Sincerely,

S. J. LUKASIK,
Deputy Director.

INTERNATIONAL TSUNAMI INFORMATION CENTER,
Honolulu, Hawaii, March 27, 1970.

Mr. ROBERT CITRON,
Director, Smithsonian Institution,
Center for Short-Lived Phenomena,
Cambridge, Mass.

DEAR MR. CITRON: I would like to thank you for the valuable assistance your event notification and information service has given the ITIC. This information is used as another source of data on tsunamigenic earthquakes. One of this Center's mission is to collect all available data on tsunamis that occur in the world. The timely and accurate information contained in your reports is used as one of our primary source of action.

The International Tsunami Information Center appreciates your past assistance and looks forward to the receipt of future reports.

Sincerely,

ROBERT C. MUNSON,
Captain, USESSA, Director, ITIC.

U.S. DEPARTMENT OF THE INTERIOR,
Washington, D.C., December 18, 1968.

Mr. ROBERT CITRON,
Center for Short-Lived Phenomena,
Smithsonian Institution,
Cambridge, Mass.

DEAR MR. CITRON: As you probably know, the Geological Survey, through this branch, has for many years supplied technical and scientific assistance to countries experiencing geological disasters with the desire to render practical help and secondarily to advance scientific knowledge of these natural phenomena. We have worked closely with the Disaster Relief Coordinator of the Agency for International Development and with other agencies, including scientists of the Smithsonian Institution. Our activities in response to foreign disasters are in addition to our continuing program of technical assistance projects in many of the less developed countries.

This branch would find it exceedingly helpful to receive on a regular basis, all reports issued by your Center for Short-Lived Phenomena; namely, list No. 8 as described in your brochure "Information about the Center." We in turn would be happy to help supply information for your center on short-lived events that occur in the areas of our field parties around the world. We will, I am certain, also find ourselves working cooperatively on specific field projects incident to the ocurrence of future disastrophic events through State Department channels.

I would be most grateful if you could place our name on your distribution list to receive all your reports automatically.

Sincerely yours,

JOHN A. REINEMUND,
Chief, Office of International Geosciences.

DEPARTMENT OF THE ARMY,
Fort Eustis, Va., June 5, 1969.

SMITHSONIAN INSTITUTION,
Center for Short-Lived Phenomena,
Cambridge, Mass.

GENTLEMAN: The Transportation Engineering Agency is a field segment of the Military Traffic Management and Terminal Service (MTMTS), Washington, D.C. The Commander of MTMTS, by authority of the Secretary of Defense, is the single manager for Military Traffic, Land Transportation and Common User Ocean Terminals. As such, his primary mission is to provide transportation planning support to the Organization of the Joint Chiefs of Staff, the unified and specified commands, the military services, and the Department of Defense agencies in support of the plans of the Joint Chiefs of Staff and other military operations as required.

This Agency's mission is to administer the Department of the Army portion of the Department of Defense Engineering for Transportability program and to provide transportation engineering services, research, studies, and publications

in the areas of traffic engineering, transportation engineering, and transportability. A large portion of our effort is directed toward assuring safety during transportation of hazardous materials. In this connection, it would be most interesting and beneficial if we could be placed on your distribution list to receive "Event Information Reports" which relate to transportation accidents happening worldwide. If possible, we would also like to receive a copy of last year's "Proceedings."

It would be greatly appreciated if the above could be furnished at no cost to the Government, however, if there is to be a charge for these items, please advise so that we may proceed through our appropriate supply channels.

Sincerely yours,

C. H. PERRY,
Deputy Director.

U.S. DEPARTMENT OF COMMERCE,
Rockville, Md., September 16, 1968.

Mr. ROBERT CITRON,
Smithsonian Institution, Center for Short-Lived-Phenomena,
Cambridge, Mass.

DEAR MR. CITRON: I am enclosing a draft of the Seismological Notes—May–June 1968 which will be published in the December 1968 bulletin of the Seismological Society of America.

You will note that quotes from your bulletins are used notably for the Galapagos Islands events and the New Zealand earthquake. The notes appear far too late to be of interest to you except for possible statistical background but I thought you might be interested to know that these bulletins are useful in providing detail for the published record as well as a valuable source of early information.

Yours truly,

JAMES F. LANDER,
Chief, National Earthquake Information Center.

INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS,
INTERNATIONAL BIOLOGICAL PROGRAMME,
Paris, France, July 25, 1969.

The DIRECTOR,
Smithsonian Institution,
Centre for Short-Lived Phenomena,
Cambridge, Mass.

DEAR SIR: My attention has only recently been drawn to the quite excellent series of event notification and information cards published by your Center. As scientific coordinator of the international PT section of IBP the type of information you circulate with such expedience would prove of immense value to me in my work.

If it would be feasible for me to be put on the mailing list of the series, I would be most grateful.

Thanking you for your courtesy,

Sincerely Yours,

MALCOLM HADLEY.

U.S. DEPARTMENT OF THE INTERIOR,
Denver, Colo., August 16, 1968,

Dr. ROBERT CITRON,
Smithsonian Institution,
Center for Short-Lived Phenomena,
Cambridge, Mass.

DEAR DR. CITRON: I would like to take this opportunity to express my appreciation for receiving the timely and informative reports on geologic short-lived phenomena. These reports, such as the ones on the earthquakes in the Philippines and in Mexico, and the volcanic eruption of Mt. Arenal in Costa Rica have been especially valuable in helping to assess the magnitude of the events and the hazard to man. I will continue to look forward with interest to receiving this kind of information and I regard it as a valuable service.

Sincerely,

RICHARD W. LEMKE,
Geologist, Engineering Geology Branch.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
Arlington, Va.

Mr. ROBERT CITRON,
Director, Center for Short-Lived Phenomena,
Smithsonian Institution,
Cambridge, Mass.

DEAR MR. CITRON: We in the National Air Pollution Control Administration are interested in your program and are desirous of becoming a correspondent. The types of short-lived phenomena that would be of primary interest would involve (1) those gross atmospheric stagnation periods causing severe air pollution episodes, Donora, Pa.; Meuse Valley, France; London, and so forth, and (2) volcanic eruptions where heavy insults of SO_2 and dust have effected the adjacent ecosystem. Generally we would only require intelligence on those atmospheric events occurring outside of the United States inasmuch as we maintain close surveillance over the weather within the United States. Depending upon the location and magnitude of the event, NAPCA may elect to send observers to the site of the event.

Enclosed is the information form designating myself as the prime correspondent and Dr. Jones as my alternate.

Thank you for your consideration, and we look forward to utilizing your services.

Sincerely yours,

JOHN H. LUDWIG,
Assistant Commissioner for Science and Technology.

U.S. DEPARTMENT OF THE INTERIOR,
Flagstaff, Ariz., July 22, 1968.

Mr. ROBERT CITRON,
Smithsonian Institution Astrophysical Observatory,
Center for Short-Lived Phenomena,
Cambridge, Mass.

DEAR MR. CITRON: I am writing to request inclusion of a Central American worker on your list to receive available information reports. He is Sr. Rodrigo Saenz, Ministerio de Industrias, Direc. de Geologia, Minas Y Petroleo, San Jose, Costa Rica. Mr. Saenz has broad interests in earth science and operates a new volcanological and seismic station in Costa Rica.

I would like to take this opportunity to express my appreciation, and that of my colleagues, for the quality, content and expedition of your "short-lived phenomena" reportage during the last few months. Of special importance have been reports and preprints in chemistry, petrology and seismology by some of your investigators. Of greatest promise seems the opportunity for scientists from different disciplines and from a variety of countries and organizations to join forces in a prompt attack upon transient phenomena such as the eruptions of Mayon and Fernandina. Many thanks for your excellent efforts in this matter.

Very truly yours,

HAROLD L. KRIVOY,
Seismologist.

U.S. NAVAL OCEANOGRAPHIC OFFICE,
Washington, D.C., May 22, 1968.

DR. ROBERT CITRON,
Administrative Officer, Center for Short-Lived Phenomena, Smithsonian Institution, Cambridge, Mass.

DEAR DR. CITRON: Your letter of April 15, 1968, announcing the establishment of the Center for Short-Lived Phenomena has been referred to this Office by Rear Adm. O. D. Waters, Jr., oceanographer of the Navy. The Naval Oceanographic Office is responsible for promulgating navigational information affecting safety at sea. It has an even broader responsibility in applying oceanographic knowledge in support of naval operations. Thus, this Office is interested in all natural marine phenomena and needs timely information on nearly all unusual events at sea. The most important of these have been listed on the enclosed form together with the other information requested of interested correspondents.

This new Center should perform a real service to scientists and other users of timely scientific information. We appreciate having this service made available to us.

Sincerely yours,

L. M. DeCamp,
Captain, U.S. Navy, Commander.

Department of the Navy,
San Diego, Calif., March 30, 1970.

Dr. Robert Citron,
Director, Smithsonian Institution Center for Short-Lived Phenomena, Cambridge, Mass.

Dear Dr. Citron: In reference to your letter of March 23, 1970, I don't think the value of the Center for Short-Lived Phenomena can be overly stressed. With current problems of pollution and the increased awareness of man's effect on his natural environment an efficient system of environmental monitoring is vital. It would be my hope as a scientist that the services of the Center will be continued, if not expanded.

Thank you again for allowing me as a non-Smithsonian scientist to benefit from the services of your event notification and information service. I sincerely hope for your continued success and operation in the future.

Sincerely,

W. E. Evans,
Staff Scientist.

Geological Survey Department,
Suva, Fiji, May 9, 1968.

Mr. Robert Citron,
Administrative Officer, Smithsonian Institution, Center for Short-Lived Phenomena, Cambridge, Mass.

Dear Mr. Citron: I hope that by now you will have received the correspondent information form.

May I say how impressed I have been to receive this correspondence from you and to know that there are people aware of the need for information concerning short-lived phenomena. The idea seems to me to be a very important one.

Although involved in the study of volcanic eruptions in the past it has never been possible for me to obtain such detailed and magnificent reports of phenomena which could have a bearing on my time-space-energy relationship work. Your organization is to be congratulated on its ability to provide such valuable data as those on Mayon volcano and the recent submarine volcanic eruption in the Tonga area.

Yours sincerely,

J. C. Grover,
Director of Geological Surveys.

University of Oregon,
Department of Geology,
Eugene, Oreg., November 8, 1969.

Smithsonian Institution,
Center for Short-Lived Phenomena,
Cambridge, Mass.

Dear Sir: I am writing to let you know that I have enjoyed receiving your reports. The reports have been particularly useful in my large introductory lecture course where, periodically, I spend some time pointing out current volcanic and earthquake activity at the beginning of class. It certainly brings home the point that ours is a living planet and that such subjects as volcanism, etc., are not just historical or infrequent.

I would like very much to continue receiving the reports but am afraid that a personal subscription is beyond my budget. I have recommended that our department purchase a subscription, however, and would hope that this program be continued, and possibly even expanded.

Sincerely,

M. Allan Kays,
Associate Professor.

U.S. DEPARTMENT OF COMMERCE,
March 27, 1970.

DIRECTOR,
Center for Short-Lived Phenomena,
Smithsonian Institution,
Cambridge, Mass.

DEAR MR. CITRON: Mr. Wirz, Chief of the Honolulu Observatory and I appreciate the receipt of your informative postcard bulletins. This information enables us to keep on top of current geophysical information which is of vital interest to us to carry out our scientific assignment. The data given is in a factual, concise manner that is easily filed for ready reference.

It would be appreciated if your organization would continue to include the Coast and Geodetic Survey. Honolulu Observatory, and National Tsunami Warning Center on your distribution list.

RAY M. SUNDEAN,
Director, National Tsunami Warning Center.
HERMAN J. WIRZ, Jr.,
Chief, Honolulu Observatory, Ewa Beach, Hawaii.

Endorsement.

NATIONAL ACADEMY OF SCIENCES,
Washington, D.C., June 13, 1969.

SMITHSONIAN INSTITUTION,
Center for Short-Lived Phenomena,
Cambridge, Mass.

GENTLEMEN: I would very much appreciate your adding my name to your mailing list to receive "Event Information Reports." The Academy's interests cover many ecological problems and others described in your reports. I feel that they would provide useful background information for the preparation of some of our reports.

Sincerely,

VIRGINIA M. HAWKINS,
Editor-Writer, Office of Information.

U.S. DEPARTMENT OF THE INTERIOR,
FISH AND WILDLIFE SERVICE,
Washington, D.C., November 1, 1968.

SMITHSONIAN CENTER FOR SHORT-LIVED PHENOMENA,
Cambridge, Mass.

GENTLEMEN: The new service of the Smithsonian at the Center for Short-Lived Phenomena has recently come to our attention. We will appreciate being alerted to "short lived phenomena" that may have significant effects on fish and wildlife. Please send more information on the capabilities of the Center for the purposes of determining what our contribution could be and to consider how best we may utilize information released from the Center.

Sincerely yours,

JACK H. BERRYMAN,
Chief, Division of Wildlife Services.

DISIN KENKYUSYO,
Tokyo, Japan, July 24, 1969.

Dr. ROBERT CITRON,
Smithsonian Institution, Center for Short-Lived Phenomena, Cambridge, Mass.

DEAR DR. R. CITRON: I'm very much obliged to your institution for sending information on various kinds of geophysical phenomena of great use and importance. I'm conscious of it every time I receive the information card with precious news on it. I hope your institution will continue your valuable work for all the researchers around the world of the world phenomena.

As for the effects of Yellow Sea Earthquake in Japan we observed no geophysical circumstances. No geophysical and biological environment fissuring, landslides, Tsunami heights, and damage were recorded.

Sincerely yours,

D. SHIMOZURU,
Professor of the Earthquake Research Institute, the University of Tokyo.

DEPARTMENT OF TRANSPORTATION,
U.S. COAST GUARD,
Washington, D.C., March 19, 1970.

CENTER FOR SHORT-LIVED PHENOMENA,
Smithsonian Astro-Physical Observatory,
Cambridge, Mass.

DEAR SIRS: The U.S. Coast Guard has had inquiries from the University of Newcastle-upon-Tyne, North Shields, Northumberland, United Kingdom, concerning the collection of certain maritime pollution data. In the Coast Guard's reply dated March 6, 1970, a copy of which you presumably have received, we suggested that the University address all of its inquiries to your Center. Conceivably, this procedure could save the entire scientific, academic, and industrial communities the requirement to draw their information from the many separate agencies concerned with pollution in its various forms. At the same time, we promised to take steps through the National Interagency Committee for Control of Pollution by Oil and Hazardous Materials to see that you are provided with current and detailed information on all marine spills of national and international interest. This we are in the process of beginning. It would assist us considerably if we could get from you exactly what it is you want reported and how you want the various agencies to do it. Once we have these requirements, we will present them to the National Interagency Committee.

If you would like to discuss this matter further, or if you have any other questions, please feel free to contact us.

Sincerely,

R. W. GOEHRING,
Rear Admiral, U.S. Coast Guard,
Chief, Office of Operations.

U.S. DEPARTMENT OF COMMERCE,
Boulder, Colo., August 6, 1968.

MR. ROBERT CITRON,
Administrative Officer,
Smithsonian Institution,
Cambridge, Mass.

DEAR SIR: I have just learned in connection with my inquiries on the eruption of Mount Avenal in Costa Rica that the Smithsonian Institution has established a Center for Short-Lived Phenomena. It appears to me that this Center is a very excellent idea and fills quite a serious void that has existed so far. I would hope that it will find the enthusiastic interest of the scientific community and that it may eventually become possible to expand it to some sort of "Scientific Minute men" organization which would consist of scientists and institutions who would be able and willing to investigate such a phenomenon "on call."

Please be so kind and send me information on the new Center and what I have to do to become a correspondent of the Center.

Sincerely yours,

HELMUT K. WEICKMANN,
Director, Atmospheric Physics and Chemistry Laboratory.

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH,
Boulder, Colo., March 27, 1970.

DR. ROBERT CITRON,
Director, Smithsonian Institution,
Center for Short-Lived Phenomena, Cambridge, Mass.

DEAR DR. CITRON: I am writing to express my appreciation for the extremely valuable services we have received relating to event notification and information from the Center for Short-Lived Phenomena. As you know, we have been undertaking a continuing study of the nature of the particles in volcanic plumes, especially as these particles may affect the composition of the atmosphere. The continuing information which we have received during the course of eruptions has permitted us to judge whether or not to sample the fume from a particular eruption. Furthermore, the histories of these eruptions which you have subsequently published have helped us in evaluating our results.

My colleagues and I feel that the Center for Short-Lived Phenomena makes a very significant contribution to many segments of the scientific community, and we certainly hope that it can continue to furnish the types of services which we have received.

Yours very truly,

RICHARD D. CADLE,
Head, Chemistry Department.

U.S. DEPARTMENT OF COMMERCE,
Rockville, Md., April 1, 1970.

MR. ROBERT CITRON,
Director, Center for Short-Lived Phenomena,
Cambridge, Mass.

DEAR MR. CITRON: I appreciate having your letter of March 23, 1970, giving me the opportunity of commenting on the helpful information received from the Center for Short-Lived Phenomena.

The preliminary earthquake data, as reflected on the card covering event 28–70 which has just been received, are especially useful to the Coast and Geodetic Survey. These data are valuable in providing additional information on earthquakes which often supplements information initiated by our National Earthquake Information Center personnel. I am pleased with the Smithsonian followup with inquiries to the source of incoming data usually from the foreign scientific community.

In addition to the earthquake data, I should like to recognize Smithsonian data on volcanic activities, meteorite sightings, oil spills, etc., which provide the scientific community with a consistent source of information not available elsewhere. Also useful is the material provided by the Center on the lunar seismology program and the recent landrise in Italy. Several collaborators in our Seismology Division who are correspondents to the Smithsonian program regularly receive the event notification reports covering all earth science events.

We find the services rendered by the Center and the collaboration which exists between our scientists and personnel of the Center of considerable benefit to the earth sciences programs of the Coast and Geodetic Survey.

Sincerely,

DON A. JONES,
Director, Coast and Geodetic Survey.

UNITED NATIONS EDUCATIONAL, SCIENTIFIC
AND CULTURAL ORGANIZATION,
Paris, France, April 2, 1970.

DR. ROBERT CITRON,
Director, Smithsonian Institution, Center for Short-Lived Phenomena, Cambridge, Mass.

DEAR DR. CITRON: I am sending you today, under separate cover and by airmail, a copy of the second number of our Annual Summary of Information on Natural Disasters, covering the year 1967. The third number, for 1968, is in press and you will receive a copy in a few weeks' time.

In preparing this third number we have been able to draw for the first time on the wealth of information contained in the event cards issued by your Center since the beginning of 1968, and I may say that this has greatly assisted us in our task of compilation, particularly with regard to volcanic eruptions. Full acknowledgment of this will be made in our publication.

You will be interested to know that UNESCO has been able to send missions of experts to make field studies of several of the events reported by your Center since January 1968. We shall continue to keep you informed of such missions, and look forward to maintaining and strengthening our cooperation in this matter.

Yours sincerely,

E. M. FOURNIER D'ALBE,
Department of Environmental Sciences.

EARTH SCIENCE CURRICULUM PROJECT,
Boulder, Colo., April 1, 1970.

Dr. ROBERT CITRON,
Center for Short-Lived Phenomena, Smithsonian Institution, Cambridge, Mass.

DEAR DR. CITRON: We of the earth science curriculum project have been very much pleased by the services being provided by the Center for Short-Lived Phenomena. Your event notification and information services are of great use to secondary school earth science teachers who are using ESCP material. They are also of great potential value to teacher trainers. We congratulate you on the high quality of your reporting and hope that you will continue this important service.

Yours very truly,

WILLIAM D. ROMEY, *Director.*

U.S. DEPARTMENT OF THE INTERIOR,
Menlo Park, Calif., April 1, 1970.

Dr. ROBERT CITRON,
Director, Smithsonian Institution, Center for Short-Lived Phenomena, Cambridge, Mass.

DEAR DR. CITRON: We have found the cards describing "short lived phenomena" that your office distributes an excellent way to keep track of seismic events that occur throughout the world. In our work with environmental hazards, we are extremely interested in earthquake reports. These cards give us the opportunity to quickly evaluate other events, compare them with our local geologic conditions, and determine which we should follow up by inquiry or on the spot investigation.

Your cards, which are specific, concise, and factual, provide a capsule view of these events without the need to evaluate and interpret news accounts. We certainly do appreciate their availability.

Sincerely yours,

ARTHUR GRANTZ,
Chief, Branch of Pacific Environmental Geology.

DOUGLAS ADVANCED RESEARCH LABORATORIES,
Huntington Beach, Calif., April 1, 1970.

Dr. ROBERT CITRON,
Director, Smithsonian Institution, Center for Short-Lived Phenomena, Cambridge, Mass.

DEAR DR. CITRON: What I find particularly valuable in the operation of the Center for Short-Lived Phenomena is its timeliness and technical excellence. There is no substitute for the telephone call or airmail post card advising of the beginning of an event for those scientists interested in studying the phenomena. I recall your early communications with me in 1968 concerning the San Fernandina volcanic explosion. Since that event, the preexplosion photos that I took were circulated to scientists who researched the crater after the explosion. I refer specifically to Dr. Keith Howard of the U.S. Geological Survey and Dr. Robert Bowman of San Fernando State College. My point in citing this one event is to show how communication among scientists has been promoted by the service the Center performs and how much geological and biological fallout results from the Center's activities. The span of interest of the Center is likewise commendable. Immediate knowledge of transients on the moon is just as vital as volcanic eruptions on the earth. In fact, I think that some lunar transients might indeed be volcanic eruptions.

There is still one transient phenomenon that you haven't documented yet and I wish the Center as many decades of support as will be required to document it; I refer to the flashing arcs associated with volcanic eruptions reported by Perret. I enclose a reprint describing it.

Cordially,

JACK GREEN, *Research Scientist.*

U.S. DEPARTMENT OF COMMERCE,
Boulder, Colo., April 1, 1970.

Mr. ROBERT CITRON,
Director, Center for Short-Lived Phenomena,
Smithsonian Institution,
Cambridge, Mass.

DEAR MR. CITRON: For some time now I have been intending to write you to let you know how valuable the information distributed by your Center for Short-Lived Phenomena has been to us. This information makes it possible to follow quickly and intensively many short-lived events of considerable interest to us here in ESSA. I know at present of no other way to get this information as quickly, reliably, and comprehensively.

I am hoping that the very severe budget cuts that will be made in Government will not have a very debilitating effect on your operations.

Sincerely yours.

JOHN S. RINEHART,
Senior Research Fellow.

CALIFORNIA INSTITUTE OF TECHNOLOGY,
Pasadena, Calif., April 2, 1970.

Mr. ROBERT CITRON,
Director, Smithsonian Institution,
Center of Short-Lived Phenomena,
Cambridge, Mass.

DEAR MR. CITRON: It is a pleasure to write this letter in appreciation of the services rendered by the Center.

Years of experience with first reports of earthquakes and related events have made me keenly aware of the desirability of reliable early information from authentic sources. Even though such reports are preliminary, and subject to significant later revisions, they are often permanently useful.

On several occasions lately, reports from the Center have enabled me to include, in manuscripts under preparation, notices of events for which authentic data were not otherwise available. Sometimes it has been possible later to insert references to publication; but in some instances citation of the Center reports has had to be retained.

While I am chiefly concerned with tectonic earthquakes, I find the reports on volcanic activity very helpful. Sometimes an eruption is associated with a remarkable earthquake swarm, as in the Galápagos (Fernandina), 1968. On other occasions eruptions tend to be confused with unrelated earthquakes at about the same time.

In return, personnel at this Laboratory will continue to furnish information on events of interest in our area. Part of our obligation is in forestalling misinformation from getting into circulation. Thus, not long ago there occurred one of the occasional earthquake swarms in the Gulf of California. There was a rumor of associated volcanic activity; we were able to state very soon that this was unfounded.

I have contributed critical comments on some of the wilder reports reaching the Center from well-intentioned but misguided volunteers, or in sensationally edited press releases.

Often first news of some unusual event—for instance, the upheaval at Pozzuoli—reaches us through press channels. When we are asked for comment, it is a great advantage to be able to say that we expect authentic information soon. By the time inquiries reach us in correspondence, usually we have reports from the Center.

Misinformation grows and expands readily, and the Center does much to nip it in the bud. In these few years there is evident improvement with accumulated experience in handling new data; publication from the Center setting forth its staff experience, including detection and avoidance of erroneous reports, would be generally helpful.

We have just received the first notification card on the Turkish earthquake disaster of March 28 and are looking forward with interest to detailed reports.

Very sincerely yours,

CHARLES F. RICHTER,
Professor of Seismology.

U.S. DEPARTMENT OF THE INTERIOR,
Hawaii National Park, Hawaii, March 27, 1970.

Dr. ROBERT CITRON,
Director, Smithsonian Institution,
Center for Short-Lived Phenomena,
Cambridge, Mass.

DEAR DR. CITRON: I was astonished at the great number of variety of events that were reported and thereby received attention during the past year of operation of the Center for Short-Lived Phenomena.

The operation certainly fills a huge gap in the spectrum of information media available to scientists throughout the world, and the apparent accomplishment shows that the gap is being well filled.

We look forward to ane even more successful and useful year.

Sincerely,

H. A. POWERS,
Hawaiian Volcano Observatory.

Mrs. HANSEN. Do you work with this Geological Survey on this program?

Dr. GALLER. Yes, ma'am.

Mrs. HANSEN. This has resulted in some of the most creative and on-the-spot responses that have been made.

Dr. GALLER. Yes, ma'am.

Mrs. HANSEN. The response to the Santa Barbara oil spill was immediate.

Dr. RIPLEY. Yes. We were fustest wth the mostest.

Mrs. HANSEN. That is right.

Dr. RIPLEY. As I mentioned this morning, Madam Chairman, this information is an extension of what Joseph Henry wanted the Federal Government bureaus to begin doing when they started the Weather Bureau, and it is this kind of instant reporting of these natural events which allows scientists to get on to the spot the quickest with the mostest and make the observations.

Mrs. HANSEN. Please insert in the record how you participate in the short-lived phenomena events.

Mr. RIPLEY. Very well.

(The information follows:)

During 1969 the Center alerted dozens of Government agncies, laboratories, and individual sceintists by telegram, telephone, and event notification card of numerous events that occurred in the United States and affected the environment. These events ranged from man-made environmental pollution to potentially disasterous earthquakes and storm surges. A representative list of environmental events that the Center reported this past year includes the Santa Barbara oil spill, one of the 17 major oil spills reported by the Center; the Lake Michigan high DDT residue discovery: Mount Ranier seismic activity; the Charles River fish kill, Boston; the sooty tern hatch failure. Florida; the Eastern United States high air pollution potential; the California channel earthquakes; the Miami snail infestation; the Raleigh Bay bird bill, North Carolina; the Lake Michigan aleife mortality; and the Hawaiian Islands storm surge.

Center participation in events included contact with event areas, obtaining information and data on the events, interviewing reliable witnesses in event areas, collecting documentation, issuing event information reports and telegrams continuing event status reports, final event reports, and preliminary results of several field investigations.

Dr. RIPLEY. We are spread out in 122 countries and we have 2,252 correspondents.

BICENTENNIAL OF THE AMERICAN REVOLUTION

Mrs. HANSEN. $400,000 is requested for the American Revolution Bicentennial program.

Please give us a complete description of your planned activities in this connection for the 1971 fiscal year.

(The information follows:)

The initial years of the Smithsonian's Bicentennial involvement and participation must establish the foundation for a series of exhibits, publications and activities culminating with a major Institution-wide exhibit in 1976. Fiscal year 1971 activity will emphasize the planning and coordination necessary to draw together the numerous and varied resources of the Smithsonian into a coherent and comprehensive program of operations to take place over the next several years. A separate Bicentennial appropriation will support these activities throughout the Institution.

We will continue to be involved on an increasing scale in advising and assisting local and regional groups in developing their participation. In 1971, we will step up research projects on the origins and impact of the American Revolution on American life and national development. This research must be completed years before 1976 to be reflected in exhibits and publications. We will intensify efforts to locate and arrange to borrow significant objects to round out our own holdings for display in exhibits in Washington and in traveling exhibits.

We will continue to design and produce exhibits that will be opening each year over the next several years, communicating signal events and national achievements of the Revolution period. Many of these exhibits will test new approaches and new techniques that we hope to use on an unprecedented scale in our great Bicentennial exhibit in 1976.

EXPENDITURES ON BICENTENNIAL ACTIVITY

Mrs. HANSEN. Does this represent the total funding the Smithsonian plans to spend on this activity in 1971?

Dr. RIPLEY. Yes, although we shall try to derive the maximum contribution of many of our other programs to the goals of the bicentennial.

Mrs. HANSEN. Please insert in the record, by fiscal year, the total expenditures you have made in this connection to date.

(The information follows:)

Fiscal year 1968	[1] $75,000
Fiscal year 1969	[2] 115,000
Fiscal year 1970	[3] 205,000

[1] Includes approximately $41,000 of staff time and other costs in the National Museum of History and Technology and $34,000 elsewhere mostly by the Office of Exhibits in the planning, design, and preparation of exhibits.

[2] Includes approximately $65,000 in the National Museum of History and Technology and $50,000 elsewhere in the Office of Exhibits and National Portrait Gallery (staff work on the Catalog of American Portraits and the acquisition of portraits).

[3] Includes about $130,000 in the National Museum of History anl Technology (research, acquisition of objects, and space and exhibits planning), $35,000 by the Office of Exhibits in design and production, $15,000 in fellowships by the Office of Academic Programs, $25,000 by the National Portrait Gallery.

COORDINATION WITH THE AMERICAN REVOLUTION BICENTENNIAL COMMISSION

Mrs. HANSEN. To what extent are you coordinating activities with the American Revolution Bicentennial Commission?

Dr. RIPLEY. This is occurring at several levels. Both Dr. Daniel Boorstin, the Director of the National Museum of History and Technology, and I are regular members of that Commission. I am an ex officio member by authorization and Dr. Boorstin is an appointed member. Before he came here, he had already been appointed by both

President Johnson and subsequently reappointed by President Nixon. So we have direct representation on the Commission. We also have one staff man working full time on liaison between the Commission and the Smithsonian.

ENVIRONMENTAL SCIENCES PROGRAM

Mrs. HANSEN. $600,000 is requested for the environmental sciences program. This is a new venture in 1971. Please give us a complete description of the requirement for this activity, what you plan to do, and why you feel you will not be duplicating activities of other Federal agencies who are rapidly accelerating their activities to protect our environment.

Dr. RIPLEY. Madam Chairman, I had mentioned earlier a number of traditional kinds of research and investigations on the environment which the Smithsonian has engaged in. For instance, I mentioned the long series of investigations on solar radiation which have indicated a substantial and important decline in the amount of such energy reaching the earth. This is not a new activity for the Smithsonian, but an activity to which the Smithsonian should give an increased and more concentrated focus drawing upon the well-established resources that we have been developing for over 100 years. What we are attempting to do is to more effectively apply the essential expertise which we have developed over the years to what are now considered to be questions of extreme national importance, questions aimed at achieving a better understanding on the part of the American public as to exactly the level and rates at which man's environment is changing and what this indicates for the future of Americans and all other peoples.

We see our participation in improving the quality of man's environment as threefold. First, the identification and assessment of the components of man's natural surroundings and of his cultural development. Second, monitoring levels and rates of biological and other changes in order to be better able to predict what the future will look like, and third, education at all levels of public interest.

I have mentioned the kinds of public education activities that the Smithsonian can and should be performing through its public exhibits, its seminars, and its public discussions involving people from all sectors of national life. In order to make a significant contribution in these three areas, the Smithsonian is requesting a special appropriation of $600,000, not for new starts so to speak, but to continue and strengthen five interrelated kinds of traditional Smithsonian activity. These are activities aimed at integrating and applying our own resources of scientists and historians, of collections documenting man's natural surroundings as well as his cultural development, and of natural land areas that are useful for laboratory purposes. We are requesting funds for field studies and publications aimed at identifying certain critical plants and animals as indicators or benchmarks of environmental change. Four additional biologists are needed to undertake special studies to monitor rates and processes of change. These studies would include the development of ecological models for predicting changes that might occur as a result of natural or man-made adjustments in the environment.

Next we must not overlook the importance of research and study of man's own social and cultural changes and difficulties in a changing and increasingly urbanized environment. We need to strengthen our capability in this area by obtaining funds for a cultural anthropologist and a social historian, for additional fellowship offerings to the best university people, and for a series of seminars to encourage constructive discussions in this important area. It is important that the general public be made increasingly aware of the effects of environmental change.

We are anxious to get our special exhibit hall on the environment under production. We believe that through our exhibits program that we can play an important role in helping to awake America to what has happened and what corrective measures need to be taken. And last, as we have discussed earlier, we are especially concerned that the information on man's natural surroundings which is inherent in the collections and related data that the Smithsonian has been collecting for over 100 years be made of maximum utility to individuals and organizations who must ultimately be responsible for recommending corrective technological and other measures that must be taken to halt, if not reverse, the process of deterioration which we are now facing.

It is in this regard, Madam Chairman, that we believe we are not duplicating activities of other Federal agencies. Instead, it is these agencies who traditionally, but now at an increasing rate, are turning to the Smithsonian because as an organization devoted to science, natural history, and man's cultural and technological development the Smithsonian is without peer in this country. We have the basic knowledge and data and the inherent ability to gather and present this data in ways that applied researchers and national policy decisionmakers need for corrective action.

In summary, I think, Madam Chairman, that the most important and unique contribution that the Institution can offer in the environmental sciences derives from our vast natural history collections and our cadre of systematists. The environmental information that can be derived from our collections through the researchers of our scientific staff will serve as the essential underpinnings for the development of the mission-oriented and applied programs for solving environmental problems.

HIGHER EDUCATION AND RESEARCH TRAINING PROGRAM

Mrs. HANSEN. Justify your request for an increase of $75,000 for academic programs.

Dr. RIPLEY. The Office of Academic Programs is our coordinating branch for services to educational institutions. Its programs fall into three parts which are described in turn.

In higher education a staff of three persons at a cost of about $38,000 disseminates information about educational opportunities to every major college and university in the United States, conducts a correspondence in excess of 15,000 pieces per year, and makes all administrative arrangement for the award of stipends (including over $100,000 each year in contract and gift support). The present level of stipends and allowances budgeted by this office is $350,000, which has not increased appreciably in the last 3 years. This is the continuing

budget for stipends. Some bureaus, most notably the Smithsonian Astrophysical Observatory, transfer additional sums for administration by the Office of Academic Programs. During this same time period the number of professional staff increased from 250 to 350, and their willingness to accept and supervise students grew even more markedly.

We are asking for an increase of $40,000, enough to add two postdoctoral stipends (a 10-percent increase), two predoctoral stipends at $6,000 apiece (a 10-percent increase), and add two cooperative fellowships (an experimental program where universities contribute half of a student's maintenance for 6 to 8 months). It is our belief that funds for higher education are a legitimate and important part of our research effort and that as our research capacity grows we have an obligation to enable universities to send a reasonable fraction of the students they would like to have working along with us.

A second category of expenditure that we call educational services includes an annual symposium and special exhibit, as well as a variety of advisory and information exchange activities (such as the weekly Washington Academic Calendar), supported principally from grants and contracts. Federal expenditures in this category include three administrative and clerical positions at a cost of $31,000, a fund to support scholars from outside in study visits of short duration at $5,000 per year, a fund of $8,000 for seminars in four of our higher education programs, and a fund of $5,000 to bring visiting lecturers to the Institution. It is proposed to increase these funds by $5,000 overall, in response to the very considerable number of requests and the demonstrable value gained from expenditures to date. Attendance at Smithsonian lectures is very widely advertised throughout the Washington area and these events serve also to nourish our professional community.

Current administrative expenses for travel, data processing, supplies and equipment total $17,000. An increase of $5,000 is necessary to meet program commitments. These funds would also permit two short trips each year by two staff members each to colleges and universities to inform them about student opportunities at the Smithsonian.

ELEMENTARY AND SECONDARY EDUCATION PROGRAM

The third major area of services is the program in elementary and secondary education with 12 positions at a cost of $113,000. This staff of subject matter specialists, in such fields as anthropology, biology, portraiture, art, and history, design educational experiences either as tours for visiting schoolchildren (which have shown a threefold increase in 2 years) or as "packages" of learning materials to be sent to schools across the Nation. In fiscal year 1968, 26,653 children participated in organized elementary school tours. This number grew to 45,523 in fiscal year 1969, and an estimated 60,000 plus in the current year.

I wish to explain briefly what might be accomplished by adding two positions at a cost of $15,000 to our elementary school program. In the National Museum of History and Technology our present school tour offerings are 18 per day, serving 2,700 students per week, but only in civil history. This effort requires the services of one staff associate and 10 volunteer docents per day.

There are extensive and unused exhibit areas in the history of science and technology. We are trying to develop a tour about the Industrial Revolution, a topic which is of crucial importance to the citizens of tomorrow. We might also offer:

Energy, to include exhibits on electricity and nuclear energy.

How Science Grew, the history of man's achievements in health and medical science, chemistry, pharmacy, and physics and astronomy.

Man and Manufacturing, to treat tools, light and heavy machinery.

Man and Communications, graphic arts and photography.

These new units provide learning opportunities beyond current offerings in the schools and also increase the Museum's weekly student capacity by 14 tours per day which would accommodate an average of 2,100 additional students per week.

If this potential is to be realized, the Division of Elementary and Secondary Education will require one additional staff associate, knowledgeable in the history of science and technology, to organize themes, prepare docent and teacher guidance materials, and train the volunteer docents who will give the school tours. The attached diagram shows areas not now serving education which we hope to bring into use in this way.

The Institution also strives to prepare education materials, based on its collections and exhibits for the Nation's schools. This effort could be significantly improved if materials could be tested among visiting schoolchildren in our exhibit halls. We propose to employ an audiovisual technician to install experimental sequences of slides and tape recorded commentary in halls used by school tours. Such a program of testing would substantially improve the flow of material from the Smithsonian to the schools.

OFFICE OF THE TREASURER

Mrs. HANSEN. Justify your increase of $60,000 for administrative and central support activities for the Office of the Treasurer.

Dr. RIPLEY. The Office of the Treasurer provides analytical and technical support, such as planning, budgeting, accounting, and auditing, in financial management matters to the entire Smithsonian Institution. An increased volume of work, additional reports that are required both for proper internal information and for outside agencies, necessitates us to request a small staff increase. We need an additional fiscal technican in the Accounting Division in order to properly provide information to and obtain information from the accounting records maintained in our computer processing system. We also need a clerk-typist for the Office of the Treasurer and the Internal Audit Office. This constitutes $14,000 of the total request. We also need approximately $46,000 for a number of things which might more properly be described as institutional support services. These include funds for reimbursement to the Workmen's Compensation Fund, increase in the reimbursement to the Post Office Department for an increased volume in public inquiries and other mail, and for computer services required for preparation of the Smithsonian payroll and fund accounting.

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HEALTH UNIT

Mrs. HANSEN. Give us the details on the requirement for $10,000 to establish a health unit for the buildings on the south side of the Mall.

Dr. RIPLEY. Madam Chairman, we now have two small health units in operation, one in the Natural History Building and one in the History and Technology Building. These are already insufficient to meet the emergency needs of employees and the many visitors to the Smithsonian. We are particularly deficient in serving those visitors on the south side of the Mall, where there are strong public attractions such as the lunar rock sample. We believe it is essential to establish a health unit in the Arts and Industries Building and are requesting one position and $10,000 for this purpose.

INFORMATION SYSTEMS DIVISION

Mrs. HANSEN. Justify your request for an increase of $100,000 for the Information Systems Division.

Dr. RIPLEY. Madam Chairman, I am pleased to be able to reemphasize what we believe is a really critical need in order to enable the Smithsonian Institution to do a proper job of diffusing the knowledge that we have acquired at a substantial investment over a long period of time. The Smithsonian, because of its stewardship of the National Collections and closely related archives and reference documents, possesses an unmatched assembly of materials which trace man's physical, cultural, and technological development and his natural surroundings. We are convinced that the information in these collections can play a very important role in helping other investigators and other agencies at all levels of Government and private interest to find solutions to present day cultural and biological problems. This information is not now readily accessible because of its huge volume, its wide variety of subject matter, and different methods of documenting and filing used over a 125-year period. Five years ago the Smithsonian realized that we had to explore more modern data automation methods in order to make our collections and research data more accessible and thereby more useful. Not only were we unable to answer questions that were brought to us, but we knew, and know, that many important questions are not even brought to the Institution because the prospective questioners know of the great difficulty, if not hopelessness, of trying to pull together related bits of important information into a coherent and comprehensive response.

We have made some progress in trying to improve our abilities. For instance, a pilot project in the National Museum of Natural History; funds for this project will no longer be available at the end of June 1970. But it is not just the National Museum of Natural History which requires improved information systems. Almost every one of our activities has proposed important applications for the 20th century handling. We have the computer capacity to handle more data, but we need additional systems analysts and computer programers to design, develop, test, and install specific systems. Our request is for four such employees with funds for travel to investigate applications, computer time, and related services.

SMITHSONIAN INSTITUTION LIBRARIES

Mrs. HANSEN. What is the need for the additional $150,000 for Smithsonian Institution libraries.

Dr. RIPLEY. The Smithsonian Institution's library program has the following basic purposes: to have at hand carefully selected documentary materials containing the best and most pertinent data and research results from the fine research done elsewhere that has a direct bearing on our own research and educational programs, and to arrange and index the information in ways that make it readily accessible. It is logical and prudent to have an information capability such as this as an adjunct to our research effort. In this manner, Madam Chairman, we speed up our own research activity and make it more efficient by avoiding costly and unnecessary duplication of research.

The Smithsonian Institution libraries do not expect to be entirely self-sufficient. Whenever the kind of information we require, or the nature of our use of the materials in which it is transmitted, permits, we borrow books from other libraries, and ask other information services and reference libraries to help us gain access to information. We, in turn, offer the same services to other libraries.

Although the Smithsonian will continue to use the resources of other libraries through interlibrary loans and other ways, the availability of adequate in-house library materials and reference services is essential to the effective performance of the Institution's curation, exhibition, and research functions. We now find with increasing frequency that materials we want in other libraries are already in use and thus unavailable, or in such great demand that they cannot be used by our researchers for as long as they need them. Competition among libraries for too few copies of books in great demand impedes efficient research. In other words, too frequently, it is more costly to buy too few books than to provide a modest amount of necessary duplication of titles. In a number of such areas the Institution is looked to by others as the principal, if not the only, source of books and information. This relieves other Federal libraries of the responsibility for developing information capabilities in topics that are of relatively limited, though perhaps momentarily vital, concern to them.

The request for fiscal year 1971 is meant to partially correct several deficiencies. An increase in purchase funds of $52,000 is needed to permit purchasing only an average of three books and four journals a year for each professional employee. Only about $50,000 are now available. An additional $15,000 are needed for binding to preserve valuable books; $15,000 are now available, but $50,000 a year are needed. A manager for the very important exchange program and three cataloger-index technicians are required, $39,000. Two additional technicians, $10,000, are required to cope with a steadily rising volume of reference questions—some 70,000 questions were posed to the library by staff and outsiders in 1969. An additional $15,000 are needed to pay for computer services to streamline the libraries' operations. And lastly, a librarian and a technician, $19,000, are required to take care of a growing collection of rare and valuable books, many acquired by gift. This is a total requested increase of $150,000.

SMITHSONIAN INSTITUTION PRESS

Mrs. HANSEN. An additional $75,000 is requested for the Smithsonian Institution Press. What is your justification.

Dr. RIPLEY. The activities of our press, Madam Chairman, are basically a natural and logical extension of much of the program work that goes on in the Institution; that is our basic research, the acquisition of collections, and public education through exhibits. In effect, then, through our publication efforts we are able to bring much of this work to a larger audience that would not be served if the information on these activities were restricted to those people who could come to Washington and visit our scholarly staff and our collections and exhibits.

The press prepares, prints, and distributes three basic kinds of publications which are used by this larger audience, the general public, students, and specialists around the world. These publications are collection catalogs, exhibition catalogs, and research studies in the fields of art, history, and science. Additional museums and galleries, new collections such as the Hirshhorn collection, the Lilly coins, and space artifacts, and improved research productivity have dramatically increased the number of important manuscripts and created printing backlogs. Deliberate efforts by the press to cut costs by revised procedures and the use of new printing techniques have helped to stretch printing funds, but these economies have been offset by higher printing costs and a rising volume of work. We are requesting an increase of $63,000 in printing funds. In addition, the editorial and design staff of the press requires a clerk-typist and an indexer to assist them with what are relatively low-level clerical and production duties.

PHOTOGRAPHIC SERVICES DIVISION

Mrs. HANSEN. Justify your request for an additional $25,000 for the Photographic Services Division.

Dr. RIPLEY. The Smithsonian has been traditionally concerned with visual education and as such the work of our photographic laboratories is an integral part of our publication and exhibit activities, and of our ability to respond to public requests for photographs of objects in our collections; for instance, the Star Spangled Banner, the Spirit of St. Louis, and John Glenn's space capsule.

This division has not had a significant funding increase in several years despite the rising costs of goods and services, and has not had a staff increase in 5 years despite a growing workload. We are requesting two laboratory technicians at $10,000 to relieve the photographers of routine duties amounting to about 17 hours a day. Funds in the amount of $15,000 are needed to purchase specialized commercial services which the laboratories are not equipped to perform, and for supplies, repairs, and the purchase of replacement equipment for 10-year-old items.

BUILDINGS MANAGEMENT DEPARTMENT

Mrs. HANSEN. An increase of $327,000 is requested for the Buildings Management Department. Give us the details on this requirement.

Dr. RIPLEY. Madam Chairman, our request for the Buildings Management Department is a very selective one aimed at meeting known needs of additional building spaces and closely related service costs. We are asking for 20 additional positions and $180,000 to provide an adequate staffing level for the Renwick Gallery of Art which is planned for a partial public opening in midfiscal year 1971. These positions include 12 guards for around-the-clock protection, five specialists to operate, maintain, and repair refrigeration and other equipment in that building, and an electrician, a painter, and a carpenter for day-to-day maintenance and repairs. Included in this dollar amount are funds for utilities, communications, security and fire detection systems, and custodial and maintenance supplies and equipment required in the building.

The balance of our request, $147,000, is to meet the higher costs of utilities, communications, and the repair and maintenance of mechanical equipment for some 3 million square feet of space in eight major buildings and nine other facilities serving some 12 million visitors a year. Costs of these services have increased some 50 percent over the last 5 years from $1 million to $1.5 million based on higher unit costs and more consumption. For instance, we have just been informed of a 5-percent surcharge on our electricity bill. Included in the request for $65,000 for electricity based in part on the air-conditioning needs of the renovated Smithsonian Building; $20,000 for communications as estimated by the General Services Administration for the Federal Telecommunications System; $43,000 for steam; and $19,000 for contract maintenance of a wide range of security and fire detection systems and some 50 elevators and escalators.

DIVISION OF PERFORMING ARTS

Mrs. HANSEN. You are requesting an increase of $50,000 for the Division of Performing Arts. Last year the distinguished gentleman from Connecticut and myself discussed with you the commitments that you might make with Actors Equity or other groups representing professional actors. What has happened on that?

Dr. RIPLEY. As a result of the difficulties of trying to meet the increased salaries and requests that were involved in the Equity negotiation, we decided to discontinue the Summer Theatre Festival. We are continuing with the American Folklife Festival and we are continuing with the American College Drama Festival for this one more year, with the possible predication that we may not be able to afford it next year because of actual financial loss.

Mrs. HANSEN. Will the Kennedy Center be able to house the Collegiate Festival next year?

Mr. WARNER. I don't think they will be, Madam Chairman, not by next year; no. This year we are employing Ford's Theatre, as we did last year, and a brand new theater at George Washington University, not the Lisner. It is a new smaller 450-seat theater, called the University Center Theater. That is where the college drama festival will be this year. We lost a bit on the tent last year in spite of the generous donation from Pepsi Cola because of the costs of erecting the tent and getting it down, and the subsequent season we had of American musicals not connected with the college drama festival. We lost rather heavily on our private role side and we are not engaging in any summer musical comedy or theater festivals this year.

Mrs. HANSEN. This coming season you will only have the folk festival and the college drama festival?

Mr. WARNER. Yes; Madam Chairman.

Dr. RIPLEY. And some small events, the puppet theaters and things of this sort.

Mrs. HANSEN. Are those largely events for children?

Dr. RIPLEY. Yes.

Mrs. HANSEN. Very good.

Dr. RIPLEY. Of course, the folk festival has been an enormous success.

PUPPET THEATER

Mrs. HANSEN. It has been a tremendous success. Your College Drama Festival also has been a great success.

Dr. RIPLEY. Oh, that was great.

Mrs. HANSEN. I attended one at Ford's Theatre and it was excellent. It was as good as any professional theater I have ever seen.

Mr. WARNER. This year, Madam Chairman, one of the universities, Los Angeles City College, has a play, an original work called "A Gap in the Generations," which attempts to explain through music, dance, and drama why we have these difficulties in communicating with the younger generation, or so it says in the press release.

Mrs. HANSEN. Is Howard University also participating this year?

Mr. WARNER. Yes; two area universities have made the final selections this year, both Howard and Georgetown.

MUSEUM PROGRAMS AND RELATED RESEARCH

Mrs. HANSEN. Please insert pages C–1 through C–30 of the justifications in the record.

(The information follows:)

SMITHSONIAN INSTITUTION
MUSEUM PROGRAMS AND RELATED RESEARCH
(SPECIAL FOREIGN CURRENCY PROGRAM)

1969 Appropriation	$2,316,000
1970 Appropriation	2,316,000
1971 Estimate	4,500,000

An appropriation of $4,500,000 in foreign currencies which are determined by the Treasury Department to be excess to the needs of the United States is requested for a program of grants to United States institutions for essential field research in archeology and related disciplines, systematic and environmental biology and astrophysics, as well as for museum programs and for other Smithsonian interests.

The requested increase of $2,184,000 in foreign currencies is to be devoted to strengthening the research programs of United States universities, museums, and other institutions of higher learning in those countries where the United States holds excess currencies. The increase is essential particularly to support urgent field studies in the Smithsonian's traditional fields of systematic and environmental biology and anthropology which today are recognized as basic to an understanding of the immediate national and world problems of environmental quality and cultural change. The increase is essential also to support on-going and new research, some long in preparation, which contributes to United States national programs under, for example, the International Biological Program, the Intergovernmental Oceanographic Commission of UNESCO, the National Aeronautics and Space Administration, and the United States National Museum.

Funds are requested for the following programs:

	FY 1969 Appropriation	FY 1970 Appropriation	FY 1971 Estimate
Archeology and Related Disciplines	$1,120,000	$1,105,000	$1,500,000
Systematic and Environmental Biology	1,046,000	1,046,000	1,800,000
International Biological Program	....	....	500,000
Museum Programs	40,000	40,000	100,000
Astrophysics	95,000	105,000	570,000
Grants Administration	15,000	20,000	30,000
Total	$2,316,000	$2,316,000	$4,500,000

IN FISCAL YEAR 1970, NO FUNDS FOR NEW RESEARCH

During fiscal year 1970 funds, including all previous appropriations, were sufficient only to cover the cost of on-going research; there were no funds for new research. Program activity has steadily increased from nine grants

during the first fiscal year, 1966, to 140 at the end of fiscal year 1969, up from 100 at the end of the previous year. New inquiries about foreign currency uses continue to average one a day. Such growing foreign currency activity reflects both the scientists' search for alternatives to declining federal research dollars and an expanding Smithsonian Special Foreign Currency Program authority. Because there are no funds for new research, many worthy projects long in preparation and now being formally submitted for funding, cannot be supported and may be abandoned as participating scholars, always under pressure to publish, seek other research opportunities. It is estimated, therefore, that a realistic level of appropriation for the Smithsonian Foreign Currency Program in future years would be $6,000,000.

USE OF FOREIGN CURRENCIES SAVES HARD DOLLARS

Special Foreign Currency Program appropriations are an advantageous source of research monies both because they are not new appropriations of tax dollars and because delay in the use of the "excess" accounts means continuing losses to the United States Treasury as these accounts lose value through inflation and devaluation. Moreover, these appropriations do not add appreciably to the President's budget total because the Commodity Credit Corporation reduces its appropriation request by an amount equal to the amount of foreign currencies expended.

At the same time, Special Foreign Currency Program appropriations contribute to essential national research objectives abroad without contributing to a balance of payments deficit. Moreover, Smithsonian Foreign Currency Grants frequently serve as dollar-saving supplements to the dollar grants of both public and private agencies like the National Science Foundation, the National Institutes of Health, The World Wildlife Fund, the John D. Rockefeller III Fund and the Wenner-Gren Foundation. In such cases, the foreign currency grants cover costs in the host country; the dollar grants are expended in the United States for equipment not available in "excess" currency countries, for American salaries, laboratory fees and the like.

FOREIGN CURRENCIES SERVE NATIONAL PROGRAMS ON ENVIRONMENTAL QUALITY

Now is the time to use foreign currencies for urgent field studies of the processes of change in man's natural environment and in his culture. The impact of technology on rural and urban communities, the poisoning of man's environment and the destruction of nature's productive mechanisms in the face of exploding human populations, are all problems of direct interest to the Smithsonian. Unrest in urban centers and among young people the world over attest to our poor understanding of these processes. Although the Smithsonian adheres to its traditional role as an institution for basic, not applied, research, its traditional biological and anthropological interests are basic to an understanding of these immediate national and world problems.

"Excess" foreign currencies represent a substantial national resource which should be fully utilized to support studies of environmental quality like the following on-going projects:

. . . International Biological Program/Smithsonian studies in Tunisia of the continuing encroachment of the Sahara in the face of concerted conservation programs.

...Yale University/Smithsonian field research in the Gir Forest in Northwest India where agricultural pressures threaten destruction of the forest which is the last habitat of the Asiatic lion, which once roamed the region from the Mediterranean to the South China Sea.

...Union College, New York, research into the deterioration of fresh water lakes in the Nile River delta as a result of the regulation of the river's flow by the Aswan Dam. The lakes have provided fish and employment for fishing communities for centuries.

...Smithsonian studies, together with Israeli scientists, of the movement of marine organisms through the man-made, sea-level Suez Canal. Results show that the majority of commercially valuable fish taken in the Eastern Mediterranean orginated in the Red Sea. These studies have saved the United States thousands of hard research dollars because they provide a tested model for studies to be conducted in connection with a possible sea-level canal at Panama.

...University of Georgia studies of the tropical forests, grasslands, and cultivated lands in the Ganges river valley in India.

...Smithsonian studies of migrating birds and the parasites associated with these migrating birds, in Northeast Africa, which have shown that they carry viruses and antibodies and thus can be considered potential carriers of human diseases.

On-going studies of cultural change supported by the Smithsonian Foreign Currency Program include:

...Duke University, Durham, North Carolina, studies of the effects of city life in New Delhi, India, on in-migrating minorities.

...University of Pennsylvania studies of the effects of urbanization on family life in India.

...University of Illinois studies of the effects of migration on basic cultural expression, specifically the traditional songs of communities of Jews migrating to Israel.

...University of Washington studies of the effects of spreading technology and urbanization on one of Ceylon's oldest ethnic groups.

...Center for the Study of Man, National Museum of Natural History, urgent anthropological studies of cultures changing rapidly or disappearing under the impact of modern technology.

Such studies by American scholars of man's behavior are best conducted abroad because, as a rule, the best observers of a living culture are those drawn from a different culture.

RESEARCH WHICH MUST BE POSTPONED

New research into the nature of the environment long in preparation which must be postponed because of insufficient funds in the Smithsonian Fiscal Year 1970 appropriation include:

... International Decade of Oceanography studies conducted aboard the Smithsonian research vessel PHYKOS by scientists from major American oceanographic research institutions as a part of the approved United States national contribution to the Cooperative Investigations of the Mediterranean of the Intergovernmental Oceanographic Commission.

... Dartmouth College studies of organic production in Kashmir lakes, a joint U. S. -Indian project, which is a part of the International Biological Program's world-wide inventory of natural productivity.

... Duke University studies of the systematics of lichens in Morocco. The first of a series of projects to study in a comprehensive manner the flora of this new "excess" currency country.

... Oak Ridge National Laboratory studies of deciduous forest and grassland ecosystems in Poland which will supplement similar studies under Oak Ridge's direction under the United States national plan for the International Biological Program.

... University of Texas archeological studies of the classical city of Stobi in Macedonia, Yugoslavia which will seek to reconstruct the history, social organization and the natural environment of this ancient city over the full span of its existence.

Other studies which must be postponed for lack of sufficient funds include:

... American Schools of Oriental Research excavations at Kirbet Shema, Israel which will apply to the Greek, Roman and Byzantine periods of the archeology of Palestine the highly refined techniques pioneered in the study of earlier periods in that country.

... Smithsonian Astrophysical Observatory studies of the Earth's upper atmosphere and magnetic field by means of newly-developed laser tracking techniques, at the Uttar Pradesh State Observatory in India, of man-made satellites.

ACCOMPLISHMENTS

Smithsonian Foreign Currency Program grants have benefitted more than 200 United States institutions in over 25 states. Accomplishments include:

... More than 43 research publications. Recent publications include the first systematic study of marine organisms sorted and distributed by the Smithsonian's Mediterranean Marine Sorting Center in Tunisia and an ecological analysis of the climate and vegetation of Ceylon growing out of the studies of the Ceylonese elephant undertaken by the National Zoological Park.

... More than 150 post-doctoral research opportunities for Americans.

... More than 110 training opportunities for American Ph. D candidates, who obtained essential field experience, frequently obtaining course credit, and more often accomplishing the independent research for doctoral dissertations. Especially noteworthy for the training of students have been Hebrew Union College, Cincinnati, Ohio in its summer seminar at the excavation of the biblical city

of Gezer in Israel; New York University's Institute of Fine Arts in the course of excavations of the ancient Egyptian city of Mendes in the Nile River delta; and the American Institute of Indian Studies (a consortium of 23 American universities), whose junior fellows conduct research in India toward their doctor's degrees with Smithsonian support. Most research projects include at least one American and one host country senior research scholar and one American and one host-country graduate student.

. . . Additions to research collections of the National Museum of Natural History and of other grantee institutions in the form of archeological, ethnographic and biological specimens collected and shared with the collaborating institutions in the "excess" foreign currency country. For example, Yale University's Peabody Museum and the Museum of the University of Colorado have benefitted from additions to their paleontological collections growing out of expeditions in Egypt and Tunisia respectively. The Yale expedition is making substantial contributions to our understanding of man's evolution; the Colorado expedition has uncovered important information about the enviornment of early man and the geological history of northwest Africa.

GROWING RESEARCH OPPORTUNITIES

Opportunities continue to grow to employ foreign currencies. In June 1969 an amendment was signed to the principles of cooperation between the Smithsonian and the Government of Yugoslavia permitting collaboration in ecological research there. Moreover, recent political developments in Eastern Europe have added to the program's authority opening up a range of "excess" currency uses covered by the National Museum Act of 1966.

Moreover, the change in government in Pakistan has brought increased interest in collaboration in basic research under the Smithsonian program. A University of Washington proposal to study the wild boar of Pakistan and a Smithsonian proposal to study the marine fauna of the continental shelf of West Pakistan are currently under consideration by the Government of Pakistan as pilot projects for a potentially extensive program. In India, the Smithsonian joined with the long-established American Institute of Indian Studies to provide facilitative services to American institutions in the development of projects there.

Direct dollar costs to the Smithsonian for its Foreign Currency Program are limited to those for administrative personnel in Washington. During Fiscal Year 1970, six people were employed by the Office of International Activities for this purpose at a total cost of about $87,000. The administrative burden has grown by some forty grants, for each of the last two years, without any increase in personnel. The increase in activity has been made possible by the simplification of procedures and the introduction of labor-saving equipment.

This Special Foreign Currency Program request, as in the past, is based on budget projections for on-going research and on pending and new research proposals which include firm research proposals, postponed do to lack of sufficient funds, and other samplé or illustrative proposals based on firm indications of interest both within and without the Smithsonian. They represent the Institution's selection of possible projects which appear most promising for successful development and implementation during Fiscal Year 1971. It should be noted, however, that actual implementation of these projects will be contingent upon three factors: review by the Smithsonian's national scientific advisory councils, review and approval by American embassies overseas, and appropriate cooperative arrangements with host-coungry institutions or Governmental authorities.

MUSEUM PROGRAMS AND RELATED RESEARCH
(SPECIAL FOREIGN CURRENCY PROGRAM)

1. Archeology and Related Disciplines

A. 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	For continued support of the Center for Art and Archeology (formerly the American Academy of Benares), a research center for South Asian archeology and art history.	1971est. 1970 1969 1968 1967 1966	100,000 150,000 147,000 144,753 130,778 76,850
2. American Research Center in Egypt (a nonprofit study center supported by ten American universities)	To continue support of the Center's research and excavation program in the archeology of Egypt, which includes Pharaonic, Hellenistic, Roman, and early Christian sites.	1971est. 1970est. 1969 1968 1967 1966	50,000 150,000 150,000 258,728 177,137 259,200
3. Jerusalem School of Archeology 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.	1971est. 1970est. 1969 1968 1967 1966	50,000 174,000 68,500 134,250 165,750 150,000
4. Peabody Museum of Yale University	To continue the paleontology and stratigraphy studies of the Paleocene, Eocene, and Oligocene deposits of Egypt, which have resulted in important discoveries relating to human evolution.	1971est. 1970est. 1969 1967 1966	20,000 30,000 30,000 31,396 19,310
5. University Museum, University of Pennsylvania	To study remaining stones of the Temple of Akhnaten at Luxor, Egypt.	1971est. 1970 1969 1968 1967	20,000 67,000 60,000 9,730 65,070
6. University of Arizona and Museum of Anthropology, University of Michigan	To support a program for research and training in prehistoric archeology through field excavations on Mt. Carmel in Israel.	1971est. 1970 1969 1968 1967	30,000 56,000 50,000 47,660 50,000

Recipient	Project	Grant Expressed in U. S. Dollars	
7. Carnegie Museum	To continue the excavation of a Philistine City at Ashdod, Israel.	1971est.	10,000
		1970	31,000
		1969	50,000
		1968	56,180
		1967	47,180
		1966	50,000
8. Lawrence Radiation Lab. University of California, Berkeley	To continue testing the utilization of cosmic rays to "x-ray" the Egyptian pyramids in search of presently unknown chambers.	1971est.	10,000
		1969	32,000
		1967	21,680
		1966	23,320
9. University of Missouri	To excavate at Tell Anafa, Israel, to understand better the nature of Greek trade with Palestine and Egypt in the period after 800 B. C.	1971est.	25,000
		1970est.	35,000
		1969	40,000
		1968	60,500
10. University of Minnesota	To continue a program of research in Yugoslavia with excavations of the unique Roman Palace of Diocletian at Split, Yugoslavia.	1971est.	40,000
		1970	80,000
		1969	27,000
		1968	32,505
11. Smithsonian Institution Office of Anthropology	To study disappearing metal-working crafts of Pakistan and Ceylon as part of a worldwide study of ancient technologies and their development.	1971est	30,000
		1970	58,000
		1969	43,700
		1968	21,128
12. Brooklyn Museum	To construct scale models of Egyptian monuments and archeological sites for study.	1971est.	8,000
		1970	18,000
		1967	4,222
13. Institute for Advanced Study, Princeton	To conduct interdisciplinary research and excavations in Bronze and early Iron Ages of Northern Yugoslavia.	1971est.	10,000
		1970	14,600
		1969	8,000
		1968	9,496
		1967	2,030
14. University of Chicago	To provide research assistantships for graduate credit in South Asian art at the American Academy of Benares, India, an affiliate of the American Institute of Indian Studies.	1971est.	10,000
		1970	10,000
		1969	10,000
		1967	11,400
15. University of Chicago	To examine a Vaisnava Religious community in West Bengal historically and sociologically. (Funds available in 1967, awaiting Government of India approval)	1971est.	15,000

Recipient	Project	Grant Expressed in U. S. Dollars	
16. American University in Cairo	To study the distinctive domed Mausolea of the Mamluk era (1250-1517 A. D.) in Cairo which have not been studied and are threatened by growth and modernization of Cairo.	1971est. 1969 1968	10,000 9,700 6,340
17. Dumbarton Oaks (Harvard) Center of Byzantine Studies; American Academy in Rome	To continue studies of the unique but rapidly disintegrating Roman and Byzantine mosaics at historic Utica, Tunisia.	1971est. 1970 1969	30,000 62,000 28,628
18. Smithsonian Institution Center for the Study of Man	To continue development of urgent anthropological research in the excess countries as a part of the Research Program in Changing Cultures of the newly established Center for the Study of Man.	1971est. 1970est. 1969	15,000 20,000 20,000
19. University of Washington	To continue studies of the relationship between social structure and economic organization in the Vedda Communities of Ceylon.	1971est. 1970est. 1969 1968	15,000 20,000 19,000 16,000
20. University of Illinois	To continue comparative studies of the effects of cultural change on folk music in Israel and Tunisia.	1971est. 1970	22,000 31,500
21. Denison University	To continue the exchanges of materials on Ancient Burmese art with Burmese museums.	1971est. 1970est. 1969	2,000 2,000 5,000
22. American Institute of Indian Studies	To continue support for post-doctoral research in social and cultural anthropology and linguistics of India and Ceylon and to support the Institute's center in Poona, India as an American research center abroad serving American scholars in all fields.	1971est. 1970 1969	90,000 201,000 148,000
23. American Schools of Oriental Research, Boston, Mass. (a consortium of 5 United States institutions of higher learning	To continue support for two archeological excavations at Tell el Hesi and Kirbet Shema embracing biblical, Greek, Roman and Byzantine periods.	1971est. 1970est 1969	50,000 100,000 50,000

Recipient	Project	Grant Expressed in U.S. Dollars	
24. University of Michigan	To continue excavations of the earliest Neolithic settlements in Poland.	1971est. 1969	20,000 37,000
25. Denison University	To continue excavations at Sirmium a Roman provincial capital along the fortifications erected against the "barbarious!"	1971est. 1970est. 1969 1968	30,000 60,000 3,000 34,000
26. Brooklyn College of the University of the City of New York	To continue reevaluation of the landmark excavations at the pre-historic site of Starcevo, Yugoslavia; apply modern ecological techniques to a site originally excavated in the early 1930's.	1971est. 1970	10,000 10,000
27. Office of Anthropology Smithsonian Institution	To continue to study the impact on the culture of Palestine of the Phoenician, Cypriot, Egyptian and Arabian cultures from the Middle Bronze age through the Persian period through excavations at Tell Jemmeh in Southern Israel.	1971est. 1970	30,000 66,500
28. University Museum University of Pennsylvania	To continue study of Dra Abul El Naga tomb inscriptions, Egypt.	1971est. 1970est. 1969	20,000 17,000 17,300
29. Douglass College Rutgers University	To continue excavations of the early Greek and Roman settlements at Salona in Yugoslavia.	1971est. 1970 1969	40,000 40,000 20,300
30. University of California Los Angeles	To continue excavations of an early neolithic settlement at Anzibegovo Macedonia, Yugoslavia considered a cross road for formative cultures of western civilization.	1971est. 1969	80,000 80,000
31. University of Minnesota	To continue studies of climate influences on man's shift from nomadic to settled life in the Middle East through studies of fossil evidence of evolving flora and fauna.	1971est. 1969	7,000 7,700
	Subtotal Estimate for On-going Research		899,000

B. Pending Research Proposals

Recipient	Project	Estimated Request in U.S. Dollars	
1. University Museum University of Pennsylvania	To excavate the protohistoric of Kantarodai Ceylon to determine the nature and chronology of settlement and relations with south India.	1971est.	40,000
2. Smithsonian Institution Office of Anthropology	To study the rapidly disappearing crafts at village level in India.	1971est.	50,000
3. American Institute of Indian Studies, Center for Art and Archeology	To survey and initiate excavation of Cultural Sites of the Pratihara period expecially at Bhinmal in Rajasthan, India.	1971est.	30,000
4. Smithsonian Institution Museum of Natural History	To survey and document the art history of Tibet on the basis of objects currently being brought to India and Nepal by Tibetan refugees.	1971est.	20,000
5. New York University Columbia University University of Michigan	To excavate ancient Utica, Tunisia employing interdisciplinary techniques designed to describe fully the mode of life and environment characteristic of successive cultures inhabiting the site.	1971est.	30,000
6. American Museum of Natural History	To initiate archeological excavations together with the Archeological Survey of India with special provision for the training of Americans in the archeology of South Asia, today an area largely neglected by U.S. scholarship.	1971est.	30,000
7. Smithsonian Institution Office of Anthropology	To initiate systematic collections of Indian folk art which is disappearing as village crafts yield to urban technology.	1971est.	26,000
8. University of California Los Angeles	To excavate Islamic archeological sites in West Pakistan.	1971est.	30,000
9. Brandeis University	To survey western Phoenician archeological sites in Morocco.	1971est.	15,000
10. University of Michigan	To conduct research and excavations into the Middle Paleolithic of Northern Bosnia.	1970est.	20,000

Recipient	Project	Estimated Request in U.S. Dollars	
11. Institute for Advanced Studies, Stanford University	To conduct investigations in the archeology of historical India.	1970est.	20,000
12. Columbia University; University of Pennsylvania	To conduct ethno-historical research into the history of Traits of traditional life in Modern India.	1970est.	20,000
13. University of Washington	To conduct investigations into the chalcolithic and early civilization of India.	1970est.	40,000
14. Southern Illinois University	To study the impact of rural road construction on social, cultural and economic change in Yugoslavia.	1971est.	28,000
15. University of Michigan	To document photographically the architecture, sculpture and paintings of the Bhuddhists, Hindus and Jains during India's "Golden Age" from the fifth to the eight century A. D.	1971est.	16,000
16. University of Wisconsin	To study Indian religious experiences and attitudes expressed through the structure of Hindu rites of death.	1971est.	12,000
Subtotal Estimate for Pending Research			327,000
C. New Projects			
1. Pennsylvania State University	To explore the significance to ancient Egyptian societies of the stars in the alignment of the temples at Luxor in Egypt through application of new techniques of aerial photography and computer calculation of the positions of stars in ancient times.	1971est.	13,000
2. University of Texas	To excavate the classical site of Stobi in Macedonia, Yugoslavia which lies at the confluence of Greek, Roman and ancient Balkan cultures.	1971est.	31,000

Recipient	Project		Estimated Request in U. S. Dollars
3. Dumbarton Oaks Harvard University	To excavate the Byzantine provincial capital of Bargala in Macedonia which lies at the confluence of Greek, Roman and ancient Balkan cultures in a study supplementary to excavations at Stobi and at Anzibegovo covering earlier periods.	1971est.	30,000
4. University of Hawaii	To initiate prehistoric archeological excavations in the northeastern India.	1971est.	30,000
5. Washington State University	To excavate a prehistoric flint mining complex work of the Kanienm River in Poland.	1971est.	25,000
6. Washington State University	To study pre-mesolithic fossils in Poland.	1971est.	10,000
7. American Museum of Natural History, New York	To conduct museum studies in Egypt of unpublished materials from Egyptian tombs of the Middle Kingdom.	1971est.	20,000
8. University of Nevada	To excavate the prehistoric site of Kausambi in northern India.	1971est.	30,000
9. University of Washington	To study the relations of fishing boat crew members and how they relate to conflict groups in a peasant fishing town in Yugoslavia.		
10. Ohio State University	To excavate the Yugoslav city of Naissus which has an uninterrupted history from the early Neolithic period to the late Middle Ages reaching its peak in the Roman period.	1971est.	35,000
11. University of Washington	To study the historical and religious documents of Tibet brought to India by the exiled Dalai Lama.	1971est.	30,000
12. Office of Anthropology Smithsonian Institution	To study the physical anthropology of prehistoric peoples in conjunction with archeological excavations of the Polish Academy of Sciences.	1971est.	20,000
	Subtotal Estimate for New Research		274,000
	Total Archeology and Related Disciplines		1,500,000

II. Systematic and Environmental Biology

A. On-going Projects

Recipient	Projects	Grant Expressed in U.S. Dollars	
1. University of Georgia	To study the flow of energy through small rodent populations in different habitats in conjunction with the Ecological Institute of Poland.	1971est.	20,000
		1970est.	20,000
2. Smithsonian Institution Office of Environmental Studies, Oceanography and Limnology Program	To study marine organisms of the Red Sea and Eastern Mediterranean in order to determine what biological interchange of species has occurred through the Suez Canal.	1971est.	100,000
		1970est.	100,000
		1969	100,000
		1967	122,000
3. Smithsonian Institution Office of Enviornmental Studies, Oceanography and Limnology Program	To accelerate the processing of marine organisms from the Mediterranean through the sorting facility known as the Mediterranean Marine Sorting Center operated in cooperation with the Tunisian Institute of Oceanography and Fisheries.	1971est.	100,000
		1970est.	100,000
		1969	100,000
		1967	152,360
4. University of Colorado	To continue to excavate a paleontological site in the Miocene-Pliocene formations of South Central Tunisia to attempt to establish a chronology for fossil mammals in Tunisia which may help to determine geological relationships with similar European formations.	1971est.	25,000
		1970est.	25,000
		1969	23,000
		1968	23,165

Recipient	Project	Grant Expressed in U. S. Dollars	
5. Smithsonian Institution Division of Birds	To continue investigations on the ecology of Palearctic birds migrating through northeastern Africa, including cooperative research on serology with the Rockefeller Virus Laboratory and ectoparasites with the Naval Medical Research Unit III in Egypt.	1971est. 1970est. 1969 1968 1967	30,000 50,000 41,000 21,517 44,083
6. University of Michigan	To continue taxonomic studies of Indian mollusks through caryotype analysis and the cytogenetics of closely related species which will contribute to medical, public health, and veterinary programs.	1971est. 1970est. 1969 1968	15,000 15,000 16,000 21,394
7. Smithsonian Institution National Zoological Park	To continue studies of the evolution and behavior of related primates (Cercopithecidae) in different environments in Ceylon.	1971est. 1970 1969 1968	30,000 38,000 21,000 45,749
8. Smithsonian Institution National Zoological Park	To continue studies of the relation of man and elephant in Ceylon where the domesticated beast of burden is captured and trained to work with man after reaching maturity as a wild elephant, rather, than after domestication as a young animal.	1971est. 1970 1969 1968	10,000 10,000 10,000 4,371
9. State University of New York at Stony Brook	To continue theoretical ecological studies of a living coral reef and the organisms related to it in Israel.	1971est. 1970est. 1969 1968	20,000 20,000 20,000 12,036
10. Smithsonian Institution Department of Botany	To continue revision of the basic Trimen's Flora of Ceylon in the light of modern botanical knowledge and techniques.	1971est. 1970est. 1969 1968	30,000 30,000 30,000 39,400
11. Smithsonian Institution Radiation Biology Lab.	To continue studies of solar radiation station in Israel to obtain data for comparsion with base line studies conducted in Washington, D. C.	1971est. 1970est. 1969 1967	80,000 80,000 84,000 110,000
12. Smithsonian Institution Office of Oceanography and Limnology Program	To continue studies of the benthic and planktonic biology of the Adriatic Sea in Yugoslavia.	1971est. 1970est.	35,000 35,000

Recipient	Project	Grant Expressed in U.S. Dollars	
13. Smithsonian Institution: National Zoological Park and Museum of Natural History	To provide additional grants to Smithsonian scientists for increasing the national entomological, botanical and zoological collections by expenditions to India, Ceylon, Egypt, Pakistan, Tunisia and Morocco.	1971est. 1970est.	25,000 25,000
14. Smithsonian Institution Department of Vertebrate Zoology	To continue studies, of South Asian birds and the preparation of a handbook.	1971est. 1970 1969 1968	5,000 5,000 5,000 5,000
15. Dartmouth College	To continue studies of organic production in fresh water lakes in Kashmir, India.	1971est. 1970est.	40,000 47,000
16. University of Miami, Flordia	To continue studies in Ceylon of Carangid fishes which constitute one of the major sources of man's food around the world.	1971est. 1970est. 1969	15,000 15,000 25,000
17. State University of New York, Stony Brook	To continue studies of the ecology of snails in Israel.	1971est. 1970est. 1969	10,000 20,000 20,000
18. University of Missouri	To continue studies of the behavior and ecology of gazelles in Israel.	1971est. 1970	35,000 45,000
19. Library, Smithsonian Institution	To continue accelerated translation and publication of reference works and monographs.	1971est. 1970	50,000 25,000
20. Department of Invertebrate Zoology Smithsonian Institution	To continue ecological studies of sponge fisheries of Tunisia.	1971est. 1970est. 1967	10,000 10,000 4,600
21. Office of Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution	To continue to study the geographic distribtuion and the ecology of the mammals of Morocco.	1971est. 1970	40,000 63,000
22. Program of Oceanography and Limnology Smithsonian Institution	To continue a survey of Marine algae, fauna and sediments of the continental shelf of Morocco.	1971est. 1970	25,000 25,000
23. Smithsonian Institution Department of Entomology	To study the Biosystematics of the insects of Ceylon as a part of the model program of ecological studies of that tropical island.	1971est. 1970	20,000 28,000
	Subtotal, Estimate for On-going Research		770,000

Recipient	Project	Estimated Request in U.S. Dollars	
B. Pending Projects			
1. Smithsonian Institution Department of Botany	To initiate flora and vegetation studies of a district of Mysore State in the Ghat Mountains of Southwest India and to prepare collections for the Smithsonian's National Herbarium.	1971est. 1970est.	20,000 20,000
2. University of Georgia	To initiate studies of the interaction of human and small rodent populations in a variety of temperate zone environments in conjunction with the Ecological Institute of the Polish Academy of Sciences.	1971est. 1970est.	25,000 25,000
3. California Academy of Sciences	To initiate field investigations of the habitats of Indian amphibians and reptiles especially in the fast disappearing virgin environments of that country.	1971est. 1970est.	25,000 25,000
4. Duke University	To initiate taxonomic studies in Yugoslavia of the Adriatic isopod and to prepare a handbook for the study around the world of this marine organism.	1971est. 1970est.	20,000 20,000
5. Smithsonian Institution Office of Environmental Studies	To initiate studies of the behavior of elephants and primates in India coordinated with base line studies conducted in Ceylon.	1970est	50,000
6. Union College, Schenectady, N.Y.	To collect and study the plankton communities of the Nile River Delta with special reference to the changes in salinity and circulation caused by interruption of seasonal river fluctuation by the Aswan Dam.	1970est.	70,000
7. Duke University	To conduct field studies in plant taxonomy and ecology in the state of Assam, India.	1971est.	30,000
8. University of California at Davis	To study the taxonomy and distribution of the poorly known microscopic marine fauna of the Bay of Bengal on the basis of collections of marine sediments from the coastal region of East Pakistan.	1971est.	20,000

Recipient	Project	Estimated Request in U.S. Dollars	
9. Smithsonian Institution Office of Environmental Studies	To study the ecology and behavior of hooved animals in a teak forest in India.	1971est.	20,000
10. Southern Methodist University	To undertake a definitive study of Quaternary age deposits on the floor and lower slopes of the Qattara Depression in the western Desert of Egypt.	1971est.	25,000
11. Smithsonian Institution, Program of Oceanography and Limnology	To collect and conduct taxonomic studies of the marine fauna of West Pakistan's continental shelf.	1971est. 1970est.	50,000 70,000
12. University of Michigan	To study productivity of tropical lakes in Southern India.	1971est. 1970est.	21,000 31,000
13. Gulf Coast Marine Lab., Mississippi, and Division of Fishes, National Museum of Natural History, Smithsonian Institution	To conduct systematic and behavioral studies of flatfishes and gobioid fishes in collaboration with the Zoological Survey of India	1971est. 1970est.	25,000 23,300
14. American University in Cairo	To study in Egypt the migration of marine biota between the Red Sea and the Mediterranean through the Suez Canal.	1971est.	20,000
15. Smithsonian Institution Office of Environmental Studies	To conduct studies of the pattern and behavior of birds during migration in the Himalayan Mountains of Northern India and Nepal.	1971est.	20,000
16. Smithsonian Institution Division of Invertebrate Paleontology	To study in India the broadly distributed fossil ostracod which reveals through its varied physical appearance much about the climate and geography of the geologic era in which it lived.	1971est.	25,000
17. University of Michigan	To study the snail, carrier of the disease, bilharzia, in the newly formed reservoirs and canals associated with the Aswan dam in Egypt.	1971est.	20,000
18. University of Utah	To collect the may flies of Pakistan for taxonomic studies as a part of specialized world wide studies of this species.	1971est.	10,000

Recipient	Project		Estimated Request in U.S Dollars
19. Smithsonian Institution Office of Environmental Studies	To investigate the plant ecology of the Laccadive Islands of India in cooperation with the Botanical Survey of India and to obtain a duplicate set of specimens for the research collections of the U.S. National Museum.	1971est.	30,000
20. Smithsonian Institution Office of Environmental Studies	To collect for the U.S. National Museum and study the flora of the long neglected areas of India particularly the Malabar and the Karomandel Coasts, and the Nilghiri and Khasia Hills--areas which served as sources of materials for classic botanical studies made as long ago as the 17th Century and badly in need of revision.	1971est.	40,000
21. University of Washington	To conduct pilot studies of the behavior and ecology of the wild boar in West Pakistan--a little studied animal which is nevertheless considered a significant agricultural pest.	1971est. 1970est.	30,000 47,000
22. University of Georgia	To study organic productivity and nutrient cycling in tropical ecosytems in collaboration with the Hindu University of Benares, India. This study has been proposed to the National Committees for the International Biological Program of both the United States and India.	1971est. 1970est.	50,000 50,000
	Subtotal, Estimate for Pending Research		526,000

Recipient	Project		Estimated Request in U. S. Dollars
C. New Projects			
1. University of California Berkeley	To initiate a comprehensive program of the study of the flora of Morocco with bio-systematic studies of flowering plants.	1971est.	3,000
2. Duke University Durham North Carolina	To conduct studies for the classification of Moroccan lichens with special emphasis on their chemical characteristics.	1971est.	3,000
3. California Institute of Technology	To study the microbiology of the desert soils of Morocco.	1971est.	10,000
4. University of Illinois	To compare structure and function in New World bird communities with those in India.	1971est.	10,000
5. Ohio University	To study the pollution condition of Lake Tunis in Tunisia.	1971est.	25,000
6. University of Michigan	To study the effects of inbreeding in mammals in collaboration with the Cancer Research Institute in India.	1971est.	22,000
7. Queens College, University of the City of New York	To conduct museum studies of unique specimens of fossil mammals in Poland in connection with studies of evolution.	1971est.	5,000
8. Office of Environmental Studies, Oceanography and Limnology Program, Smithsonian Institution	International Decade of Ocean Exploration (IDOE), cooperative investigations of the Mediterranean aboard the Smithsonian research vessel PHYKOS as follows:	1971est.	230,000
--University of Southern California	Dredging, coring and bottom grab sampling in studies of microscopic sea life and fossils of such life.		
--National Museum of Natural History, Smithsonian Institution	Deep sea dredging to study recent changes in the geography of biological regions through study of the changing conformation of the highly adaptable animal, the ostracod.		

Recipient	Project	Estimated Request in U.S. Dollars
--Duke University Durham, North Carolina	Bi-monthly cruises to collect samples for the study of the develoment, distribution and biology of crab larvae.	
--Washington State University	Biological sampling for studies of the paleontology of Pteropods.	
--University of North Carolina	Isolation and study of pure cultures of marine fungi.	
--National Museum of Natural History Smithsonian Institution	Plankton tows for studies of planktonic foraminifera.	
--Florida State University	Sampling for studies of deep sea biology and geology.	
--University of Delaware	Towing multiple plankton samplers to study the verticle distribution of the cosomatous pteropods in relation to water masses.	
--University of California	Sampling deeper than 200 meters to study the systematics and distribution of marine mites.	
--Division of Fishes National Museum of Natural History Smithsonian	Long line fishing for several hundred specimens for a study of the distribution of the common sharksucker.	
--University of North Carolina	Trawling, gill net, and long line collection of samples for systematic and distribution studies of sharks and their relatives.	
--Department of Invertebrate Zoology, Smithsonian Institution	Mid-water trawling for studies of the systematics, distribution and ecology of pelagic Cephalopods.	
--Department of Paleobiology Smithsonian Institution	Dredging, coring and bottom photography to study the morphology of sediments and sub-bottom.	

Recipient	Project	Estimated Request in U.S. Dollars	
--Massachusetts Institute of Technology	Deep lowerings of coring and grab sampling equipment for study of the deepest Mediterranean geological structures.		
--Woods Hole Oceanographic Institution, Massachusetts	Submergible dives to explore the water transport over the Scarpanta sill in the Eastern Mediterranean.		
9. Office of Environmental Studies, Oceanography and Limnology Program Smithsonian Institution	To initiate study of the existing ecosystem of the Eastern Arabian Sea through oceanographic cruises undertaken in cooperation with the Indian National Institute of Oceanography.	1971est.	140,000
10. Office of Environmental Studies, Oceanography and Limnology Program Smithsonian Institution	To initiate a multi-year program of study of the ecology of coral reefs in India.	1971est.	56,000
	Subtotal, Estimate for New Research		504,000
	Total, Systematic and Environmental Biology		1,800,000

III. International Biologial Program (IBP)

A. On-going Projects

Recipient	Project	Grant Expressed in U.S. Dollars	
1. National Academy of Sciences - U.S. National Committee to the International Biological Program	To continue direct support to the U.S. National Committee to the International Biological Program for planning symposia, training of U.S. scientists and research program development.	1971est. 1970 1968	25,000 25,000 10,000
2. National Academy of Sciences -U.S. National Committee to the IBP	To continue development of joint U.S.-Indian research projects which strengthen the research of United States institutions and contribute to the priority objectives of the U.S.I.B.P.	1971est. 1970est. 1969	25,000 25,000 25,000

Recipient	Project	Grant Expressed in U. S. Dollars	
3. Office of Environmental Sciences, Smithsonian Institution	To continue ecological studies of the last surviving population of the Asiatic lion in the Gir Forest in India and to recommend techniques for conservation of the animal and his habitat.	1971est.	20,000
4. Yale University New Haven, Conn.	To continue to study habitat relationships, numbers and distribution of wild antelope, deer, boar and other hooved animals in the Gir Forest India as part of a broad study of this tropical forest which includes study of the Asiatic lion.	1971est. 1970	50,000 35,000
B. Pending Projects		Estimated Request in U. S. Dollars	
1. Office of Environmental Studies, Smithsonian Institution	To contribute to American ecological studies of Mediterranean and Saharan environments in a multi-national project initiated by the International Biological Program's Terrestrial Conservation Section in Tunisia.	1971est. 1970est.	80,000 80,000
C. New Projects			
1. Oak Ridge National Laboratory Oak Ridge, Tenn.	To conduct cooperative research in Poland on temperate zone forest and grassland ecosystems supplementing studies conducted in the United States.	1971est.	25,000
2. Pennsylvania State University	To conduct comparative studies of human adaptability at high altitudes in India.	1971est.	100,000
3. University of Minnesota	To study biological rhythms in man and beast in India.	1971est.	50,000
4. Pennsylvania State University and the University of Minnesota	To study in South Asia the international spread of plant disease by means of airborne organisms.	1971est.	50,000
5. University of Utah	To conduct comparative studies in the arid climates of Egypt and India supplementing studies conducted in the United States.	1971est.	25,000

Recipient	Project		Estimated Request in U.S. Dollars
6. University of Texas	To conduct studies of convergent and divergent evolution in desert flora of Tunisia and India.	1971est.	50,000
	Total International Biological Program		500,000

IV. Museum Programs

A. On-going Projects

Recipient	Project		Estimated Request in U.S. Dollars
1. U.S. National Museum	To assist, under the U.S. National Museum Act, with museum expertise and support the program of the International Council of Museums (ICOM), a UNESCO affilliate, to develop teaching museums of science and technology in Asia and Africa. For example, the Smithsonian contributed in FY 1969 to studies resulting in recommendations to ICOM that there be established in India a laboratory for basic exhibits in science and technology where teaching exhibits will be built for circulation in industrializing countries. The experiment will provide opportunities to American Museum Specialists to observe the effectiveness of exhibits in teaching basic science and technology to people of all cultural backgrounds.	1971est. 1970 1969	55,000 25,000 20,000

B. Pending Projects

1. National Collection of Fine Arts and Smithsonian Traveling Exhibition Service	To prepare an exhibit catalogue, to be the first scholarly publication on a unique collection at Benares Hindu University, of miniature paintings of the Moghul period of Indian art for distribution through American museums exhibiting such art treasures, for the first time, in the United States.	1971est.	5,000

C. New Projects

Recipient	Projects	Estimated Request in U. S. Dollar	
1. United States National Museum	To support the participation of stone and wood conservation specialists from India and Poland in the symposium on this subject to be sponsored by the International Institute for Conservation of Historic and Artistic Works (IIC).	1971est.	10,000
2. American Association of Museums and the United States National Museum	To initiate a program of professional training for museum curators and technicians in collaboration with museums of India, Pakistan, Tunisia and Egypt through two-way exchanges of personnel for on-the-job training. Participants would be expected to serve at least six months in a museum housing collections of direct importance to their professional development.	1971est.	30,000
	Total Museum Programs		100,000

V. Astrophysics

A. On-going Projects

Recipient	Project		Grant Expressed in U.S. Dollars
1. Smithsonian Astrophysical Observatory, Cambridge, Mass.	To continue balloon experiments in cooperation with the Tata Institute of Fundamental Research, Bombay, India on gamma radiation reaching the earth's upper atmosphere from outer-space at the magnetic equator.	1971est. 1970est. 1969 1968	42,000 42,000 4,000 29,000
2. Hunter College of the City University of New York and Smithsonian Astrophysical Observatory	To continue computer analysis in Israel of the application of principles of plasma physics concerning the movement of particles at extremely high speeds to the movement of celestial bodies in galaxies--a study of the collective behavior of self-gravitating systems.	1971est. 1970 1968	15,000 14,000 41,800
3. Smithsonian Astrophysical Observatory	To continue studies in Israel comparing theories developed separately of the nature of the interior and of the exterior of evolving stars.	1971est. 1970 1969	13,000 28,000 27,300
4. Smithsonian Institution Office of the Secretary	To assist in studies sponsored by newly created Center for Short-Lived Phenomena, a clearing house for the receipt and dissemination of information concerning rare or infrequent natural events that might otherwise go unobserved or uninvestigated, such as remote volcanic eruptions, the birth of new islands the fall of meteorites and large fire balls and sudden changes in biological and ecological systems.	1971est. 1969	24,000 9,540
	Subtotal, On-going Research		94,000

B. Pending Projects

Recipient	Project		Estimated Request in U.S. Dollars
1. Smithsonian Astrophysical Observatory	To record and analyze together, with data from around the world, at the Uttar Pradesh State Observatory, India, film exposures of suspected flare stars, a relatively newly discovered class of variable stars, with radio and optical energies several orders of magnitude higher than emissions from the largest solar flares.	1971est. 1970est.	6,000 10,000

Recipient	Project	Estimated Request in U.S. Dollars	
2. Harvard University	To initiate a collaborative program with the Indian Institute of Science leading to a publication on the historical, mathematical and theoretical foundations of the theory of radiation gas dynamics.	1971est.	9,100
3. Harvard University and the Smithsonian Astrophysical Observatory	To select, translate, and publish the key works of the distinguished Polish Copernican scholar, L. A. Birkenmajer, in collaboration with the International Astronomical Union. The publication will make available, for the first time to large segments of American and other English speaking scholarly communities, invaluable anaylses of the astronomy of Copernicus.	1971est.	12,000
4. Harvard University and Smithsonian Astrophysical Observatory	To conduct laboratory studies in India of the spectra of hybrids and oxides in the visible and vacuum ultra violet region.	1971est.	29,000
5. Smithsonian Astrophysical Observatory, Cambridge, Mass.	To investigate solar radiation pressure purturbations upon the Passive Geodetic Earth-Orbitting satellite (PAGEOS) in collaboration with the University of Warsaw and the Polish Academy of Sciences.	1971est.	45,000
6. Harvard University	To conduct laboratory studies of the excitation processes in stellar, planetary and cometary atmospheres.	1971est.	41,700
7. Smithsonian Astrophysical Observatory	To measure air glow and ionospheric characteristics at the magnetic equator in studies contributing to the understanding of the nature of the upper atmosphere and of some of its effects on satellites.	1971est.	17,500
	Subtotal, Estimate for Pending Research		160,300

C. New Projects

Recipient	Project	Estimated Request in U. S. Dollars
1. Yale University and Smithsonian Astrophysical Observatory	To conduct research in theories of planetary motion in Egypt.	1971est. 40,000
2. Harvard University and Smithsonian Astrophysical Observatory	To conduct studies of thermal emission and absorption of the diatomic molecules in India.	1971est. 16,000
3. Dickinson College, Pennsylvania	To investigate the astronomical alignment of the Temples of Karnak, Egypt.	1971est. 13,000
4. Smithsonian Astrophysical Observatory and consortium of United States Astronomical Research Institutions	To conducted coordinated 24 hours observation of astronomical phenomena in collaboration with Israeli institutions employing telescopes in the western United States, Chile and Israel.	1971est. 154,700
--U.S. Naval Research Laboratory, Washington, D. C. and Massachusetts Institute of Technology	To conduct optical and photoelectric monitoring of X-ray sources.	
--California Institute of Technology	To conduct photoelectric monitoring of the continuum and line emission from quasi-stellar objects (QSO) and the nuclei of N-type galaxies.	
--Smithsonian Astrophysical Observatory	To conduct a high-dispersion abundance analysis of stars in the Pleiades.	
--State University of New York at Stony Brook	To determine the rate of star formation in young clusters.	
--Harvard College Observatory, Cambridge, Mass.	To conduct photometric observations of the High Balmer Lines (near the Balmer Limit) and the Balmer Continuum in Planetary Nebulas.	

Recipient	Project	Estimated Request in U.S. Dollars	
5. University of New Hampshire	To conduct solar neutron experiments in India.	1971est.	30,000
6. Harvard University, Massachusetts Institute of Technology, Alaska Methodist University	To investigate the feasibility of astronomical programs with astronomers in India, United Arab Republic, and Poland.	1971est.	22,000
7. Harvard University and Smithsonian Astrophysical Observatory	To conduct in India spectrascopic studies of free radicals of astrophysical interest by the bombardment of accelerated charged particles.	1971est.	40,000
	Subtotal, Estimate for New Research		315,700
	Total, Astrophysical		570,000

VI. Program Development and Administration

Recipient	Project	Estimated Request in U.S. Dollars	
1. Smithsonian Institution Office of International Activities	To defray costs of inspection and audit of field research sites and costs of negotiation with host governments on program operations--costs which increase in step with the increasing numbers of active grants.	1971est. 1970 1969 1968	30,000 20,000 15,000 10,000
	Total, Program Development and Administration		30,000
	GRAND TOTAL		$4,500,000

MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

Distribution of Funds by Country

Fiscal Years 1969, 1970, and 1971

Country	1969	1970	1971
India	$ 490,066	$ 520,000	$1,140,000
Egypt	400,210	300,000	640,000
Israel	450,000	481,000	679,500
Morocco	25,000	50,000	150,500
Pakistan	34,380	75,000	150,000
Tunisia	225,000	155,000	250,000
Poland	100,000	100,000	200,000
Guinea	3,000	4,800	100,000
Burma	0	50,000	120,000
Yugoslavia	479,333	480,000	650,000
Ceylon	109,011	100,200	420,000
Total	$2,316,000	$2,316,000	$4,500,000

Mrs. HANSEN. An increase of $2,184,000 is requested for museum programs and related research (special foreign currency program).

Are you aware of any instances where grants under this program were made to any organization other than an American university? What I have particular reference to is whether or not you would deem it proper to make a grant under this program to an individual.

Dr. RIPLEY. I can't answer that. Dr. Galler, do you know?

Dr. GALLER. I believe, Madam Chairman, that legally these grants are made for individual research but through universities.

Dr. RIPLEY. Yes; this is my understanding.

Mrs. HANSEN. Does the university designate the individual?

Dr. GALLER. Not exactly, Madam Chairman.

Dr. RIPLEY. He is the project leader, or whatever you call it, under the proposal, but the reason I hesitated there, Madam Chairman, is I can't recall an instance where we have not given a grant through an institution, although the grant may be for a one-man or individual project.

Mr. WARNER. That is correct. The grant is always in the name of a university.

Dr. RIPLEY. Or equivalent institution.

Mrs. HANSEN. Insert in the record a statement on the availability of grant funds to an individual.

Dr. GALLER. Yes.

(The information follows:)

Funds are available only to U.S. institutions, and are normally transferred to the control of that institution by means of a grant contract made with the institution. There are instances where research support is provided to an individual from the institution in the form of a travel document, but only when approved by the American university itself to which the individual belongs.

PURPOSES OF FOREIGN CURRENCY GRANTS

Dr. RIPLEY. I think we have a very complete documentation of all the grants. Perhaps it is an attachment.

Mrs. HANSEN. Insert the information in the record.

(The information follows:)

SMITHSONIAN INSTITUTION—SPECIAL FOREIGN CURRENCY PROGRAM (MUSEUM PROGRAMS AND RELATED RESEARCH)—AMERICAN UNIVERSITIES AND OTHER BASIC RESEARCH INSTITUTIONS, BY STATE, RECEIVING FOREIGN CURRENCY GRANTS

Institution	Purpose	Approximate amount in dollar equivalent		
		Grants	Institution	State total
ARIZONA				
Arizona, University of, Tucson	Cultural anthropology, India	$77,782	$154,262	$154,262
	Prehistoric archeology, Israel (2 years)	76,480		
CALIFORNIA				
California, University of, Berkeley	Botany, Morocco	2,270	94,280	406,957
	Studies of the evolution lizards, Yugoslavia	4,162		
Lawrence Radiation Laboratory.	X-raying pyramids, Egypt (3 years)	87,848		
California, University of, Los Angeles.	Prehistoric archeology, Yugoslavia—2 projects (2 years).	110,937	201,577	
		90,640		
Stanford University, Stanford	Salvage archeology, Yugoslavia (2 years)		111,100	
COLORADO				
Colorado, University of, Boulder	Prehistoric archeology, Tunisia (2 years)	81,896	195,206	195,206
	Paleontology, Tunisia (2 years)	113,310		

See footnotes at end of table.

SMITHSONIAN INSTITUTION—SPECIAL FOREIGN CURRENCY PROGRAM (MUSEUM PROGRAMS AND RELATED RESEARCH)—AMERICAN UNIVERSITIES AND OTHER BASIC RESEARCH INSTITUTIONS, BY STATE, RECEIVING FOREIGN CURRENCY GRANTS—Continued

Institution	Purpose	Approximate amount in dollar equivalent		
		Grants	Institution	State total
CONNECTICUT				
Yale University, New Haven	Mammal ecology, India	$35,055	$233,461	$233,461
Peabody Museum	Paleontology, Egypt	19,310		
	Paleontological investigations of ancestors of man, Egypt and India, 2 projects (2 years)	47,694 131,402		
FLORIDA				
Miami, University of, Institute of Marine Sciences, Miami.	Taxonomy of fishes, Ceylon		24,800	26,750
Florida, University of, Gainesville	Study of meiofauna, Tunisia		1,950	
GEORGIA				
Georgia, University of, Athens	Ecology of mammals, Poland		73,468	73,468
HAWAII				
Hawaii, University of, Honolulu	Prehistoric archeology, Ceylon		6,660	6,660
ILLINOIS				
Chicago, University of, Chicago	Cultural anthropology, India	55,295	66,695	123,082
	Archeology and art history, India	11,400		
Illinois, University of, Urbana	Ethnomusicology, Israel		36,575	
Northwestern University, Evanston.	Prehistoric archeology, Yugoslavia		11,917	
Southern Illinois University, Carbondale.	Impact of rural roads, Yugoslavia		7,895	
INDIANA				
Indiana, University of, Bloomington.	Classical archeology, Yugoslavia		41,706	41,706
MARYLAND				
Johns Hopkins University, Baltimore.	Mammal ecology, India		39,209	39,209
MASSACHUSETTS				
American Research Center in Egypt, Boston (a consortium of 11 American institutions—see Appendix I).	Egyptian archeology, Mendes, Egypt (4 years) Participating institutions: Brooklyn Museum, Brooklyn, N.Y.; University of Chicago, Chicago, Ill.; Columbia University, New York, N.Y.; New York University, New York, N.Y.	127,458	698,622	985,367
	St. Catherine's monastery, Sinai, Egypt (3 years) Participating institutions: Princeton University, Princeton, N.J.; Michigan, University of Ann Arbor, Mich.	25,332		
	Islamic archeology, Fustat, Egypt (3 years) Participating institution: Princeton University, Princeton, N.J.	107,613		
	Epigraphic survey, Luxor, Egypt (4 years) Participating institution: Chicago, University of, Chicago, Ill.	119,809		
	Physical anthropology, Giza, Egypt Participating institution: Chicago, University of, Chicago, Ill.	4,222		
	Prehistoric archeology, Gebel Adda, Egypt	41,289		
	Study of ancient glass, Egypt	19,500		
	Survey of ancient sites, Luxor, Egypt	9,200		
	Cairo center (4 years)	148,007		
	Egyptian archeology, Hierakonpolis, Egypt (2 years). Participating institution: Washington, University of, Seattle, Wash.	91,191		
	Arabic literature Participating institution: California, University of, Los Angeles, Calif.	5,001		

See footnotes at end of table.

SMITHSONIAN INSTITUTION—SPECIAL FOREIGN CURRENCY PROGRAM (MUSEUM PROGRAMS AND RELATED RESEARCH)—AMERICAN UNIVERSITIES AND OTHER BASIC RESEARCH INSTITUTIONS, BY STATE, RECEIVING FOREIGN CURRENCY GRANTS—Continued

Institution	Purpose	Approximate amount in dollar equivalent		
		Grants	Institution	State total
American Schools of Oriental Research, Boston: institutional corporation composed of 121 American institutions (see app. II).	Biblical archeology, Israel (3 years). Principal participating institutions: Southern Baptist Theological Seminary, Louisville, Ky.; Drew Theological Seminary, Madison, N.J.; McCormick Theological Seminary, Chicago, Ill.; Harvard University, Cambridge, Mass.; Concordia Seminary, St. Louis, Mo.		$281,705	
Boston Museum of Fine Arts, Boston, Mass.	Exhibition of Egyptian Art		5,040	
MICHIGAN				
Michigan, University of, Ann Arbor	Prehistoric archeology, Israel (2 years)	$97,660	297,557	$297,557
	Prehistoric archeology, Poland (3 years)	95,041		
	Marine biology, India (2 years)	46,808		
	Coral reef ecology, Israel	12,036		
	Limnology, India	30,792		
	Prehistoric archeology, Yugoslavia	15,220		
MINNESOTA				
Minnesota, University of, Minneapolis.	Roman archeology, Yugoslavia (3 years)	218,487	226,206	226,206
	Paleoecological studies of early man in Iran—collaborative studies with Polish scholars.	7,719		
MISSOURI				
Missouri, University of, Columbia	Phoenician archeology, Israel (with Corning Museum) (2 years).	45,750	153,820	153,820
	Mammal ecology, Israel	45,070		
	Hellenistic archeology, Israel (2 years)	63,000		
NEW HAMPSHIRE				
Dartmouth College, Hanover	Limnology, India		47,392	47,392
NEW JERSEY				
Institute of Advanced Studies, Princeton.	Bronze and Iron Age studies, Yugoslavia (4 projects) (3 years).	2,030	62,392	129,478
		24,126		
		21,628		
		14,608		
Rutgers University, Douglass College, New Brunswick.	Classical archeology, Yugoslavia (2 years)		60,876	
Princeton University, Princeton	Comparative studies of tropical rain forests		6,200	
NEW YORK				
Brooklyn College of the City University of New York, Brooklyn.	Prehistoric archeology, Yugoslavia (2 years)		16,228	140,528
Brooklyn Museum, Brooklyn	Egyptology, Egypt	14,157	35,630	
	Ancient goldwork, Egypt (2 years)	6,180		
	Archeological survey, Egypt	10,293		
	Model of Egyptian temple	5,000		
New York, State University of, Stony Brook.	Coral reef ecology, Israel (2 years)		35,610	
Union College, Schenectady	Ecology of delta lakes, Egypt		50,470	
Columbia University, Lamont Geological Observatory.	Oceanography, India		2,590	
NORTH CAROLINA				
Duke University, Durham	Lichenology, Morocco		2,711	2,711
OHIO				
Denison University, Granville	Roman archeology, Yugoslavia (3 years)		164,198	977,930
Hebrew Union College, Cincinnati (HUC's Jerusalem School of Biblical Archeology is sponsored by a consortium of 43 American colleges and universities—see app. III).	Biblical archeology, Israel (5 years)		809,040	
Natural Science Museum, Cleveland.	Paleontology, West Pakistan		2,840	
Kent State University, Kent	Studies of mollusks, India		1,852	

See footnotes at end of table.

SMITHSONIAN INSTITUTION—SPECIAL FOREIGN CURRENCY PROGRAM (MUSEUM PROGRAMS AND RELATED RESEARCH)—AMERICAN UNIVERSITIES AND OTHER BASIC RESEARCH INSTITUTIONS, BY STATE, RECEIVING FOREIGN CURRENCY GRANTS—Continued

Institution	Purpose	Approximate amount in dollar equivalent		
		Grants	Institution	State total
OREGON				
Oregon, University of, Eugene	Prehistoric archeology, Guinea		$55,301	$55,301
PENNSYLVANIA				
American Institute of Indian Studies, Philadelphia (a consortium of 23 American institutions including 8 colleges and universities—see app. IV).	Support for AIIS Center at Banaras (art history and archeology), 5 years.	$700,145	975,425	1,603,986
	Support for research programs. Conducted under the auspices of California State College, Hayward, Calif.; Chicago, University of, Chicago, Ill.; Colgate University, Hamilton, N.Y.; Columbia University, New York, N.Y.; Cornell University, Ithaca, N.Y.; Duke University, Durham, N.C.; Harvard University, Cambridge, Mass.; Jefferson Community College, Watertown, N.Y.; New York, State University of, Binghamton, N.Y.; Pennsylvania, University of, Philadelphia, Pa.; Rochester, University of, Rochester, N.Y.; St. Lawrence University, Canton, N.Y.; Washington, University of, Seattle, Wash.; Wisconsin, University of, Madison, Wis.	275,280		
Carnegie Museum, Pittsburgh	Biblical archeology, Israel (4 years)	156,579	176,251	
	Underwater archeology, Israel	19,172		
	Paleontology, Poland	500		
Pennsylvania, University of, Philadelphia.	Studies desert glass, Egypt	27,468	358,785	
	Study Aknaten Temple, Egypt (4 years)	259,193		
	Study tomb inscriptions, Egypt (3 years)	32,074		
	Prehistoric archeology, Pakistan	40,050		
Pittsburgh, University of, Pittsburgh.	Prehistoric archeology, Yugoslavia		93,525	
TEXAS				
Southern Methodist University, Dallas.	Prehistoric archeology, Egypt (3 years)	5,204	118,039	188,245
		39,719		
		[1] 73,116		
Texas Technological College, Lubbock.	Studies of algae, Israel		9,025	
Texas, University of, Austin	Classical archeology, Yugoslavia		61,181	
WASHINGTON				
Washington, University of, Seattle.	Prehistoric archeology, Pakistan	52,376	138,103	140,070
	Cultural anthropology, Ceylon (2 years)	36,677		
	Study of wild boars, West Pakistan	46,660		
	Crustacean studies, Ceylon, India, Yugoslavia, and Tunisia.	2,390		
Batelle Memorial Institute, Richland.	Tethyan fusulinid studies, Tunisia and Yugoslavia		1,967	
WASHINGTON, D.C.				
American Anthropological Association.	Methodology symposium, several "excess" countries.		10,000	176,806
American University in Cairo	Medieval Islamic architecture, Egypt		16,076	
Dumbarton Oaks Center for Byzantine Studies.	Roman mosaics, Tunisia (2 years)		90,730	
National Academy of Sciences, Washington, D.C.	International biological program, all "excess" currency countries (2 years).	35,000	60,000	
	Mediterranean region conservation conference, Tunisia (IBP).	25,000		
WISCONSIN				
Wisconsin, University of, Madison	Prehistoric archeology, Egypt	4,024	68,627	68,627
	Cultural anthropology, India (2 projects)	52,609		
		11,994		

[1] 2 years.

APPENDIX I.—American Research Center in Egypt Consortium Members.

California, University of, Berkeley Calif.
California, University of, Los Angeles, Calif.
Chicago, University of, Chicago, Ill.
Columbia University, New York, N.Y.
Harvard University, Cambridge, Mass.
Indiana University, Bloomington, Ind.
Michigan, University of, Ann Arbor, Mich.
New York University, New York, N.Y.
Pennsylvania, University of, Philadelphia, Pa.
Princeton University, Princeton, N.J.
Utah, University of, Salt Lake City, Utah.

APPENDIX II.—American Schools of Oriental Research Institutional Corporation Members.

Alma College (California).
Anderson College & Theological Seminary.
Andover Newton Theological Seminary.
Andrews University.
Asbury Theological Seminary.
Ashland Theological Seminary.
Augustana Theological Seminary.
Baltimore Hebrew Teachers Training College.
Bangor Theological Seminary.
Berkeley Baptist Divinity School.
Berkeley Divinity School.
Bethany Biblical Seminary.
Biblical Seminary in New York.
Boston University School of Theology.
Brigham Young University.
Brown University.
California Baptist Theological Seminary.
Candler School of Theology (Emory University).
Catholic University of America.
Central Baptist Theological Seminary.
Central Conference of American Rabbis.
Chicago Luthern Theological Seminary.
Christian Theological Seminary.
Church Divinity School of the Pacific.
Colgate—Rochester Divinity School.
College of the Bible (Lexington).
Columbia Theological Seminary.
Columbia Uuiversity.
Concordia Teachers College.
Concordia Theological Seminary.
Cornell University.
Covenant College & Theological Seminary.
Crozer Theological Seminary.
Drake University Divinity School.
Drew University Theological Seminary.
Dropsie College.
Duke University.
Dumbarton Oaks Research Library.
Eastern Baptist Theological Seminary.
Episcopal Theological School.
Episcopal Theological Seminary of the Southwest.
Evangelical Theological Seminary.
Fordham University.
Fuller Theological Seminary.
Garrett Bibilical Institute.
General Theological Seminary.
Golden Gate Baptist Theological Seminary.
Gordon Divinity School.
Grace Theological Seminary.
Hamma Divinity School.
Harding College School of Bible & Religion.
Hartford Seminary Foundation.
Harvard University.
Hebrew Union College.
Iliff School of Theology.
Jewish Institute of Religion.
Jewish Theological Seminary of America.
Johns Hopkins University.
Kenyon College.
Lancaster Theological Seminary.
Louisville Presbyterian Seminary.
Loyola University (Chicago).
Lutheran Theological Seminary (Gettysburg).
Lutheran Theological Seminary (Philadelphia).
McCormick Theological Seminary.
Methodist Theological School in Ohio.
Metropolitan Museum of Art.
Midwestern Baptist Theological Seminary.
Moravian College.
Mount Holyoke College.
Nazarene Theological Seminary.
New Brunswick Theological Seminary.
Northern Baptist Theological Seminary.
Northwest Christian College.
Northwestern Luthern Theological Seminary.
Oberlin Graduate School of Theology.
Pacific Lutheran Theological Seminary.
Pacific School of Religion.
Philadelphia Divinity School.
Phillips University Graduate Seminary.
Pittsburg Theological Seminary.
Princeton Theological Seminary.
Princeton University.
Rosary College.
San Francisco Theological Seminary.
Seabury-Western Theological Seminary.
Smith College.
Society of Biblical Literature & Exegesis.

Southeastern Baptist Theological Seminary.
Southern Baptist Theological Seminary.
Southern California School of Theology.
Southern Methodist University (Perkins School of Theology).
Southwestern Baptist Theological Seminary.
Stanford University.
St. John's Seminary.
St. Joseph's Seminary.
St. Mary's Seminary.
St. Paul's School of Theology
St. Thomas Seminary (Colorado)
Syracuse University
Texas Christian University
Union Theological Seminary (New York)
Union Theological Seminary in Virginia
United Theological Seminary
University of California
University of Chicago
University of Cincinnati
University of Dubuque Theological Seminary
University of Michigan
University of Notre Dame
University of Pennsylvania
University of Wisconsin
Vanderbilt University
Virginia Theological Seminary
Wake Forest College
Wartburg Theological Seminary
Wellesley College
Wesley Theological Seminary
Western Theological Seminary
Wheaton College (Illinois)
Yale University

APPENDIX III.—Consortium of institutions which sponsor Hebrew Union College's Jerusalem School of Biblical Archeology.

Antioch College, Yellow Springs, Ohio
Boston University, Boston, Mass.
Brandeis University, Waltham, Mass.
Carnegie Museum, Pittsburgh, Pa.
Christian Theological Seminary, Indianapolis, Ind.
Church Divinity School of the Pacific, Berkeley, Calif.
Cincinnati Art Museum, Cincinnati, Ohio
Colgate-Rochester Divinity School, Rochester, N.Y.
College of the Holy Cross, Worcester, Mass.
Emanuel School of Religion, Milligan College, Tenn.
General Theological Seminary, New York, N.Y.
The Hartford Seminary Foundation, Hartford, Conn.
Harvard University, Cambridge, Mass.
Lutheran School of Theology, Maywood, Ill.
McCormick Theological Seminary, Chicago, Ill.
New York University, New York, N.Y.
Oberlin College, Oberlin, Ohio
Pittsburgh Theological Seminary, Pittsburgh, Pa.
Princeton Theological Seminary, Princeton, N.J.
St. Marys College, St. Marys, Calif.
St. Paul School of Theology, Methodist, Kansas City, Mo.
San Francisco Theological Seminary, San Anselmo, Calif.
School of Theology at Claremont, Calif.
Southern Baptist Theological Seminary, Louisville, Ky.
Temple University, Philadelphia, Pa.
Union Theological Seminary, New York, N.Y.
University of California, Los Angeles, Calif.
University of Cincinnati, Cincinnati, Ohio
University of Michigan, Ann Arbor, Mich.
University of Missouri, Columbia, Mo.
The University Museum of the University of Pennsylvania, Philadelphia, Pa.
University of Southern California, Los Angeles, Calif.
University of Wisconsin, Madison, Wis.
Vanderbilt University, Nashville, Tenn.
Wayne State University, Detroit, Mich.
The Wesley Theological Seminary, Washington, D.C.
Xavier University, Cincinnati, Ohio
Yale University, New Haven, Conn.

APPENDIX IV.—American Institute of Indian Studies consortium members.

California, University of
Chicago, University of
Columbia University
Cornell University
Duke University
Hawaii, University of
Illinois, University of
Kansas State University
Michigan, University of
Minnesota, University of
Missouri, University of
Pennsylvania, University of
Rochester, University of
State University of New York
Syracuse University
Texas, University of
Washington, University of
Wisconsin, University of
American University
Carleton College
Claremont Graduate School and University Center
Colgate University
Massachusetts Institute of Technology
Northern Iowa, University of

Oakland University (Rochester, Mich.)
Rutgers University
Sweet Briar College
Wooster, The College of

CRITERIA FOR THE AWARD OF GRANTS

Dr. RIPLEY. Off the record.

(Discussion off the record.)

Mrs. HANSEN. Also insert in the record your criteria for awarding grants.

(The information follows:)

The Institution's criteria for the award of grants in each scientific discipline are determined by the judgment of regularly constituted scientific panels, composed of distinguished senior scientists in each discipline, most of whom are drawn from outside the Institution and each of whom serves for 3 years on a given panel. The members of these scientific panels are chosen with the advice of the Institution's scientific staff and are named by the Secretary. The major panels meet twice yearly to examine scientific proposals submitted to the Institution by American colleges, universities, and museums, and to decide which of these proposals deserves financial support on the basis of its competitive scientific merit, as determined by the eminent practitioners of each discipline who compose the panels. Prior to the formal meetings of the scientific panels, outside specialists qualified to comment on each individual research proposal are asked to provide written reviews on it. These reviews are provided, together with each research proposal itself, to the regularly constituted scientific panel at the time of its scheduled meeting. Criteria used by the scientific panels to determine the excellence of proposals are listed in the foreign currency program's official public "Announcement" as follows:

"the importance of the research objective; the methodology proposed to carry it out; and the priority of the research compared with other proposals under review. Funding of approved research also depends upon the current availability of "excess" currencies to the Smithsonian."

CONSTRUCTION

Mrs. HANSEN. Please insert in the record pages D–1 through D–6 of the justifications.

(The pages follows:)

CONSTRUCTION AND IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK

1969 Appropriation..... $300,000
1970 Appropriation..... $600,000
1971 Estimate..... $200,000

Recognizing that the National Zoological Park had not had any major improvements since the mid 1930's and that it was in a disgracefully deteriorated condition, the Congress in 1963 approved a master plan for improvement of its physical facilities. The original schedule called for a ten year program and funds were appropriated for each of the next five consecutive years in support of the master plan. In fiscal year 1968, construction funds were not appropriated to maintain the momentum of the program and the work was scaled down to those critical improvements required to extend the useful life of facilities not yet replaced and to minor projects which contributed to the elimination of water pollution of Rock Creek and air pollution. This holding action has continued through fiscal year 1970. Funds appropriated this year will be used for completion of the heating plant conversion and for such essential safety and preventive maintenance projects as replacing deteriorated wooden handrails in and outside of the buildings, installing fire alarm systems, repairing the Elephant House roof, replacing cage doors, and installing a prototype system for manure disposal to combat air pollution.

In fiscal year 1971, the Smithsonian will again defer a request for funds to resume progress toward completion of the improvement program and will request funds only for repairs and continued maintenance to keep those buildings and exhibits, which will eventually be replaced, in usable condition. Included in the necessary projects are waterproofing buildings, painting of buildings and cages to prevent structural damage, and repair of outside cages. Funds in the amount of $200,000 are requested for these purposes.

RESTORATION AND RENOVATION OF BUILDINGS

1969 Appropriation.....	$400,000
1970 Appropriation.....	$525,000
1971 Estimate.....	$1,130,000

An appropriation of $1,130,000 is requested for the following projects:

Renwick Gallery of Art	$300,000
Arts and Industries Building.....	500,000
Smithsonian Tropical Research Institute....	25,000
Fumigation Facility	75,000
Library Modifications	50,000
Museum Support Facility	80,000
Feasibility Studies	100,000
Total estimate for 1971.....	$1,130,000
Less amount appropriated in fiscal year 1970	525,000
Increase in fiscal year 1971.....	$605,000

Renwick Gallery of Art

An appropriation of $300,000 is requested to complete a program of restoration and improvement of the old Court of Claims building on Lafayette Square, now known as the Renwick Gallery of Art.

Completion of restoration work on the Renwick Gallery is of the highest priority, not only to protect the $2,070,000 thus far appropriated by the Congress and invested in construction and restoration work, but also to make this historically important and centrally located building available for use and enjoyment by the public.

With funds previously appropriated, work is being completed now for central rooms on each floor, thereby assuring that a portion of the building can be opened to the public by the fall of 1970. An additional appropriation of $300,000 will permit completion of flooring, plastering, painting, lighting, and millwork for the remainder of the rooms and to install necessary furnishings and exhibits.

With this appropriation the essential renovation and restoration work will be sufficiently complete to permit full use of the building. To restore the building interior to comparable elegance approaching the original design would be prohibitively expensive; work is being limited, therefore, to architectural restoration of the main building features.

The Renwick Gallery in association with the National Collection of Fine Arts will be primarily concerned with the American decorative arts and designs, broadly defined to reflect the diverse competence and collections within the Smithsonian Institution as well as important objects and collections that will be borrowed for exhibit. Because of its proximity to the White House and to centers of government and private activity, a carefully planned program of exhibits, talks, concerts, and informal lectures will be instituted to serve the interest of that area of the inner city.

Arts and Industries Building

An appropriation of $500,000 is requested to construct second floor decks in the Arts and Industries Building to provide office and work space for the Smithsonian Institution staff.

In fiscal year 1967, the Congress appropriated $133,000 to prepare plans and specifications for renovating the 90-year-old Arts and Industries Building, located at 9th Street and Independence Avenue. Although plans have been completed and construction can start upon receipt of an appropriation, the full funding request will be deferred until a future date, so that higher priority restoration and renovation projects elsewhere in the Institution may proceed. The total renovation cost for this building will be approximately $3,000,000.

Included in the total project is an item amounting to $500,000 for construction of several second floor decks in high ceiling court areas and thus put to good use space that is otherwise wasted. The additional floor space is planned for use as offices as well as for classroom and other public service purposes. Because of the urgent need for this space, this portion of the renovation project should proceed as soon as possible, and funds are requested as a priority item.

The demands for additional administrative and public service space for the Smithsonian are the natural result of substantially broadening the diversified programs of the Institution in recent years. Over twenty programs have been added by legislation, including such major museums and functions as the Museum of History and Technology, the National Portrait Gallery, the National Air and Space Museum, and the Hirshhorn Museum. All of these activities require administrative support from the personnel, fiscal, supply, buildings management, budget, and other management service units, as well as those units that more directly provide information and services to the public. With funds requested, substantial relief may be realized from the present overcrowding in administrative offices.

Smithsonian Tropical Research Institute

An appropriation of $25,000 is requested for continuing emergency repairs to existing facilities.

In fiscal year 1970, $25,000 were appropriated to start a program of repairs and renovation for the buildings on Barro Colorado Island and at the mainland facilities in the Panama Canal Zone. There are 15 small wood frame buildings on the Island, most of which are over 25 years old and in poor condition due to the high tropical humidity and insect infestations. A program of general improvements will cost approximately $100,000 and would involve the replacement of flooring, wiring, roofing, screening, and some mechanical repairs and replacements. With the funds requested, many of these improvements can be made and the useful life of existing buildings extended.

Fumigation Facility

An appropriation of $75,000 is requested to construct a fumigation facility in the Museum of Natural History Building.

Hundreds of thousands of organic specimens in the Collections, including plants, hides and skins, and articles made from leather, bone, and wood, require careful fumigation for preservation. Objects must be fumigated immediately upon receipt to eradicate live pests and then periodically to eradicate those hatched from eggs previously deposited or from new infestations.

In the past, fumigation work has been accomplished with a homemade facility in a room in the Museum of Natural History in a rather crude manner requiring hand pouring of fumigants. Modern building codes, requiring specialized facilities, ventilation, and safety features as well as improved methods for handling toxic fumigants have shown the Museum's facility to be obsolete, inadequate, and unsafe. For safety reasons, the facility has been closed and fumigation work is now accomplished by outside contracting or is being deferred.

The cost of transportation to private fumigation facilities as well as the inconvenience and danger to security of the Collections also justify this high priority request for construction of a new facility in the Museum of Natural History Building.

Funds requested will be used to construct a specially designed room, with sealable openings, safety control systems for storing and handling fumigants, and proper ventilation and exhaust systems.

Library Modifications

An appropriation of $50,000 is requested to modify a portion of the space, in the Museum of Natural History Building, used by the Smithsonian Library.

The Library's collections now contain more than 750,000 pieces, most of which are housed in the Museum of Natural History Building, in less than 25,000 square feet of floor space. Because adequate operating space is not available nor can additional space be assigned at this time, it is necessary that maximum use be made of all available space and that mezzanines be constructed where head room permits.

With funds requested, it will be possible to construct a mezzanine level in three adjacent rooms and to install a booklift. This is a small, but important, project which will provide some urgently needed relief to the congested conditions now existing in the library.

Museum Support Facility

An appropriation of $80,000 is requested for preparation of plans and specifications for an off-Mall central museum storage and study facility for the Smithsonian Institution.

Rather than continue to store increasing numbers of objects from the National Collections in the buildings on the Mall, a central storage and retrieval center for classifying, preserving, restoring, studying, and storing items is required along with shops and laboratories in support of research and education activities related to the Institution's work. A specially designed facility using modern storage and retrieval methods will permit improved management of the 60,000,000 items in the National Collections as well as making the collections more accessible for study and research. The space vacated on the Mall can be used for exhibits and other public education and service purposes.

Planning studies are now in progress to select a site for the center and to phase a development program over a ten-year period. This appropriation request is for design of the first increment of a long-range program.

Feasibility Studies

An appropriation of $100,000 is requested to prepare feasibility studies for the future building needs of the Smithsonian Institution.

Careful advanced and long-range planning are essential if the future building needs for the complex and varied programs of the Smithsonian Institution are adequately identified, studied, and documented. With funds requested, urgent work can be started on studies of storage retrieval methods and methodology for the expanding collections; methods of cataloging, inventorying, and preserving specimens; feasibility studies for physical facilities to accommodate future research needs in tropical biology, astrophysical sciences, environmental and ecological studies on land now owned by the Institution; and for new museum space to improve and expand the exhibits and educational programs for the benefit of the people of the United States.

CONSTRUCTION
(JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN)
(Liquidation of Contract Authority)

1969 Appropriation..... $2,000,000
1970 Appropriation..... $3,300,000*
1971 Estimate..... $8,897,000

By the Act of November 7, 1966, the Congress provided a site on the Mall for construction of the Joseph H. Hirshhorn Museum and Sculpture Garden and provided statutory authority for the appropriation of construction and operating funds. Within this appropriation authority, $803,000 were appropriated in fiscal year 1968 for the preparation of plans and specifications. In fiscal year 1969, an additional $2,000,000 were appropriated to start construction, and authorization was granted by the language in the appropriations bill to enter into construction contracts in an amount not to exceed $14,197,000. An additional $3,300,000 were appropriated in fiscal year 1970 toward liquidation of the contract authority.

The justification in support of the fiscal year 1970 budget request indicated that construction bids would be opened in the spring of 1969 and construction would be started soon thereafter. Bids were opened on May 27, 1969, but had to be rejected because the low bid exceeded available funds. Although this project was affected adversely by an unusual and unexpected sudden escalation in construction costs, the Congress will not be requested to provide an additional authorization of funds. The General Services Administration was instructed to revise the drawings and scale down the scope of work to stay within the existing authorization. Drawing revisions were completed in October 1969 and new bids were opened on December 18, 1969. Construction is now scheduled to start about March 1970 and be completed in about two years.

Because construction work will be in full progress during fiscal year 1971, an appropriation of the remaining $8,897,000 is requested to liquidate the balance of the contract authority. This appropriation will be used to complete funding of construction contracts, to finance supervision and related construction management costs, and to provide some necessary equipment and facilities to install the Hirshhorn collection in the completed building.

* Excludes $200,000 appropriated for the relocation of the Medical Museum (Armed Forces Institute of Pathology).

SMITHSONIAN INSTITUTION

SCHEDULE OF BUILDING PROJECTS

January 1970

	FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970	FY 1971	FY 1972
	Under construction								
Remodeling of Civil Service Commission Bldg. (for art galleries)	Apprn. received, $5,465,000	Apprn. received, $1,000,000		April 1967 completion	May 1968 opening (NCFA)	Oct. 1968 opening (NPG)			
National Air and Space Museum Building	Planning apprn. received, $511,000	Remainder of planning apprn. received, $1,364,000							Request construction apprn.
	Construction and improvements in progress								
Construction and Improvements, National Zoological Park 1/	Apprn. received, $1,275,000	Apprn. received, $1,525,000	Apprn. received, $1,539,000	Apprn. received, $1,589,000	Apprn. received, $400,000	Apprn. received, $300,000	Apprn. received, $600,000	Apprn. requested $200,000	Request apprn. for continuing program
Restoration and Renovation of Buildings			Apprn. received, $2,248,000	Apprn. received, $2,300,000	Apprn. received, $1,125,000	Apprn. received, $400,000	Apprn. received, $525,000	Apprn. requested $1,130,000	Request apprn. for add. renov.
Joseph H. Hirshhorn Museum and Sculpture Garden					Planning apprn. $803,000	Construction authorized $14,197,000 apprn. received, $2,000,000	Apprn. received $3,500,000	Apprn. requested $8,897,000	

1/ First funding received in fiscal year 1963 in the amount of $1,275,000.

RENWICK GALLERY OF ART

Mrs. HANSEN. You are requesting $300,000 for the Renwick Gallery of Art. Justify this request.

Dr. RIPLEY. This is to complete the restoration and improvement in the interior of the Renwick Gallery in order to be able to open. I notice here, Madam Chairman, we have cited the total funds appropriated for this project that you requested. An amount of $2,070,000 has been appropriated by the Congress and invested in the restoration and renovation of this building.

Mrs. HANSEN. The old Court of Claims Building has very interesting architecture.

Dr. RIPLEY. It is a unique building because it is the first one ever designed as a gallery of art and therefore is a historic landmark and has been so registered and designated by the Historic Preservation Trust. It also is significant because it was designed and constructed as an act of personal philanthropy, one of the first in this Nation, by Mr. W. W. Corcoran. It was designed by James Renwick, the architect of our old castle building on the Mall, who was one of the most famous architects of his time in America. On every count it is an extraordinarily interesting building, and we feel ourselves very privileged to be the eventual occupants of it.

ARTS AND INDUSTRIES BUILDING

Mrs. HANSEN. You are requesting $500,000 for the Arts and Industries Building. Justify this request.

Dr. RIPLEY. This is to make better use of the building in its present exhibit and educational functions by constructing second floor decks. Congress has appropriated money to prepare plans and specifications for the renovation of this building, which as you recall was built in 1878 to contain the centennial exhibition objects given to the Smithsonian. It will cost $500,000 to construct several second floor decks in high ceiling court areas and thus put to good use space that is otherwise wasted.

Mrs. HANSEN. Will this provide additional space?

Dr. RIPLEY. We will make an additional space available.

FUMIGATION FACILITY

Mrs. HANSEN. You are requesting $75,000 for a fumigation facility project. Justify this request.

Dr. RIPLEY. This is a very important need for us, because we have many hundreds of thousands of organic specimens in the collection, plants, hides and skins, articles made from leather, bone and wood. In order to preserve them they need very careful fumigation, first when they arrive to eradicate live pests and then periodically to make sure that pests derived from eggs hatched in objects might not have survived the poison of the first fumigation. This has been done previously with a homemade facility in a very crude manner, which involves some hazard to the building and to the people doing it. It is also a violation of the building codes.

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MUSEUM STORAGE AND STUDY FACILITY

Mrs. HANSEN. You are requesting $80,000 for preparation of plans and specifications for an off-Mall central museum storage and study facility. Justify this request.

Dr. RIPLEY. This is an attempt to develop a facility off the Mall for study and storage, which would be able to use our objects that are now in rather inaccessible or difficult storage, or in dead storage in Silver Hill. We feel that the most efficient way to get at this material, to preserve it and study it both, would be to have quite a novel, new system of inline storage and accessibility which is not being done, and would require a specialized facility to be built.

FEASIBILITY STUDIES

Mrs. HANSEN. You are requesting $100,000 for feasibility studies. Justify this request.

Dr. RIPLEY. This is an attempt to be prudent about future needs of the Institution. We feel that our complex and various programs, which are so difficult and so extensive and hard to understand for so many of the public, I may say, require that we should decide how best to set up a long-range program of construction or reconstruction or arrangement for our collections, our research, and our exhibits. We need storage retrieval methods. We need methods of cataloging and inventorying, preserving specimens. We need, of course, feasibility studies for physical facilities to accommodate research needs, in tropical biology, in astrophysical science, and in environmental and ecological studies on land now owned by the Institution, and also for new museum space to improve and expand our exhibits and educational programs.

BALANCES IN CONSTRUCTION FUNDS

Mrs. HANSEN. Please insert in the record your unobligated and unexpended balances as of June 30, 1969, and as of February 28, 1970.

(The information follows:)

CONSTRUCTION ACCOUNTS, UNOBLIGATED AND UNEXPENDED BALANCES

Account	As of June 30, 1969	As of Feb. 28, 1970
Construction and improvement, National Zoological Park:		
Unobligated balance	$2,488,000	$2,894,402
Unexpended obligations	475,000	281,113
Restoration and renovation of buildings:		
Unobligated balance	793,000	1,242,286
Unexpended obligations	1,717,000	613,165
Construction:		
Unobligated balance	13,957,000	807,965
Unexpended obligations	0	13,111,638
Miscellaneous construction appropriations:		
Unobligated balance	171,000	140,021
Unexpended obligations	174,000	177,702

CONSTRUCTION OF THE HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Mrs. HANSEN. $8,897,000 is requested for construction of the Joseph H. Hirshhorn Museum and Sculpture Garden. Give us a detailed description of the requirements for this funding.

Dr. RIPLEY. We will do so, Madam Chairman. I would like to point out that we believe that the full $8 million which will consummate the contract authority may not be entirely necessary for this one year, but we are asking for it as a matter of course, in order to liquidate the contractual obligations under which it has been authorized. We believe that we will need in excess of $5,126,000 this year.

Mrs. HANSEN. I believe you recently awarded the contract for the construction of this museum. How many bidders were there?

Dr. RIPLEY. There were three.

Mr. BRADLEY. There were three bidders and it was opened, of course, by the General Services Administration.

Mrs. HANSEN. Were the bids handled by the GSA?

Mr. BRADLEY. Yes. They are the construction agent for the Smithsonian.

COMPANIES SUBMITTING BIDS

Mrs. HANSEN. Will you please insert in the record the names of the companies that submitted bids and the name of the company that was the low bidder?

(The information follows:)

The following companies submitted construction bids, for the Joseph H. Hirshhorn Museum and Sculpture Garden, which were opened on December 18, 1969:

1. Piracci Construction Co., low bidder.
2. Norair Engineering Corp.
3. Blake Construction Co., Inc.

COMPUTATION ERROR ON THE LOW BID

Mrs. HANSEN. There was a question of a computation error on the lowest bid. Describe in detail for the committee how this situation was resolved.

Dr. RIPLEY. We have the appropriate documents which we would like to enter in the record if we may, Madam Chairman.

Mrs. HANSEN. Please do.

(The information follows:)

JANUARY 21, 1970.

Mr. PAUL SHNITZER,
Deputy Assistant General Counsel,
General Accounting Office, Washington, D.C.

DEAR MR. SHNITZER: Reference is made to your letter of January 12, 1970 (your reference B–167068), requesting a documented report on the protest by Norair Engineering Corp. against award to Piracci Construction Co., Inc., in an amount other than the amount of its bid on contract No. GS–03B–16254 for construction of the Joseph H. Hirshhorn Museum and Sculpture Garden.

Bids on this project were opened December 18, 1969. The base bids plus the extended unit prices for foundation piles were:

Bidder	Base bid	Extended unit price	Total
Piracci Construction Co	$11,874,000	$330,763.00	$12,204,763.00
Norair Engineering Corp	14,398,000	365,277.40	14,763,277.40
Blake Construction Co., Inc	14,372,000	445,811.00	14,817,811.00

By telegram of December 19, 1969, the apparent low bidder advised that a mistake had been made in its bid and requested a meeting on the matter. In oral statements at the meeting and letters dated December 22 and 29, 1969, the Piracci firm and its lawyer reiterated the assertion of a mistake and requested

correction of the bid. The alleged error occurred when, through a clerical misunderstanding, the figure of $754,375 for exposed Swenson pink granite aggregate mix was erased and the remaining materials figures on page 6 of the computations for poured-in-place concrete were added together, carried forward and finally incorporated into the recapitulation sheet without the figure that had been erased. See enclosed letters for more detailed explanation. The original worksheet which the Piracci firm submitted to the General Services Administration tends to bear out the explanation. In addition, examination of the 11 sheets of estimates on the poured-in-place concrete makes no other provision for the material deleted as a result of the misunderstanding and consequent erasure of the extended figure for the 5,000 number concrete. GSA's estimate on this item of material was 5,739 cubic yards at $131.28. Both the quantity and the price correspond closely to the bidder's figures. Accordingly, the bidder appears to have submitted clear and convincing evidence that a mistake was, in fact, made in preparing the bid.

On the question of the bid actually intended, Piracci's attorney has offered only the proposition that the omitted figure plus .0065 thereof (erroneously expressed as .065) representing bond premium adjustment be added to the bid actually submitted. However, we find no evidence that the figure resulting from such an adjustment would have been the bid submitted had there been no error.

On the other hand, the bid estimate sheets submitted in support of the allegation of mistake fulfill the requisite evidentiary requirement. The bid actually intended can be ascertained by reinserting the $754,375 at the point where it should have appeared on page 6 of the cast-in-place concrete computations, retotaling the page, carrying the correct total forward to page 10, finding the correct total of all the cast-in-place concrete estimate sheets, making the adjustments as shown on page 11, rounding off to the nearest $10,000 (as was done by the bidder originally), carrying the corrected figure forward to the recapitulation sheet, computing the new total, deducting therefrom the cuts of $280,000, and finally adding the lump-sum fee of $500,000. This, we believe, is clearly what the bidder would have done in computing its overall bid if the erroneously erased $754,375 had not been erased and, therefore, the resulting figure represents what the bid would actually have been but for the mistake. Enclosed (enclosure I) is a set of the original worksheets on which the recomputation, following the bidder's method of calculation, is shown in pencil.

In connection with this reconstruction of what the bid would have been from the evidence furnished, several facts need to be pointed out. The standard premium for construction bonds is $10 per $1,000 on the first $100,000 (or a total of $1,000); $6.50 per $1,000 on the next $2,400,000 (or a total of $15,600); $5.25 on the next $2,500,000 (or a total of $13,125); $5.00 on the next $2,500,000 (or a total of $12,500); $4.70 per $1,000 on everything over $7,500,000; plus 1 percent of the aggregate of the foregoing for each month by which the project will exceed 24 months. On the foregoing basis, the bond premium would be computed as follows for both the erroneous original bid and for the bid as corrected:

	Original bid	Corrected bid
1st $1,000	$1,000	$1,000
Next $2,400,000	15,600	15,600
Next $2,500,000	13,125	13,125
Next $2,500,000	12,500	12,500
All above $7,500,000	19,194	22,720
Subtotal	61,419	64,945
Plus 1 percent times 6 months	3,685	3,897
Total premium	65,104	68,842

In the original bid, the total bond premium was apparently rounded off to the nearest $10,000, for a figure of $70,000 was included on the recapitulation sheet. Applying the same method to corrected bid figures, the amount included for bond premium would not change.

It will also be noted that the $280,000 shown at the bottom of the recapitulation sheet represents "cuts" for reduced prices received from subcontractors after the bid costs had already been calculated on the basis of earlier quotations

and is not a fee as might be supposed. The derivation of these cuts of $280,000 is indicated in the documentation furnished by the bidder. Note also that in subtracting the $280,000, Piracci dropped the last three figures before arriving at his final bid price of $11,874,000 by adding on a lump-sum figure of $500,000 profit and overhead (not shown step by step on the recapitulation sheet but only as a resulting total identical to the amount bid).

By reinserting the figure erased from page 6 of the poured-in-place concrete computations and following through the remainder of the bid computation in the manner which was apparently followed by the bidder, it appears to us that the amount the bid would have been but for the mistake is readily and clearly ascertainable from the evidence submitted and is thus subject to correction under the provisions of FPR 1-2.406-3(a)(2). Since the bid, as thus recomputed, is still far below that of the next bidder, it is recommended that correction thereof be approved as outlined. A somewhat similar (albeit much simpler) matter of recomputation on the basis of the bidder's own method of calculation was involved in Comptroller General's Decision B-161489 of June 23, 1967. There, the bidder had a figure of $75,000 in detail estimate sheets which was brought forward into the summary sheet as $7,500. GSA had approved correction of the bid on the basis of bringing the correct figure forward into the summary and (following the bidder's original method of computation), finding a new total of all costs, adding 10 percent thereof for profit and overhead, and rounding off the result to the nearest thousand. Your office found no reason to overturn that determination. Accordingly, it is recommended that Piracci be permitted to amend its bid as herein indicated and that the protest of Norair Engineering Corp. be denied.

Enclosed (as listed on the attachment) are documents pertinent to this matter. Please return these documents when they have served your purposes.

The bids expire on February 1, 1970, and the wage rate determination expires on February 24, 1970. We consequently request your expedited consideration of this matter.

Sincerely,

HART T. MANKIN, *General Counsel.*

Concurrence:

———— ————,
Assistant General Counsel, Public Building Division.

———— ————,
Commissioner, Public Buildings Service.

LIST OF ENCLOSURES

A. Specifications and bid forms, vol. I of III, together with amendments 1 through 5.
B. Bid of Piracci Construction Co., Inc.
C. Abstract of bids.
D. Bid comparison tabulation.
E. Telegram of December 19, 1969, from Piracci Construction Co., Inc., alleging mistake in bidding.
F. Letter of December 22, 1969, from attorney for Piracci Construction Co., Inc., explaining how the error occurred and forwarding partial supporting documentation.
G. Additional compensation (bid estimate sheets) furnished.
H. Letter of December 29, 1969, from attorney for Piracci Construction Co., Inc., explaining how the lump sum for profit and overhead is derived for bidding purposes.
I. Set of bid estimate sheets with penciled notations showing recomputation of bid on basis of correcting the error alleged.

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, D.C., February 10, 1970.

Hon. ROBERT L. KUNZIG,
Administrator,
General Services Administration.

DEAR MR. KUNZIG: Reference is made to a letter dated January 21, 1970, signed by your General Counsel, furnishing a report on the protest of Norair Engineering Corp. on contract No. GS-03B-16254 for the construction of the Joseph H. Hirshhorn Museum and Sculpture Garden.

Enclosed is a copy of our decision of today denying the protest. Your documents are returned as requested.

Sincerely yours,

R. F. KELLER,
Assistant Comptroller General of the United States.

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, D.C., February 10, 1970.
B-167068

MATZKIN & DAY,
Washington, D.C.

(Attention Sheldon I. Matzkin, Esq.).

GENTLEMEN: Reference is made to your letter of January 28, 1970, protesting on behalf of Norair Engineering Corp., the proposed award of a contract for the construction of the Joseph H. Hirshhorn Museum and Sculpture Garden, General Services Administration project No. 49356, contract No. GS-03B-16254, to Piracci Construction Co., Inc., if the award is in an amount other than the amount of its original bid.

Bids were opened on December 18, 1969. The base bids were as follows:

Bidder:	*Base bid*
Piracci Construction Co	$11,874,000
Norair Engineering Corp	14,398,000
Blake Construction Co., Inc	14,372,000

By telegram dated December 19, 1969, Piracci notified GSA that a mistake had been made in its bid. The alleged mistake occurred when, due to a clerical error, the figure of $754,375 for exposed swenson pink granite aggregate mix was erased from page 6 of Piracci's estimate sheets and the remaining materials figures on the page which represented computations for poured-in-place concrete were added together, carried forward, and finally incorporated into the recapitulation sheet without including the figure that had been erased. It is reported that the erasure occurred when, because of several changes in the quantities for this material during final analysis review, several erasures were made, weakening and tearing slightly the paper at this particular line on the worksheet. For this reason the final quantity and price for this item were dropped one line on the sheet. Thereafter, this worksheet among others was given to a bookkeeper of the company who was instructed to add the various columns of figures to arrive at a total price for the concrete work. Because of the break in the column caused by dropping down one line, the bookkeeper erroneously assumed that the $754,375 figure represented a total of the figures in the column that preceded it. According to the bookkeeper's affidavit, she then erased the figure and retotaled the column, substituting the new total in the amount of $438,009. The quantity of 5,702 cubic yards and the unit price of $132.30 which resulted in the erased figure rounded to the nearest dollar remain on the estimate sheet.

GSA is of the opinion that the original worksheets submitted by Piracci accompanied by affidavits of the company's estimator and the bookkeeper who made the alleged error substantiate Piracci's allegation. GSA points out that the 11 sheets of estimates made no provision for the swenson mix deleted as a result of the clerical misunderstanding and consequent erasure of the extended figure for the material. In addition to the worksheets forwarded here by GSA, Piracci, through its attorney, submitted directly to this office a letter dated December 18, 1969, from a proposed subcontractor to Piracci, furnishing the price quotations for materials upon which Piracci relied in preparing its bid. GSA's estimate on this item was 5,739 cubic yards at $131,28 per yard. Both the price and quantity correspond closely to the bidder's figures allegedly omitted in error. GSA concludes that the bidder appears to have submitted clear and convincing evidence that a mistake was made by it in preparing its bid.

In regard to an alleged error in bid, we have held that to permit correction prior to award a bidder must submit clear and convincing evidence that an error has been made, the manner in which the error occurred, and the intended bid price. B-164620, September 3, 1968, and cases cited therein. The same basic

requirements for the correction of a bid are also found in section 1–2.406–3(a) (2) of the Federal Procurement Regulations which provide as follows:

"(2) A determination may be made permitting the bidder to correct his bid when the bidder requests permission to do so and clear and convincing evidence establishes both the existence of a mistake and the bid actually intended."

We are satisfied that the evidence described above establishes the existence of the alleged mistake. Further, the bid actually intended can be ascertained by reinserting the $754,375 at the point where it should have appeared on page 6 of the worksheets (cast-in-place concrete computations), carrying the correct total through to the recapitulation sheet, and as was done originally, deducting the cuts of $280,000 and adding the lump-sum fee of $500,000.

The resulting base bid price from the above calculations is $12,628,375. (The original base bid of $11,874,000 plus the $754,375 correction.) GSA reports, and Piracci has stipulated, that the amount included in the bid for bond premium had been rounded off up to the nearest $10,000 and consequently would be unchanged by correcting the error.

Regarding the $500,000 lump-sum fee which represents profit and overhead, Piracci reports that this figure was reached prior to final pricing. They state that the error involved exclusively the cost of exposed aggregate material only and did not include the cost of labor and, therefore, would not increase risk and, in and of itself, would not have required an increase in overhead and profit. We do not feel that we would be justified in rejecting Piracci's contention that the profit and overhead figure would have not been affected by the increase in material costs in this case. It also may be noted that, even assuming the overhead and profit figure would have been affected by the correction, the maximum that the bid could have been is still nearly $1,750,000 below the next lowest bid, and that, therefore, correction of the bid would not be prejudicial to the other bidders. B–123888, May 9, 1955. We have specifically held that correction may be permitted to reflect the omission of direct costs without any increase for profit where the bidder requests correction in such form and the bid would remain low whether or not the low bid is amended to reflect the profit. B–149798, September 7, 1962.

We note, however, that the bid prices for the alternates and unit prices found on the supplement to standard form 21 might be affected by the correction in the base bid to reflect the intended material price. This is especially true with respect to the deductive amount applicable to alternate E for omitting the entire Sculpture Garden and associated work north of the south curb line at Jefferson Drive. We think there is considerable substance to your expressed position that if the contract were awarded with the deduction of alternate E, the deductive amount should be adjusted to reflect the correction in the base bid.

Based on the foregoing, we are of the opinion that the bid of Piracci may be corrected as specified above. Accordingly, your protest is denied.

Very truly yours,

R. F. KELLER,
Assistant Comptroller General of the United States.

Dr. RIPLEY. These include the letter from the GAO authorizing the GSA to proceed and accept the bid.

Mrs. HANSEN. That was a strange mistake.

Dr. RIPLEY. Apparently it does happen. It was a perfectly authentic mistake. It was a question of addition. There was an erasure. This girl didn't know her actual failure to include the last figure.

(Discussion off the record.)

AWARD OF THE CONTRACT TO THE PIRACCI CO.

Mrs. HANSEN. Please insert in the record the document that awarded the contract to the Piracci Co.

(The information follows:)

FEBRUARY 12, 1970.

PIRACCI CONSTRUCTION CO., INC.,
Baltimore, Md.

GENTLEMEN: Your lump-sum bid dated December 18, 1969, in the corrected amount of $12,628,375, together with add alternates A, B, C, and D for a total of $840,000, as well as the unit price—Foundation piles, $11.50 per linear foot

(product being $330,763), totaling overall $13,799,138 (GS–03B–16254) for construction of the Joseph H. Hirshhorn Museum and Sculpture Garden, Smithsonian Institution, Independence Avenue, Seventh to Ninth Streets SW., Washington, D.C., is accepted. The unit price of $20 for increase or decrease in the quantity of gallery partitioning is also accepted.

Three sets of the contract are enclosed. "Copy for contractor" is to be retained by you. Return two completely executed sets within 15 calendar days after receipt.

Your attention is called to the enclosed Sales Tax Bulletin No. 18, and also to the enclosed GSA form 1015 outlining suggestions for you to follow should the contract completion date be exceeded.

Please date, sign, and return the set of drawings being forwarded under separate cover.

Sincerely,

H. F. OFFENBACHER,
Chief, New Construction Branch, Design and Construction Division, Contracting Officer.

Three bids opened December 18, 1969.

Lowest (corrected lump sum bid) together with alternates A, B, C, and D accepted: BB

Corrected lump-sum bid	$12,628,375
Alternate "A" add	210,000
Alternate B add	130,000
Alternate C add	20,000
Alternate D add	480,000
Total	13,468,375
Foundation piles $11.50 per linear foot	330,763
Total	13,799,138

Specifications dated PB–REG–3 November 5, 1969.

Amendments Nos. 1, 2, 3, 4, and 5 thereto dated November 18, December 2, 5(2), and 8, 1969, respectively.

Completion: Within 915 calendar days from date of receipt of notice to proceed.

Appropriation:	
R3.568.X–X.81141.251.49356	$12,799,138
R3.472.X–X.81141.251.49356	1,000,000
Total	13,799,138

Liquidated damages in specifications $940 per c.d.

ADEQUACY OF FUNDS FOR CONSTRUCTION

Mrs. HANSEN. Do you have sufficient funds to construct the Hirshhorn Museum?

Mr. BRADLEY. Yes, Madam Chairman.

Mrs. HANSEN. The accepted bid exceeded the total authorization by about $1 million. How did you resolve this situation?

Mr. BRADLEY. Madam Chairman, we have letters that perhaps should be included in the record, if you please, that outline this entire event. Included is a response from Mr. Hirshhorn advising that he would put up the $1 million for construction, in order to make it possible for us to tell the General Services Administration to proceed with the combination of appropriated funds totaling $15 million and up to $1 million from Mr. Hirshhorn's private funds as a donation to construction.

LEGAL OPINION ON INTERMINGLING PUBLIC AND PRIVATE FUNDS

Mrs. HANSEN. Do you have a legal opinion on the legality of intermingling private funds and public funds for the construction?

Mr. BRADLEY. We do not have a formal one, but we can certainly get it.

Mrs. HANSEN. Please insert in the record the legal opinion on the legality of this procedure.

Mr. BRADLEY. Yes. I assure you we had many informal discussions before we proceeded.

(The information follows:)

USE OF SMITHSONIAN TRUST FUNDS AS WELL AS APPROPRIATED FUNDS FOR CONSTRUCTION OF THE JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN

The Smithsonian Institution is a unique educational establishment incorporated by Congress in 1846 to carry out the trust responsibilities of the United States "for the increase and diffusion of knowledge among men" and to administer the Smithson bequest independent of the Government itself. The Institution, under its authority "to receive money or other property by gift, bequest, or devise, and to hold and dispose of the same in promotion of the purposes thereof" (20 U.S.C. 55), has received substantial additions to this basic governmental endowment (sometimes referred to as Smithsonian "trust funds" or "private funds"). These additions have included not only money and securities, but all sorts of real and personal property.

For 124 years, these trust funds have been used for all the varied purposes of the Institution, including construction, as necessary and appropriate. The original Smithsonian building and the Freer Gallery are major examples of construction carried out with trust funds.

During its first few years the Institution was built and operated entirely with endowment income. Starting in 1858, Congress has supplemented this income with direct annual appropriations to provide for the growth of the Institution's educational programs, including construction of many of the buildings necessary therefor. (See, for example, act of June 28, 1955, 69 Stat. 189, authorizing the construction, for the Smithsonian, of the Museum of History and Technology.)

Thus, there is ample precedent and authority for the use of both appropriated funds and trust funds for the construction of Smithsonian buildings. When the Joseph H. Hirshhorn Museum and Sculpture Garden was authorized both as a building and an activity, by Public Law 89–788, a combination of public and private funds was contemplated from the start: a Federal contribution of up to $15 million for basic construction, and a private contribution of $1 million for purchase of additional works of art for the museum. When building costs rose about twice as fast as reasonably contemplated in 1966, the Institution decided not to exercise its prerogative to ask for the additional funds from Congress, but instead determined to use private funds contributed by the donor of the collection. With the agreement of the General Services Administration, which has the delegated responsibility for the construction project as a whole, these additional funds have now been committed to the building contract. This result is not only within the traditional practice and authority of the Institution, but also is further evidence of the generosity and good faith of the donor.

APRIL 22, 1970.

PETER G. POWERS,
General Counsel,
Smithsonian Institution.

COST PER SQUARE FOOT FOR CONSTRUCTION

Mrs. HANSEN. How many square feet will be in the museum and what will it cost per square foot for construction?

Mr. BRADLEY. There will be in the museum a total of 168,000 square feet in the Hirshhorn Museum proper as distinguished from the sculpture garden. The cost per square foot, I think, requires a little analysis in order to separate out the sculpture garden for which the bidders

varied from $1 million to $1,995,000. This was an alternate. We had a separate price on the garden. Some bid $1 million and some bid nearly $2 million, so we are going to have to size up how much fairly should be subtracted from the total bid in order to get to the building that has the square footage in it. We may do that readily, of course.

Mrs. HANSEN. Please do.

(The information follows:)

COST OF THE HIRSHHORN MUSEUM PER SQUARE FOOT

The cost of the Hirshhorn Museum and Sculpture Garden is itemized below:

Museum building (contract)	$12,799,138
Sculpture garden (contract)	1,000,000
Design and supervision (estimate)	1,554,200
AFIP relocation (estimate)	200,000
Contingencies (estimate)	717,662
Total project cost	16,271,000

The gross floor area of the building is 168,000 square feet.

The total project cost without the sculpture garden would be $15,271,000. That amount divided by 168,000 square feet gives a cost of $91 per square foot.

ARCHITECT FOR THE HIRSHHORN MUSEUM

Mrs. HANSEN. Who is the architect for this museum?

Dr. RIPLEY. Gordon Bunshaft of Skidmore, Owings & Merrill.

Mrs. HANSEN. How was he selected?

Dr. RIPLEY. He was selected by the Smithsonian and Mr. Hirshhorn together, in concert.

Mrs. HANSEN. Please insert in the record a listing of some of the projects Mr. Bunshaft has designed which would indicate his competence as a recognized architect.

Dr. RIPLEY. We will do that, Madam Chairman.

(The information follows:)

PROJECTS DESIGNED BY MR. GORDON BUNSHAFT OF SKIDMORE, OWINGS, & MERRILL

The following is a list of major projects designed by the New York office of the architectural firm of Skidmore, Owings & Merrill, of which Mr. Gordon Bunshaft is in charge:

Lever House Office Building, New York City.
Manufacturers Hanover Trust Bank, New York City.
Istanbul Hilton Hotel, Istanbul, Turkey.
Connecticut General Life Insurance Co., Bloomfield, Conn.
Reynolds Metal Co., Richmond, Va.
Chase Manhatan Bank, New York City.
First City National Bank, Houston, Tex.
Albright-Knox Art Gallery, Buffalo, N.Y.
Beinecke Rare Book and Manuscript Library, Yale University.
Bank Lambert, Brussels, Belgium.
Marine Midland Building, New York City.
Number One Main Place, Dallas, Tex.
American Can Co., Greenwich, Conn.

The firm of Skidmore, Owings & Merrill has received more first honor awards for excellence from the American Institute of Architects than any other firm in the United States and over two-thirds of those awards have been received by the New York office under Mr. Bunshaft.

CONSTRUCTION COSTS FOR THE HIRSHHORN

Mrs. HANSEN. The new annex to the National Gallery of Art was designed by I. M. Pei according to information received by the committee. We understand the construction costs for that structure are estimated at $100 per square foot. How do you reconcile this estimate with the current estimate of construction costs for the Hirshhorn Museum?

Mr. BRADLEY. May we supply a statement on that for the record? I would certainly want to check with my conferees over at the Gallery to make sure we know what their cost per square foot is.

Mrs. HANSEN. Please do.

(The information follows:)

COMPARISON OF THE HIRSHHORN BUILDING COSTS WITH THE PROPOSED NEW NATIONAL GALLERY OF ART BUILDING

Information obtained from the National Gallery of Art on the status of their planning and cost estimating follows:

Preliminary plans will be submitted to the Trustees next month. It is expected that the working drawings to be used for the construction contract will be completed at about the beginning of the next calendar year (1971). Because the plans are incomplete and also because of the uncertainty of building construction cost levels at the beginning of 1971, the Gallery considers its preliminary cost estimates to be tentative and subject to change. Accordingly, the Smithsonian Institution is unable to make the requested comparison of costs.

The Hirshhorn Museum and Sculpture Garden is under contract and construction work is in progress. The contract price and estimates of other elements of total cost are given above.

SUMMARY JUSTIFICATION MATERIAL

Mrs. HANSEN. Please insert pages E–1 through E–7 of the justifications in the record at this point.

(The pages follow:)

SMITHSONIAN INSTITUTION

"SALARIES AND EXPENSES"

Report on the Number of Permanent Positions by Organization Unit

Unit	1969 Actual	1970 Estimate	1971 Estimate	Increase 1970 over 1969
United States National Museum	210	214	217	+ 3
National Museum of History and Technology	154	155	155	0
National Museum of Natural History	258	258	268	+ 10
National Air and Space Museum	41	41	45	+ 4
National Zoological Park	0	0	252	+252
National Armed Forces Museum Advisory Board	7	7	7	0
Anacostia Neighborhood Museum	4	8	12	+ 4
Freer Gallery of Art	7	7	7	0
National Collection of Fine Arts	56	56	60	+ 4
National Portrait Gallery	27	27	27	0
Joseph H. Hirshhorn Museum and Sculpture Garden	7	13	20	+ 7
Smithsonian Astrophysical Observatory	54	57	57	0
Smithsonian Tropical Research Institute	23	38	43	+ 5
Radiation Biology Laboratory	32	36	40	+ 4
Office of Ecology	5	5	8	+ 3
Office of Oceanography and Limnology	18	18	26	+ 8
Center for the Study of Man	1	2	5	+ 3
Center for Short-Lived Phenomenon	0	0	1	+ 1
Office of Academic Programs	17	18	20	+ 2
American Revolution Bicentennial	0	0	5	+ 5
Environmental Sciences Program	0	0	14	+ 14
International Activities	15	15	15	0
Woodrow Wilson International Center for Scholars	0	2	0	- 2
Administrative and Central Support Activities	237	243	267	+ 24
Buildings Management Department	827	857	877	+ 20
GRAND TOTAL	2,000	2,077	2,448	371

SMITHSONIAN INSTITUTION
"Salaries and Expenses"

Report of Obligations by Objects

	1969 Actual	1970 Estimate	1971 Estimate	Increase or Decrease (-) '71 over '70
11 Personnel Compensation..	$17,368,000	$19,570,000	$23,181,000	$3,611,000
12 Personnel Benefits.....	1,290,000	1,471,000	1,758,000	287,000
21 Travel and Transportation of Persons.....	277,000	334,000	466,000	132,000
22 Transportation of Things..	218,000	198,000	250,000	52,000
23 Rent, Communications, and Utilities.....	1,596,000	1,928,000	2,423,000	495,000
24 Printing and Reproduction	515,000	597,000	724,000	127,000
25 Other Services.....	2,779,000	2,915,000	3,773,000	858,000
26 Supplies and Materials....	857,000	1,048,000	1,707,000	659,000
31 Equipment.....	1,407,000	1,446,000	2,023,000	577,000
41 Grants.....	8,000	58,000	62,000	4,000
42 Insurance Claims and Indemnities.....	1,000	0	0	0
Total Obligations.....	$26,316,000	$29,565,000	$36,367,000	$6,802,000
Appropriation Adjustments:				
Receipts and Reimbursements from Federal funds.....	-6,000	0	0	0
Unobligated balance lapsing..	+29,000	0	0	0
Transferred to other accounts	+103,000	0	0	0
Appropriation or estimate...	$26,443,000	$29,565,000*	36,367,000	$6,802,000

*Includes anticipated supplemental of $1,431,000.

SMITHSONIAN VISITORS
(By fiscal year)

Fiscal Year	Smithsonian Institution Building	Arts and Industries Building	Museum of Natural History	National Air and Space Building	Freer Gallery of Art	Museum of History and Technology	Fine Arts & Portrait Gallery	Total[8/]
1961	1,024,526	2,912,371	2,047,973	987,858	130,746	(1)	(3)	7,103,474
1962	1,222,112	3,471,050	2,113,053	1,986,319	130,597	(1)	(3)	8,923,131
1963	1,630,280	3,534,182	2,288,397	2,673,618	183,359	(1)	(3)	10,309,836
1964	1,311,061	2,457,243	2,512,306	1,854,186	168,625	2,509,774[1/]	(3)	10,813,195[2/]
1965	1,065,635	2,028,175	3,051,472	1,705,683	210,972	5,091,776	(3)	13,153,713
1966	870,010	1,746,715	2,988,006	1,494,922	222,089	4,829,112	(3)	12,150,854
1967	1,020,312	1,638,873	3,409,957	1,484,422	212,920	5,546,102	(3)	13,312,586
1968	847,176	1,344,622	3,257,957	1,123,698	169,533	4,750,023	30,888	11,523,897[4/]
1969	275,259[5/]	1,493,141[6/]	2,916,749	1,225,959	179,374	4,174,071	166,177	10,430,730[7/]

1/ Museum of History and Technology opened January 1964.
2/ July-August 1964, certain Smithsonian Institution buildings were open 4:30 to 10 p.m. for the first time.
3/ National Collection of Fine Arts opened May 1968.

4/ Reflects the significant decrease in visitors to the Nation's Capital in the first six months of CY 1968, due to unsettled local conditions.
5/ Building closed for renovation October 1968.
6/ Since the first display of the lunar sample in September 1969, visitors to this building have averaged approximately 270,000 per month (2,532,000 on an annual basis).

7/ Fiscal year 1969 visitor totals represent the effect of local conditions in late 1968 on visitor attendance. During CY 1969, a total of 12,438,909 visitors came to the Smithsonian, an increase of 25 percent over CY 1968.
8/ An additional 5,000,000 visitors visit the National Zoological Park annually.

SMITHSONIAN INSTITUTION

Multiyear Projections of Selected "Outputs"
By Program Category

Program Category	Actual 1969	Estimated 1970	1971	1972	1973	1974	1975
I. Research and Scholarship							
Cooperative Ph.D.'s completed at Smithsonian	55	60	70	75	80	100	115
Postdoctoral investigators	45	55	65	80	110	135	165
Smithsonian-University cooperative graduate fellowships	2	3	5	10	15	25	30
II. Growth of National Collections							
(Number of specimens in the Smithsonian's museums and galleries) (in millions)	67.0	69.0	72.0	73.0	74.0	76.0	78.0
III. Public Education and Enlightenment							
A. Number of visitors (Mall facilities exclusive of National Gallery of Art) (in millions)	10.4	14.3	16.8	17.0	18.0	19.0	19.5
B. Organized visitation programs							
Secondary school visits (in thousands)	11.2	12.0	15.0	18.5	23.5	31.5	39.0
Primary school visits (in thousands)	38.0	47.0	60.0	75.0	94.0	127.0	157.0

SIGNIFICANT EXHIBITS, FISCAL YEAR 1969

National Museum of Natural History

"Masada"
The Indomitable Major John Wesley Powell
Jean Louis Berlandier--A French Scientist
Yorba Textiles

National Museum of History and Technology

"The Quest for the Presidency"
Inaugural Medal Display
"High School Graphics"
Edgar Dorsey Taylor drawings
Imogen Cunningham exhibit
"The Coke Push"
Cotton Gin display
"Patent Controversies in the History of Radio"
"Hail to the Chief"
Josiah K. Lilly coin collection
Raphael Soyer lithograph display
"Woman, Cameras, and Image"
"The Lingering Shadow"
"Abandoned Mine Scenes"
"Bible Quilt" display
"Human Rights Year"
"Stamps of Malta"

Anacostia Neighborhood Museum

Jazz show
Makonde sculpture
The Sage of Anacostia

Division of Performing Arts

Folklife Festival
Summer in the Parks
Puppet theatre
"Perceptions"

National Collection of Fine Arts

Alexander Archipenko
The Roy R. Neuberger Collection
"The Figurative Tradition in Recent American Art"
"European Painters Today"
Yasuo Kuniyoshi
WPA Prints
Charles Sheeler
The Graphic Art of Winslow Homer"
Rico Lebrun
"The American Poster"

National Portrait Gallery

"This New Man--A Discourse in Portraits"
"Time"
A 19th Century Gallery of Distinguished Americans

Cooper-Hewitt Museum

"Early 20th Century Posters"
Paintings by Winslow Homer
Sketches by Frederic Edwin
"Counterchange and New Color"
"Contemporary Japanese Posters"
"A Treasury of Design"

National Air and Space Museum

NC-4 Transatlantic Flight display
Lunar Sample display
X-15 display
Apollo display

CONTRACTS AND GRANTS TO THE SMITHSONIAN INSTITUTION
Fiscal Years 1969 and 1970

Contracts	1969	1970	Grants	1969	1970
National Aeronautics and Space Administration					
Historical Artifacts	$11,969	0	Satellite Tracking Program	$4,610,297	$2,200,000
Interdisciplinary Communication	149,990	$199,606	Recovery of Meteorites	150,000	0
Geodetic Satellite Analysis	105,715	0	Miscellaneous	140,780	89,980
Radio Meteor Research	492,000	250,000			
Celescope	767,000	847,000		$4,901,077	$2,289,980
Miscellaneous	216,585	227,640			
	$1,743,259	$1,524,246			
Department of Defense					
Pacific Birds Program	$190,080	0	Tropical Forest Ecology	$50,894	0
Mosquitoes in Southeast Asia	131,800	$161,895			
Diseases in Overseas Areas	155,068	39,000			
Mammalian Parasites	91,299	100,937			
Miscellaneous	384,966	299,237			
	$95[illegible],2[illegible]3	$601,069			
Department of Health, Education, and Welfare					
			Ecology & Behavior of Primates	$16,436	0
			Cancer of the Pelvic Region	19,676	0
			Human Osteon Chemistry	72,506	0
			Curricula in Environmental Design	11,411	0
			Postdoctoral in Education	15,047	0
				$135,076	0
Atomic Energy Commission					
Protein Properties	$15,634	0			
Radiation & Plant Metabolism	64,202	0			
	$79,836	0			

Contracts	1969	1970	Grants	1969	1970
			National Science Foundation		
Processing Antarctic Collections..	$90,764	$140,640	Taxonomic Study.....	$18,900	0
Science Information Exchange.....	1,800,000	1,600,000	Papers of Joseph Henry	30,000	0
Miscellaneous.....	18,000	0	Marine Technician Program	25,000	0
			Taxonomy of Grasses	12,000	0
	$1,908,764	$1,740,640	Undergraduate Research Program.....	35,070	0
			Miscellaneous.....	0	$125,978
				$120,970	$125,978
			National Institutes of Health		
Miscellaneous.....	$95,326	0	Miscellaneous.....	0	$259,000
			Department of the Interior		
Miscellaneous.....	$22,780	0			
			Other		
Miscellaneous.....	$102,750	$204,728	Miscellaneous.....	$25,110	$85,587
Total, Contracts...	$4,905,928	$4,070,683	Total, Grants...	$5,233,127	$2,760,545

SMITHSONIAN MAGAZINE

Mrs. HANSEN. The Smithsonian Institution is publishing a new magazine called the Smithsonian. Give us the details on this project.

Dr. RIPLEY. We would like to insert the details in the record if we may.

(The information follows:)

The Smithsonian magazine has been established primarily to extend the Smithsonian Associates into a nationwide public membership group. The magazine is offered as part of national membership in the Associates, which organization has heretofore been developed very successfully on a regional or Washington-area basis. Smithsonian is being issued monthly; there are no newsstand or other commercial sales. As with all activities of the Smithsonian Associates, the magazine is privately funded.

The magazine already gives promise of becoming the Institution's principal instrument for presenting the Smithsonian's traditional concerns and research interests to a large national audience. The first or April issue is currently in the mails; circulation has reached 180,000 at the time of writing and is expected to reach 200,000 very soon.

Although Smithsonian will reflect all of the Institution's subject area interests, it will seek to bind these interests into the central theme of the current condition of man—his environment, sciences, arts, adventures, follies and fortunes. Writers and topics for the first issue included Pulitzer Prize winner Dr. Rene Dubos on the current condition of man, Russell Lynes on the Metropolitan Museum's 100th anniversary, National Zoological Park research scientist Dr. John Eisenberg on the restoration of Ceylonese elephants, and Dr. Jon N. Weber on the infestation of Pacific coral reefs by the crown-of-thorns starfish.

The Smithsonian magazine staff is headed by Edward K. Thompson, who comes to the Smithsonian after 18 years as Managing Editor and Editor of Life. With Mr. Thompson on the board of editors are Ralph T. Backlund, formerly Associate and Managing Editor of Horizon Magazine; R. Hobart Ellis, who has served as editor of various scientific publications, including Nucleonics, Nuclear Fusion and Physics Today; Edwards Park, formerly editor of several magazines in Australia and Associate Director of the National Geographic's book department; and Mrs. Grayce P. Northcross who has done research and reporting for Time, Life, and USIA's America and most recently served as Text Editor of Topic.

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS

Mrs. HANSEN. What is the current status of the Woodrow Wilson International Center for Scholars? You are not requesting any funds in this budget for the Center.

Dr. RIPLEY. We had asked the Bureau of the Budget for a sum of money.

(Discussion off the record.)

Mrs. HANSEN. I am startled that there are not any funds in this budget for the Center in view of President Nixon's deep interest in Woodrow Wilson as a scholar, and as a President.

Dr. RIPLEY. Dwight Eisenhower Memorial College received some money recently as I understand it from the Congress.

Mrs. HANSEN. Is it in the budget?

Dr. RIPLEY. We requested $934,000 in the President's budget for fiscal year 1971 for the Woodrow Wilson Center. Part of this is for the Center's postdoctoral program. Additional funds are to be sought from private sources. The balance of the requested funding is for administrative support, including program staff, equipment, and furnishings. No funds were provided in the President's budget allowance to the Smithsonian Institution.

DIVISION OF PERFORMING ARTS

Mrs. HANSEN. You have budgeted $221,000 for the Division of Performing Arts. Please describe your program plans in this connection for 1971.

Mr. BRADLEY. Of course.

Dr. RIPLEY. Would you like us to put that in the record?

Mrs. HANSEN. Please discuss it now.

Dr. RIPLEY. We requested an increase of two positions and $50,000 for the Division of Performing Arts, that is for the next fiscal year. This consists of the following items: Program support funds in the amount of $27,000 are requested to design and produce the American Folklife and American College Theater Festivals. The Folklife Festival was attended by 618,000 persons in July 1969, and the College Theater Festival was very successful as a forum for the best achievements of 10 of the Nation's colleges and universities. In both cases we require funds for staging, equipment rental, supplies, and related production costs. Two additional clerical assistants at $12,000, and funds for contractual services at $11,000 are required to permit the division to provide technical assistance and advice to State groups and other organizations interested in producing folk, craft, and similar performances.

Mr. WARNER. Madam Chairman, did you mean by your question that you want more description of what we will be doing this year in the way of programs?

Mrs. HANSEN. Yes.

Mr. WARNER. I would like to say, Madam Chairman, that for the next year we are reducing our performing arts program in general, and we are not having any theatrical attractions that are possibly competitive with commercial theater. We are not having a summer musical comedy series which was the one where we used non-Equity companies last year. Of course, we did consult with Equity, but they did not allow us to use a split company. We will not have that this summer. Our principal activities for the coming year include the Folklife Festival in July. We are also undertaking at no cost to us a jazz festival for the National Capital Parks department of the Department of Interior but that will be fully funded by them. We will go ahead only on that basis. We will continue with the puppet theater, which is a good self-liquidating proposition. We are preparing for the Bicentennial and trying to make a better Folklife Festival. We do on our private side give a certain number, not so much of plays or theater in the usual sense, but rather of unusual concerts, and dance groups for our associates. This is by subscription to our privately funded membership organization.

So the three program elements that we are now pursuing are the Folklife Festival; some small theatrical performances, that is not so much plays or drama, but more often concerts for our Smithsonian Associates; and a very important new program that we are just now developing. We have something called Smithsonian Institution Touring Performances. Some of the companies that have served us so well in the Folklife Festival we are now booking around to small colleges. We have one Appalachian group, for example. We have another roots or jazz or black music group. We have another chamber concert group.

This we call Touring Performances. It is a beginning, in a sense, to duplicate in the performing arts what we do with our traveling exhibition service.

Mrs. HANSEN. Are all the traveling performances folk exhibits?

Mr. WARNER. In the folk and rock categories. The universities have responded very well to this. They say, "Yes, send us more." These are some of our future horizons for the performing arts.

Dr. RIPLEY. These are essentially going to colleges and universities, and high schools.

Mrs. HANSEN. I have been very interested in the college drama festivals. This is one program that has been very successful. Many talented young people have had an opportunity to appear. I certainly think the puppet theater and the folk festival have been marvelous.

Dr. RIPLEY. This certainly makes an inspiring contrast to some other activities that happen in our cities today.

Mrs. HANSEN. Yes. I saw the youngsters at one of your puppet shows, and I have never seen faces like that in my life. They were lost in another world. They thoroughly enjoyed it.

Dr. RIPLEY. I may say we have had a number of testimonial letters from Members of the Congress who attended these folk festivals on the Mall, quite a number, because some Congressional Members are here with their children in the summer. Without exception we have nothing but enthusiasm.

Mrs. HANSEN. Mr. Wyatt.

Mr. WYATT. I just have one question, Madam Chairman. On page E2 under the summary report of obligations by objects, this is, I assume, a different kind of breakdown of everything that we have been over here. Under personnel compensation you have a very large increase for 1971 over 1970.

Dr. RIPLEY. This year, sir; this includes the Zoo which is a new obligation.

Mr. WYATT. This is for personnel of the Zoo?

Dr. RIPLEY. Yes. I may say we are peculiar in our Federal budget in that over 70 percent of our obligations are in this "Salaries and Expenses" to maintain these buildings, produce exhibits, and conduct research.

Mr. WYATT. These figures, Dr. Ripley, I assume reflect the addition of the Zoo personnel, the pay increases?

Dr. RIPLEY. Yes, sir.

Mr. WYATT. And probably some peripheral other personnel?

Dr. RIPLEY. That is true. Under the employment ceilings, and so on, we are essentially talking about pay increases, various kinds of nondiscretionary increases which are locked into the system.

Mr. WYATT. Mandatory increases.

Dr. RIPLEY. Over 75 percent of our budget is involved with these kinds of built-in nondiscretionary expenses, such as payroll, utilities, and maintaining our buildings.

Mr. WYATT. Thank you.

Mrs. HANSEN. Thank you very much, Mr. Wyatt. Thank you very much, Dr. Ripley. I think you and your staff have made a very fine presentation today and, as usual, you have given us a lot of interesting information.

Dr. RIPLEY. Thank you very much. We have enjoyed this presentation.

MONDAY, APRIL 13, 1970.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

WITNESSES

DR. EMERY A. JOHNSON, DIRECTOR, INDIAN HEALTH SERVICE
HENRY V. CHADWICK, EXECUTIVE OFFICER, INDIAN HEALTH SERVICE
RICHARD S. GREEN, CHIEF, OFFICE OF ENVIRONMENTAL HEALTH, INDIAN HEALTH SERVICE
IRVING J. LEWIS, DEPUTY ADMINISTRATOR
JAMES B. CARDWELL, DEPUTY ASSISTANT SECRETARY, BUDGET

INDIAN HEALTH SERVICES AND INDIAN HEALTH FACILITIES

Mrs. HANSEN. We now have Indian Health Service. Our principal witness is Dr. Emery Johnson, the Director. What is the former Director, Dr. Rabeau, doing?

Dr. JOHNSON. He is heading our research and training center in Tucson.

Mrs. HANSEN. The committee wishes Dr. Rabeau the very best. He was an excellent witness and did an excellent job.

Mr. REIFEL. I would like to welcome Dr. Johnson to our committee. Dr. Johnson was born in my district, Sioux Falls, S. Dak. He served as medical director on the Winnebago and Omaha Indian Reservations at one period in his field service some 10 or 15 years ago. He has done an outstanding piece of work for the Indian people and the Government, and worked his way up, and I must say that the Surgeon General is well advised to have designated him as the Director in Dr. Rabeau's place and I welcome him here.

GENERAL STATEMENT

Mrs. HANSEN. It is a pleasure to have you this morning. Please insert your biography in the record at this point. Also insert your general statement in the record and summarize it for us.

(The biography and statement follow:)

BIOGRAPHICAL SKETCH

Name: Emery A. Johnson, M.D., M.P.H.
Position: Director, Indian Health Service.
Birthplace and date: Sioux Falls, S. Dak., April 16, 1929.
Education: Hamline University, St. Paul, Minn., 1951, Bachelor of Science; University of Minnesota Medical School, Minneapolis, Minn., 1954, Doctor of Medicine; University of California, Berkeley, Calif., 1964, Master of Public Health.
Experience: Present, 1967–69, Director, Indian Health Service, Rockville, Md.; Deputy Director, Division of Indian Health, Silver Spring, Md.; 1966–67, Chief, Office of Program Services and Assistant Director, Division of Indian Health, Silver Spring, Md.; 1964–66, Indian Health Area Director, Indian Health Area Office, Billings, Mont.; 1961–63, Medical Officer in Charge, Phoenix Indian

Medical Center, Phoenix, Ariz.; 1959–63, Assistant Area Medical Officer in Charge, Indian Health Area Office, Phoenix, Ariz.; 1957–59, Medical Officer in Charge, PHS Indian Hospital, Winnebago, Nebr.; 1956–57, Medical Officer in Charge, PHS Indian Hospital, White Earth, Minn.; 1955, Medical Officer, PHS Indian Hospital, White Earth, Minn.

Association memberships: American Public Health Association; American Medical Association; American Academy of General Practices; Association of Military Surgeons; Alpha Omega Alpha—National Honorary Medical Society Delta Omega—National Honorary Public Health Society.

Awards: PHS Commendation Medal, October 5, 1966.

STATEMENT BY DIRECTOR, INDIAN HEALTH SERVICE

Madam Chairman and members of the committee: It is now nearly 15 years since responsibility for the health care of American Indians and Alaska Natives was transferred to the Department of Health, Education, and Welfare from the Department of the Interior. Since July 1, 1955, when the Indian Health Service was established, program activities have been directed to improving the health of these people. Special emphasis on particular health problems has varied through the years according to the most critical needs of the times. The result as been a metamorphosis from a health level that was the lowest of any population group in the United States to one that now more nearly approximates other minorities.

The Indians' health still, however, is 20 to 25 years behind that of the general population.

In the early days of the program, the greatest needs were for resources to permit assembling a competent staff and establishing adequate facilities where health care could be provided. The major immediate program priority was to combat tuberculosis, which existed in epidemic proportions, especially in Alaska, where death rates of Alaska Natives were more than 17 times as high as the general U.S. population. Indian death rates were 5½ times as high as the U.S. general rate.

Next ranking priorities were to reduce infant death rates which were 2½ times as high as the all races rates and deaths from gastroenteric diseases which were about nine times as high among Indians as the U.S. general population. At the same time, intensive preventive services had to be introduced, to reduce disease and death, and to increase life expectancy.

We are pleased that as a result of continued and increased support of the Congress, the assistance of numerous private and governmental agencies and the active participation of Indian and Alaska Native people, significant progress has been made toward accomplishing the major objectives of bringing down the tremendously high disease and death rates and of adding years to the age to which Indians now can aspire to live.

An essential element to the success of the Indian health program is the participation and involvement of the Indian people, not only as receivers of services, but as providers of services and advisers. The Indian Health Service consistently has fostered an active role for Indians and is ever expanding the opportunities for participation, many to meet the expressed requests of Indian people.

A prime mission of the Service is to involve Indians in the planning, operation and evaluation of their health programs at every level of operation. Through health committees established reservationwide and in individual communities, Indian and Alaska Native people are working side by side with the professional health staff, assessing their health problems and initiating positive action to overcome them. At each administrative level—service units, area offices and headquarters—Indian advisory boards have been selected and are participating in the decisionmaking processes of the Service as they concern conduct of the health program.

The recent assumption of a leadership role by Indian people and their concurrent sense of responsibility for programs designed to improve their well-being, are having considerable impact upon many health problems. Indian-developed efforts such as public housing programs, tribal community action programs, tribal alcoholism control programs, tribal economic development programs, et cetera are becoming significant health resources and are providing new opportunities to place increasing health responsibilities under the direct control and administration of Indian people.

An over-all recruitment and training effort to bring Indians into health careers is another major Indian Health Service activity.

Some 50 percent of the Indian Health Service staff are of Indian descent. Along with performing their regular duties, Indian staff members are invaluable in reducing language and cultural barriers between Indian people and the health staff, in explaining good health principles and practices to Indian people and in encouraging them to accept services available to them. As members of the health teams, Indians project a success image which is important to themselves and their fellow Indians, and are able to contribute to the economy of their communities. The availability of new and expanded social and economic benefits for Indian people serves to ignite a renewed interest in helping themselves to improve the quality of their life, including their state of health.

One of the most successful and viable new programs undertaken cooperatively by Indian tribes and the Indian Health Service, is the community health representative program started in fiscal year 1969. The community health representative is a unique category of health worker who is selected, employed and supervised by Indian tribes under contract with the Indian Health Service. The Indian Health Service provides the training for the community health representatives, tailored to the needs of the particular tribes, but emphasizing community development and individual and group motivation. These representatives provide a communications link between the Indians and the health staff and stimulate ideas and actions to solve health problems. They are particularly effective in reaching people who had formerly resisted health care, and in locating hitherto unknown resources and avenues to problem solution.

A similar program is being conducted in Alaska. Although the Indian Health Service had been using health aides for many years in Alaska villages, training had been generally limited and informal, and aides served on a volunteer basis. Beginning in fiscal year 1968 however, appropriations included funds and positions to permit expanding the program and fiscal year 1969 appropriations permitted the training and employment of a number of aides on a part-time basis. The function of the Alaska Native community health aide is substantially the same as that of the community health representative, however the extreme isolation factor in Alaska makes it necessary for the Service to include additional training to prepare the aides to provide a wide range of medical services under professional supervision received via short-wave radio or telephone.

By the end of fiscal year 1970, the Indian Health Service will have trained and placed under contract 310 community health representatives. In addition, 185 Alaska Native community health aides are receiving compensation and will have completed phase 2 of a 4-phase training program. These combined programs represent contracts with some 65 tribal groups and 54 Alaska Native villages. This distribution has included all eight of our Indian Health Service Area Offices and extends over 19 States.

These are but two categories in which the Indian Health Service provides training and employment for people of Indian and Alaska Native descent. Others are licensed practical nurses, dental assistants, sanitarian aides, laboratory assistants, medical social assistants, and food service supervisors. Two-year programs are conducted to train medical-record technicians and radiologic technicians and licensed practical nurses are sponsored for registered nurse training. On-the-job training is provided for nursing assistants, food service workers and medical-record clerks. A limited amount of specialty training for physicians, dentists, nurses, pharmacists, health educators, and other health professionals is supported for both Indians and non-Indians.

PROGRAM PROGRESS

The 415,000 Indians and Alaska Natives eligible for the Indian health program have taken increasing advantage of services available to them. Since 1955, annual admissions to Indian and contract hospitals have nearly doubled; outpatient visits made to hospitals, health centers and field clinics have more than tripled; and the number of dental services provided has almost quadrupled. Nearly all Indian births now occur in hospitals.

The Indian Health Service now operates a total of 51 hospitals, 71 health centers and over 300 field health stations. Since 1955, 12 hospitals, 11 health centers and 48 field health stations have been built and major alterations made at 11 other facilities. Through Public Law 85–151, 129 beds have been added in

17 community hospitals to serve Indians and Alaska Natives and 18 more beds are being added in one other community facility in fiscal year 1970.

A 200-bed medical center is under construction at Phoenix, to be ready for occupancy in late 1970. Six new health centers and 10 health stations are presently under either design or construction.

The professional staff has been expanded from a nucleus of Public Health Service personnel, mainly physicians and nurses on detail to the Bureau of Indian Affairs, into a competent health team of medical and environmental specialists.

Since passage of Public Law 86–121 in 1959 enabling construction of sanitation facilities, projects have been authorized to provide running water and an adequate means of waste disposal for approximately 48,000 Indian and Alaska Native families through fiscal year 1970. An additional 17,000 families have benefited from some type of sanitation facility improvement.

The Indians have made significant contributions to this program in terms of labor, materials, and funds.

A continuing program of consultation and other services concerning the environment also have been provided for added thousands on reservations and in native communities.

ACCOMPLISHMENTS

There have been substantial improvements in health levels of Indians and Alaska Natives. From 1955 to 1967 (latest year available), infant death rates have declined 48 percent, from 62.5 to 32.2 per 1,000 live births; tuberculosis death rates are down 70 percent; gastroenteric death rates are down 60 percent, and death rates from influenza and pneumonia are down 40 percent.

Tuberculosis, the former number one health problem among Indians and Alaska Natives has been dramatically contained. In 1956 for example, the Indian Health Service had 3,606 tuberculosis admissions to Public Health Service Indian and contract hospitals. In fiscal year 1969, there were only 830 tuberculosis admissions. This represents a decline of 77 percent in tuberculosis hospital admissions.

New active case rates of tuberculosis among Indians and Alaska Natives also have been drastically reduced. They are down 44 percent since 1962.

Life expectancy for Indians and Alaska Natives now is 64 years as compared to 70 for the general population. In 1950 the Indian life expectancy was 60 years and that of the general population, 68 years. The gap is narrowing.

TRENDS

As the critical curative needs of Indians were being met and preventive measures began to take effect, a number of changes in health patterns have occurred, especially within the past 6 or 7 years. Hospital admissions, while continuing to experience annual increases have slowed down, and the average length of stay in hospitals has decreased markedly. At the same time, medical care on an outpatient basis has continued to increase substantially each year, especially at facilities where comprehensive diagnostic and therapeutic care can be obtained.

Considerable reductions have been made in the hospitalization of patients with infective and parasitic diseases, diabetes mellitus, gastroenteritis and colitis, skin disease, and deliveries and complications of pregnancies. The percentage of pediatric patients is showing a significant downward trend in admissions to PHS Indian hospitals. Numbers of patients with chronic diseases and other conditions associated with old age are increasing.

These trends reflect the impact of preventive medical and public health services which have reduced infectious and preventable diseases; the maternal and child-care effort which has reduced infant and maternal deaths and illnesses; and the more accessible and improved facilities, and laboratory, X-ray, and other expanded services which have made it possible to diagnose, treat and prevent more diseases that might previously have required hospitalization.

They also are indications of the generally better state of health of Indians and Alaska Natives.

Despite these improvements, however, comparisons of Indians' health with that of the U.S. general population, reveal such serious discrepancies that we cannot relax our health efforts, nor can we permit any reversals of the forward trends.

Age-adjusted mortality data for 1967 show how much higher Indian death rates are than those of all U.S. races: deaths from tuberculosis, 8 times; cirrhosis of liver, 4.4 times; accidents, 3.9 times; homicide, 3.5 times; gastritis, 3.3 times; influenza and pneumonia (excluding newborn), 2.4 times; diabetes and suicide, 2 times.

Moreover, the Indian and Alaska Native infant death rate per 1,000 live births is 1.4 times as high as the U.S. all races rate of 22.4. This higher rate is primarily due to deaths in the post-neonatal period of 28 days to 11 months when infants leave the hospital and return to the complex problems that accompany poor environment and poverty.

SPECIAL HEALTH PROBLEMS

Added focus is needed on special Indian health problems and on ways to obtain maximum results from available resources. During the past year, increased emphasis was placed on development of innovative multi-agency approaches to health service delivery. To meet the extreme health needs of natives in the Bethel, Alaska area for example, coordination was undertaken of a three-pronged program including nurse-midwife services, a prematernity home and an otitis media effort. Involved with the Indian Health Service are the Alaska Federation of Natives, the Federal Office of Economic Opportunity, the State of Alaska and the voluntary Alaska Crippled Children's Association.

In California the Indian health service contracted with the State department of public health in cooperation with the California Rural Indian Health Board to train and employ Indian community health representatives, and is working with the California Rural Indian Health Board to develop an in-depth plan for meeting the health needs of rural California Indians who are not receiving adequate health services.

At the Service's Tucson complex, studies were continued at the health program systems center into all aspects of delivering health services in order to develop a system which will best meet a community's health needs within the framework of available resources. At the Desert Willow Training Center, workshops, seminars, and training courses were held to develop competencies in both Indian and non-Indian groups to assist the Indian health program.

Mental health

The effects of poverty, cultural conflict, geographic isolation, unemployment, lack of education, degradation of the role of the father in the family and an adverse physical environment all combine to develop in the reservation Indian a frustration and sense of hopelessness. As a result, suicide rates among Indians and Alaska natives are two times as high and the homicide rate 3½ times the all-races rate. Alcoholism, with the attendant child neglect and family disorganization, is prevalent in many reservation communities. Emotional problems and behavioral disorders are frequent among Indian children.

The first community mental health program of the Indian health service was started on the Pine Ridge, South Dakota Reservation in 1966 to provide services for the Sioux and to develop a program for use on other reservations. All Indian health areas now have community mental health programs to some degree and most area staffs include psychiatrists and other mental health professionals such as psychologists, psychiatric social workers and mental health nurses.

Substantive progress has been made in developing definitive methods of operation and experienced people are working in the field. Area mental health teams cooperate with a wide variety of organizations concerned with Indians such as universities, Government agencies, tribal governments, welfare organizations, church groups, legal aid societies, and schools.

Special programs have been developed to meet the acute problems, such as alcoholism, suicides, and the mental health problems of children and youth.

Nutrition

Poor nutritional status has been identified as a major health problem among Indians and Alaska Natives for a number of years. Mild and moderately severe nutritional deficiencies are relatively common in this population with infants and preschool children, and women in the childbearing years of 15–44 par-

ticularly vulnerable to malnutrition. Malnutrition is a problem in itself and also is a contributing or complicating factor in a wide variety of other health problems and illness such as infectious disease, retarded physical growth, higher infant death and disease rates, maternal deaths and birth complications, nutritional anemia, significant overweight or underweight, and chronic disease.

The poor nutritional health of these populations is closely related to economic and social problems. Many Indian and Alaska Native people do not have enough food or enough income to provide nutritionally adequate diets without substantial supplementation. This situation is further complicated by the people's lack of knowledge of proper food habits and the relationship of food to health, which would motivate the best use of resources that are available.

The Indian health service has consistently stressed intensive education in nutrition, adapting proper principles to the food habits and cultural practices of Indians and Alaska Natives. A program increase is being requested in order to augment the number of professional nutrition and dietetic staff members now reaching approximately 20 percent of the two populations.

Food assistance programs, including commodities, supplemental food program, food stamps, school breakfasts, and school lunches are reaching only a small percentage of Indians and Alaska Natives who should be receiving them. This is due to a number of factors: stringent eligibility and certification requirements, difficulties in transporting foods home from distribution centers, lack of home storage space for monthly food supplies, and distances to certification centers and to food stamp distribution centers.

Otitis media

Otitis media, middle ear disease, is one of the most prevalent infectious diseases among Indians and Alaska Natives. It has been the first or second leading notifiable disease since recording was begun in 1961 (first each year since 1964) and numbers of cases have steadily increased. It has replaced tuberculosis as the major health problem among Indians in all areas, inflicting serious and often permanent damage to those persons who contract the disease. Children are affected the hardest, often suffering severe hearing loss which results in physical incapacitation and social, vocational and educational retardation.

In 1968 there was a total of 36,340 cases of otitis media reported by the Indian Health Service with a rate of 9,073.8 per 100,000 population. In the same year, 2,098 discharges from Indian and contract hospitals were for otitis media. This represented 20,688 hospital days.

The principal program impact to date has been in the treatment of active cases and to some extent in the provision of restorative surgery. This is a large number of patients in need of treatment. We need to develop a better and more comprehensive case finding program for otitis media, and a preventive program which attacks the environmental, social, cultural and educational factors which contribute to the incidence of the disease.

Trachoma

Trachoma is an eye disease seldom encountered in the general population, but most serious among American Indians, particularly in the Southwest where it is a major cause of reduced vision. In fiscal year 1967 a 5-year trachoma control program was initiated. Three medical teams consisting of ophthalmologists, nurses, and education specialists travel from PHS Indian hospitals at Phoenix and Tuba City, Ariz., and Gallup, N. Mex., to examine and treat both general and school populations within their respective jurisdictions. All contacts of each positive case are checked and follow-ups are made within 6 months to see if patients need retreatment.

The established program objective of reducing trachoma as a serious disease has almost been achieved.

Family planning

Family planning includes birth control, increasing fertility, and promotion of education for responsible parenthood. To help combat the poor state of maternal and child health among Indians and Alaska Natives, the Indian Health Service intensified family planning activities in 1965. Multi-agency committees including

Indian parents were formed to promote family life and responsible parenthood education on reservations and in native communities. An education program was developed and has been incorporated into the curriculums of many schools and an audiovisual presentation has been produced for adult Indian groups. From 1965 through fiscal year 1969, a cumulative total of 28,900 women received family planning services, representing 63.3 percent of the estimated potential program users.

Dental deficiencies

The generally poor state of dental health of Indians and Alaska Natives created such overwhelming demands for services that firm priorities had to be set. So far most of the care has been provided for children, with adults receiving little more than emergency or palliative treatment.

Some expansion of services to older groups is being experienced, but on a still far too restricted level. Only about 24 percent of the dental care needs are being met.

Environmental health

The physical environment in which Indians and Alaska Natives live as a rule is a poor one, isolated from community services and utilities which exist among the general U.S. population. Housing is substandard and the average family of five or six lives in a one or two-room dwelling, often without safe water or satisfactory waste disposal facilities. In addition, the majority of Indians and Alaska Native homes are located in areas of severe climates, with extreme temperature ranges of hot or cold.

These environmental conditions have serious adverse effects upon the health of the two populations and contribute greatly to the high rates of infectious diseases, especially those of respiratory and parasitic nature, and skin diseases.

Public Law 86–121 enables the Indian Health Service to help alleviate the substandard environmental conditions. Since construction of sanitation facilities began in 1960, approximately 65,000 Indian and Alaska Native families have benefited from some improvement of water supply and waste disposal facilities.

In addition, consultation and services are continually provided to Indian tribes, groups, and families to help them improve and maintain a healthful home and community environment. Services are mainly concerned with sanitary conditions in homes, at trading posts and other commercial establishments serving Indians, and at Indian celebrations. Particular emphasis is placed on adoption of sanitary codes by tribal governing bodies. Programs are conducted in cooperation and/or consultation with Indian tribes or Alaska Native groups, and State and local health agencies. Sanitarian aides of Indian or Alaska Native descent are the key staff members who bridge the gap of cultural differences to bring modern environmental sanitation practices to their respective reservations and communities.

In the past 7 years, improvements in sanitation facilities have been accelerated through coordination with other agencies having homebuilding authority and with tribal groups sponsoring homebuilding.

The Indian Health Service is coordinating efforts with those of the Department of Housing and Urban Development, the Bureau of Indian Affairs, the Office of Economic Opportunity and various Indian housing authorities. Under these cooperative arrangements, 243 sanitation construction projects were undertaken through fiscal year 1969 to provide facilities for new or improved housing, over and above the regular Indian Health Service construction projects to serve existing homes. In fiscal year 1970, the Indian Health Service is initiating efforts to provide sanitation facilities for 7,100 units of new or improved housing constructed by other agencies and to provide technical assistance for another 900 new housing program homes.

The optimum objective is provision of safe water and waste disposal facilities for all Indian and Alaska Native families. Efforts will continue toward this objective through the 86–121 program and the housing programs of other agencies.

The overall goal of the Indian Health Service is to raise the health of Indians and Alaska Natives to the highest possible level.

With the continued support of the Congress and the increasing assistance and participation of the Indian and Alaska Native people, we hope to see further achievements toward this goal.

PROVISION OF APPROPRIATION REQUEST

The 1971 appropriation request for $113,217,000 for Indian Health Services represents a net increase of $7,233,672 and an increase of 178 positions of which 100 are for staffing of newly constructed facilities. This request includes: a program increase of $885,672 and 78 positions which provides for (*a*) the establishment of a pilot inpatient mental health program at the Gallup Medical Center, Gallup, N. Mex. (+$185,672); (*b*) a nutrition and dietetic program which will extend patient dietetic education services in Indian Health Service hospitals and provide for the initial implementation of a nutrition aide training program in which eight nutrition aides will be trained and employed by the Indian Health Service in 1971 (+$482,000); and (*c*) completing the establishment of professional mental health teams in each of the eight Indian Health Service Areas while utilizing indigenous Indian workers as mental health aides in selected Indian communities (+$218,000); and program decreases amounting to $527,000 due to a decrease in contract tuberculosis average daily patient load (—$177,000), and termination of the special assistance to the Menominee Indian people (—$350,000) as a result of the expiration of authorizing legislation.

Further, the 1971 budget before you does not show the full effect of the recent decision to release from reserve $957,000 in 1970 supply and equipment funds. Although the 1971 supply and equipment budget has not been increased by a like amount, these funds will be obligated during the third and fourth quarters of 1970, thus having a beneficial impact on 1971 operations.

The construction appropriation request in the amount of $17,950,000 will provide for: (1) sanitation facilities to assist Federal and Tribal housing programs to serve approximately 7,100 units of new or improved housing ($16,500,000); (2) new or improved sanitation facilities for residents on rancherias, reservations, and scattered land allotments in California benefiting approximately 450 families ($1 million); and (3) special sanitation projects to serve ceremonial areas and community buildings, engineering investigations, emergency works, supplies and equipment and unforeseen conditions ($450,000).

This completes my opening remarks, Madam Chairman.

Dr. JOHNSON. I would like to briefly, Madam Chairman, highlight the opening statement and try to focus on where we have been and where we are and, hopefully, where I think we are going as we look back over the nearly 15 years since the transfer of this program from the Bureau of Indian Affairs to Indian Health Service.

GOALS AND DIRECTIONS

At the time of the transfer we had to formulate some specific goals and directions for the program. We had a tuberculosis epidemic raging in Alaska, an infant mortality 2½ times that of the general population, as well as a whole series of communicable diseases that were relatively out of hand.

The initial approach was to develop the clinical capacity within the system so that we could provide high-quality health services to Indian people and to gain their respect and support for the program. We then could begin the preventive health program. With the help of the Congress, and this committee in particular, and the Senate committee, and with the very sincere and increasing support of the Indian people throughout the country, I believe we accomplished some of these earlier objectives. Certainly, we have decreased disease and death rates and have seen a dramatic increase of life expectancy for Indian people. I think as the program reaches this stage we are coming into a transition, really passing through one which changes from a program focused on the clinical side, that part of the health program effort that requires the health professional, into one that

really is going to require behavioral change that can only occur through the active and full participation of the Indian people themselves.

ROLE OF THE INDIAN PEOPLE

Certainly in our program we have emphasized the Indian's role in planning, operating, and evaluating the health program. We have advisory boards at all levels—service-unit areas as well as at headquarters—and they are increasingly moving into, I think, a substantive decisionmaking role. At the same time we are seeing a number of other very valuable changes going on on the reservations in Indian country, including the impact of many other Federal programs, public housing, community action programs of OEO, economic development, and the Indians' interest in alcohol control. In other words, the Indians are getting really deeply involved in decisionmaking and doing things on their own for themselves.

In the Indian Health Service we have long had an interest in training and recruitment of Indian people. We have over 50 percent of our staff that are of Indian descent. We know by experience the advantages of employing Indian people in helping to reduce the culture and language barriers, provide health education, and their ability to project a success image to the kids growing up, so they can see that here is a future. There is really an emphasis on improving the quality of Indian life through the employment of Indian people.

One of the significant programs that this committee has supported is the community health representative program that I know you are all familiar with, and the Alaska village health program. By the end of this fiscal year we will have some 310 community health representatives employed. They are employees of the tribe under contract with the Indian Health Service, trained by us but selected and supervised and really employed by the tribes.

In addition, we will have 185 village health aides in Alaska. They are similar to the CHR's except they actually are providing definitive medical care in the remote bush communities in Alaska.

We will have contracts with 65 tribal groups and 54 Alaska native villages. These contracts are spread out over 19 States. It is a very widespread program and one that has had tremendous support and enthusiasm from the Indian communities.

We have a number of other training programs that I am sure you are all familiar with. We are beginning to move in training, not to deemphasize the training for the auxiliary or ancillary types of health personnel but to move into an era of increasingly getting Indian people into the professional categories, training them as RN's to be professional health educators, professional administrators, and this type of position.

NUTRITION PROGRAM

Mrs. HANSEN. Dr. Johnson, what are you doing to train people in the field of nutrition? As you are well aware, nutrition is a tremendous part of preventitive medicine?

Dr. JOHNSON. Madam Chairman, the CHR's all have a nutrition section in their training program at Desert Willow. In addition, we are training food service supervisors at Santa Fe. They are primarily

to increase the competence of our dietary service and relieve the dietitian of some of her chores so she can spend more time in patient education.

Then, as you know, in the budget before you, we have a proposal to train eight nutrition aides as a pilot project, with the intention that if this proves as valuable as we think it will, we will in future years provide nutrition aides for the total program.

Mrs. HANSEN. It took the United States a long time to recognize that nutrition is a built-in part of health. I graduated in the field of nutrition and I remember many years ago trying to persuade the Washington State Public Welfare Department to hire nutritionists as a basic part of their program, because it seemed to me that it was mandatory to teach the low-income family how to spend their food dollars wisely.

Dr. JOHNSON. That is certainly very true. In addition, I think that the nutrition aides, and to a large degree so far the CHR's, have had a significant impact in encouraging—I suppose I should put that in quotes—the other agencies that have nutritional services available in getting these services out to the reservations. One of the problems we face, is trying to encourage implementation of other programs, for example, making the food supplement programs available to Indian reservations.

I think Congressman Reifel knows there have been long delays and very difficult times getting supplementary food programs and so forth available to the Indian population groups even though they are one, I think, of the prime target groups.

Mrs. HANSEN. The Indian people should be a major target group because this Government has a great responsibility in this connection. The Federal Government has been very negligent in not increasing this program.

For example, I have noted on occasion that the welfare payments were raised on the Navajo reservation and that wouldn't have been necessary if the means had been found to make them economically viable.

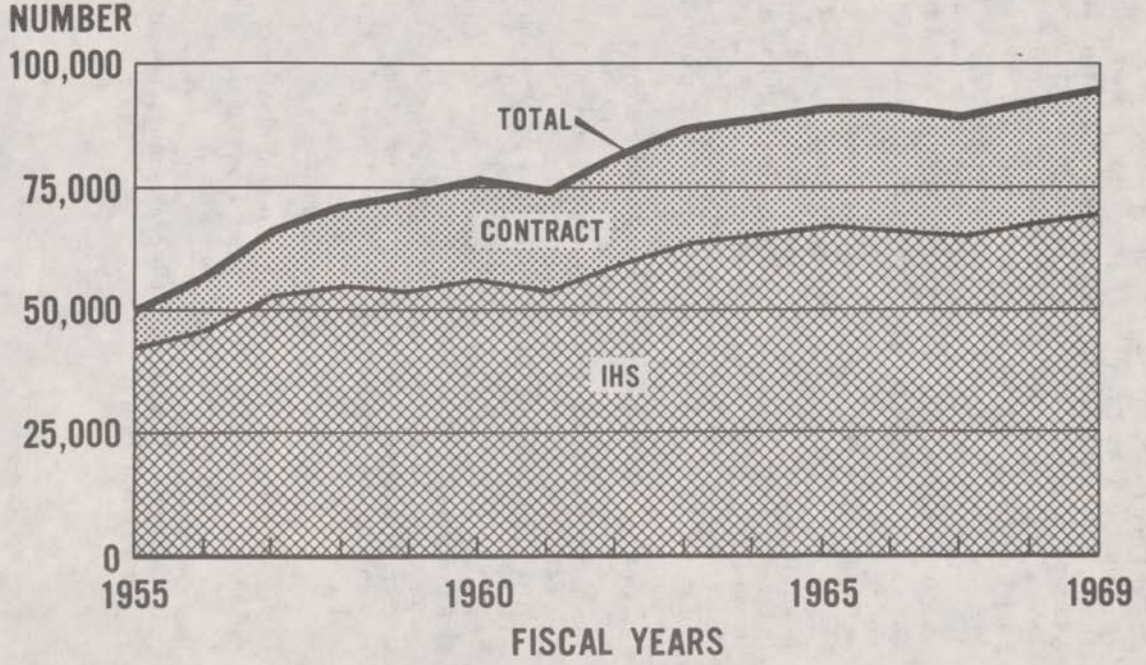
PROGRAM PROGRESS

Dr. JOHNSON. If I may go on, Madam Chairman, to briefly highlight some of the program progress I have a chart series to pass out to the committee. We might just look at it. It rather graphically portrays some of the advances.

Mrs. HANSEN. Please insert the charts in the record.

(The charts follow:)

NUMBER OF INDIAN AND ALASKA NATIVE ADMISSIONS
TO I H S AND CONTRACT HOSPITALS



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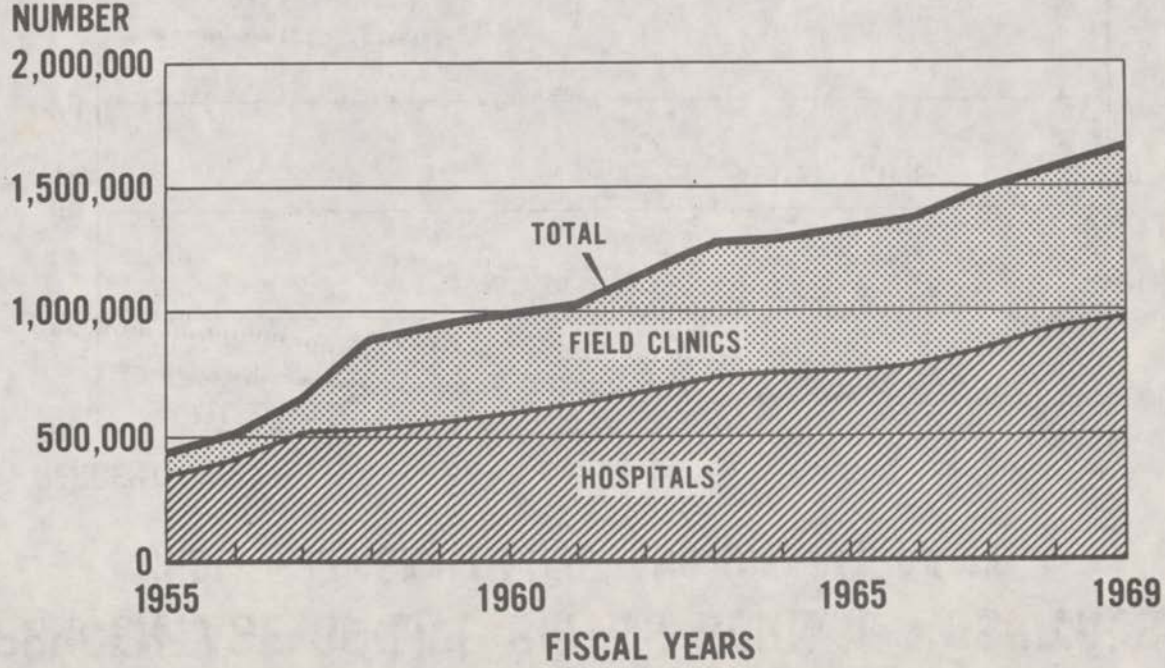
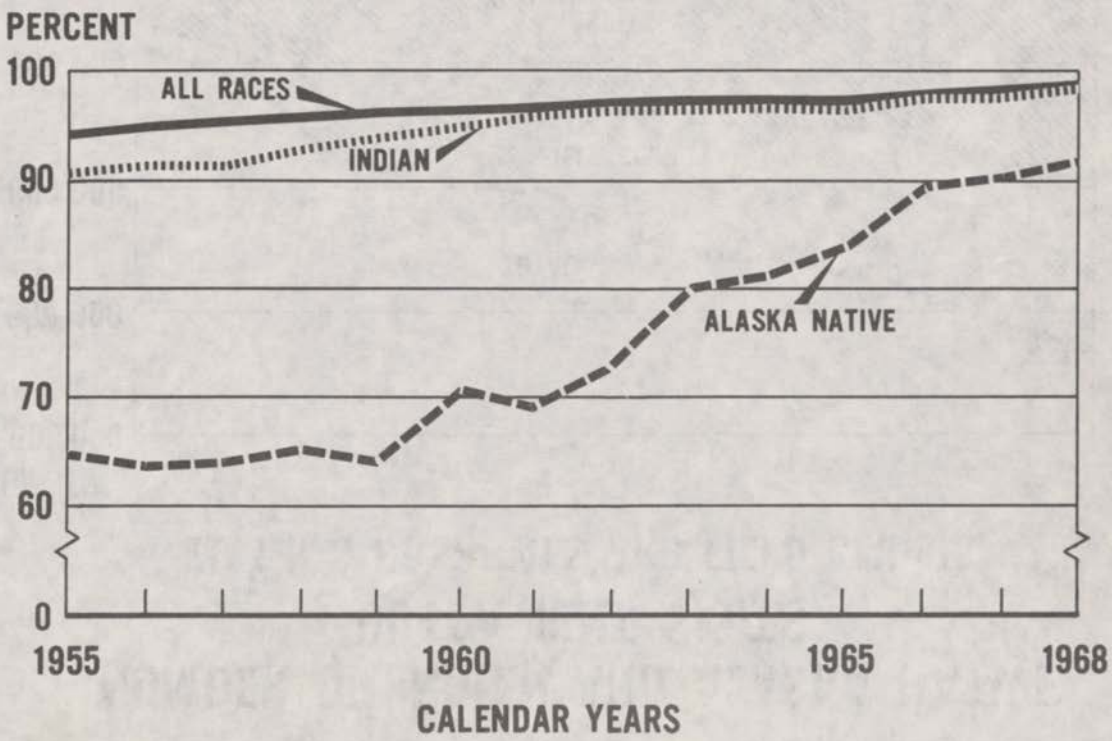
NUMBER OF INDIAN AND ALASKA NATIVE OUTPATIENT VISITS

TO I H S HOSPITALS AND FIELD CLINICS

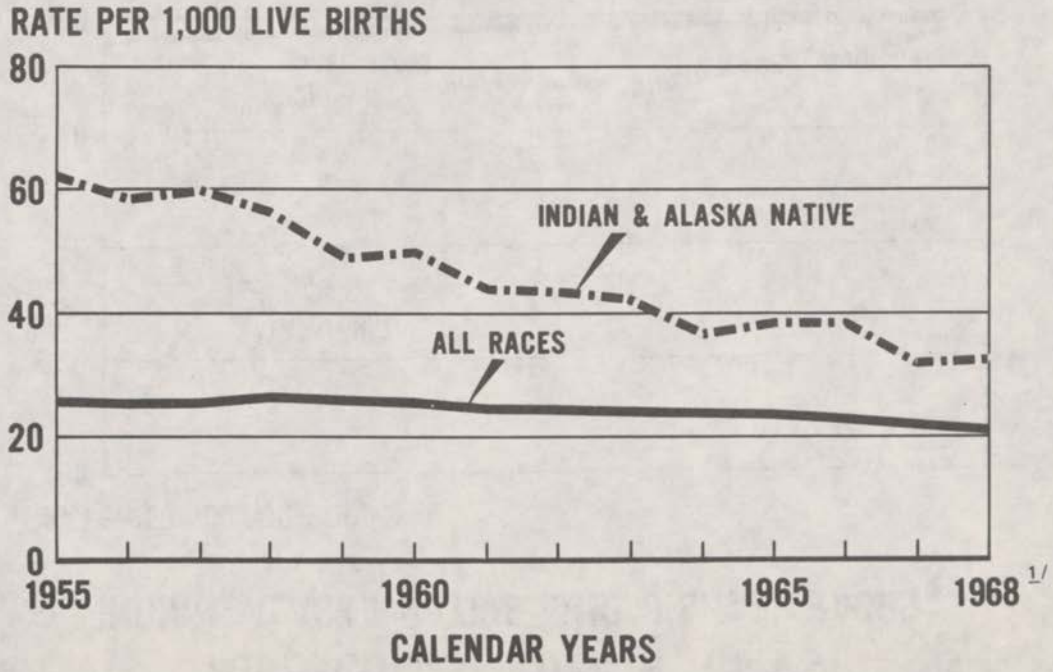


PERCENTAGE OF LIVE BIRTHS BORN IN HOSPITALS

INDIAN, ALASKA NATIVE, AND U.S. ALL RACES

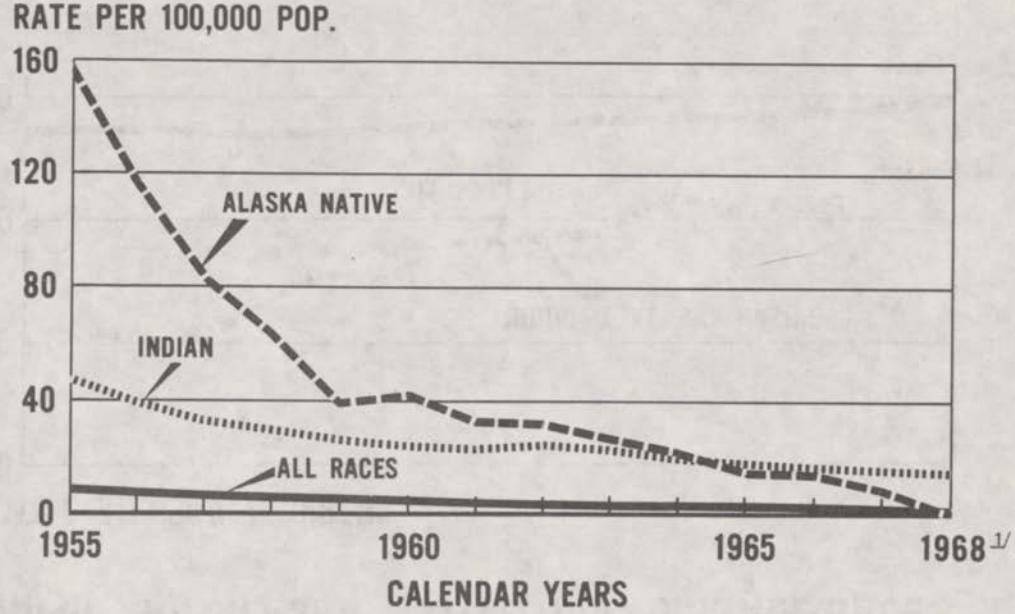


INFANT DEATH RATES
INDIAN AND ALASKA NATIVE, AND U.S. ALL RACES



1/ INDIAN & ALASKA NATIVE RATE IS A PROJECTION; ALL RACES RATE IS PROVISIONAL.

TUBERCULOSIS DEATH RATES *
INDIAN, ALASKA NATIVE, AND U.S. ALL RACES

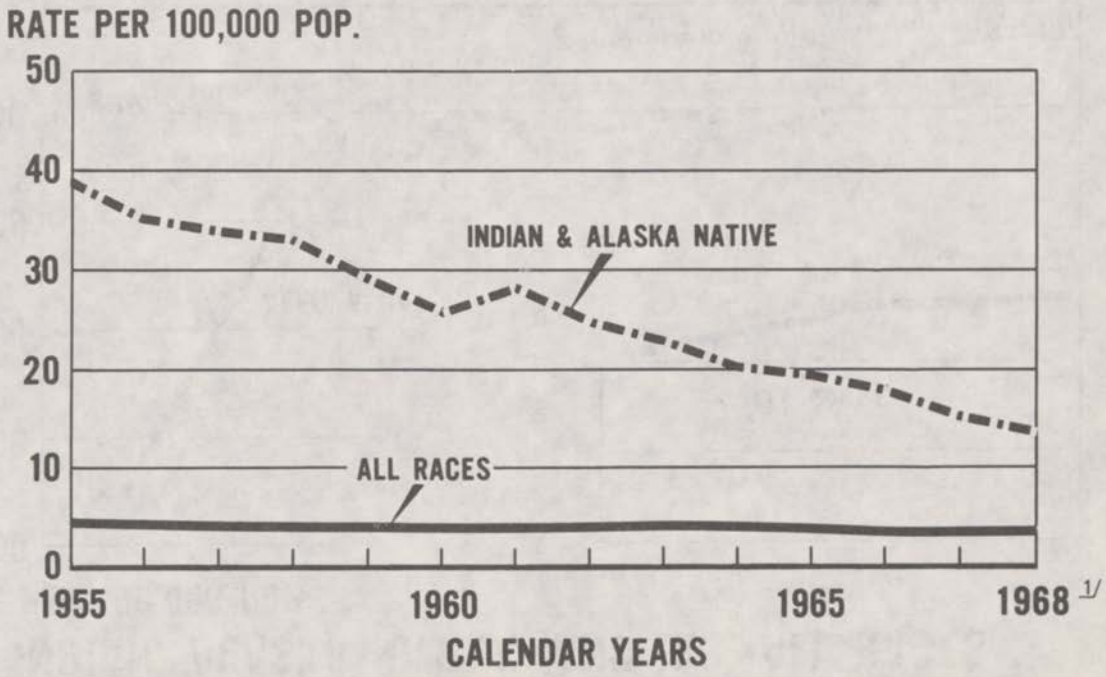


* INDIAN AND ALASKA NATIVE RATES BASED ON 3-YEAR MOVING AVERAGE THRU 1967. ALL OTHER RATES BASED ON SINGLE YEAR DATA.

1/ INDIAN RATE IS A PROJECTION; ALASKA NATIVE AND ALL RACES RATES ARE PROVISIONAL.

GASTROENTERITIS DEATH RATES *

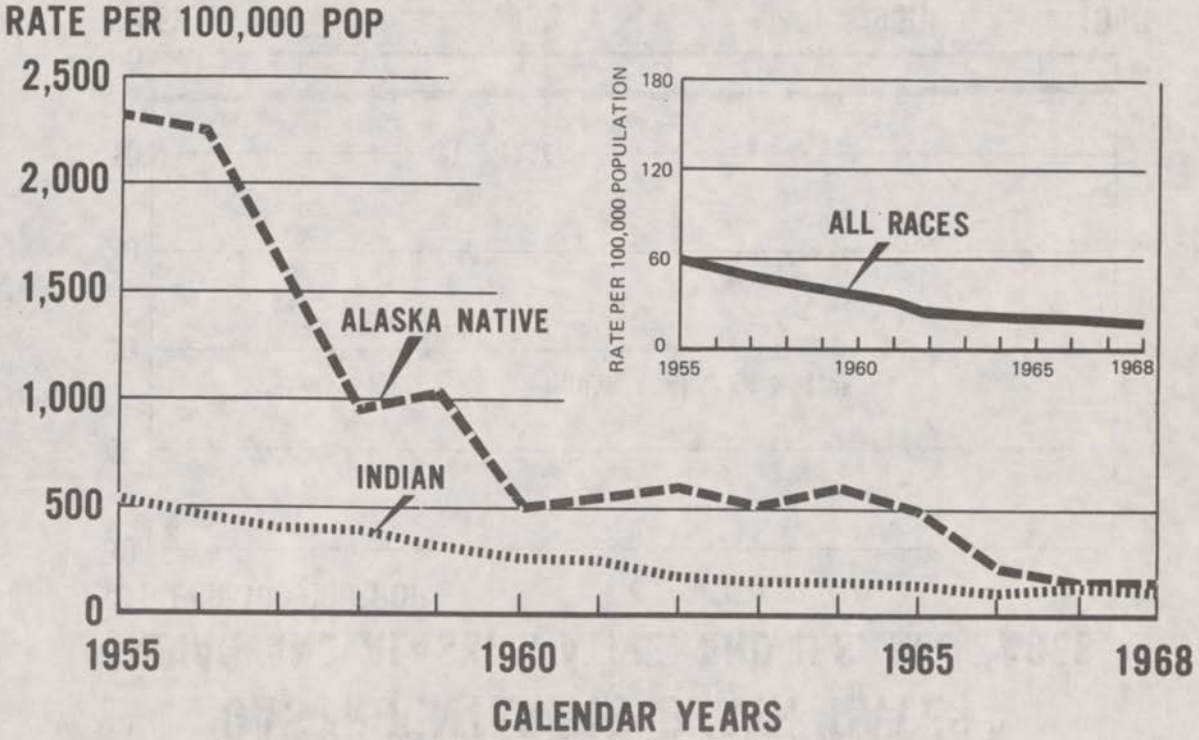
INDIAN AND ALASKA NATIVE, AND U.S. ALL RACES



* INDIAN AND ALASKA NATIVE RATES BASED ON 3-YEAR MOVING AVERAGE THRU 1967. ALL OTHER RATES BASED ON SINGLE YEAR DATA.

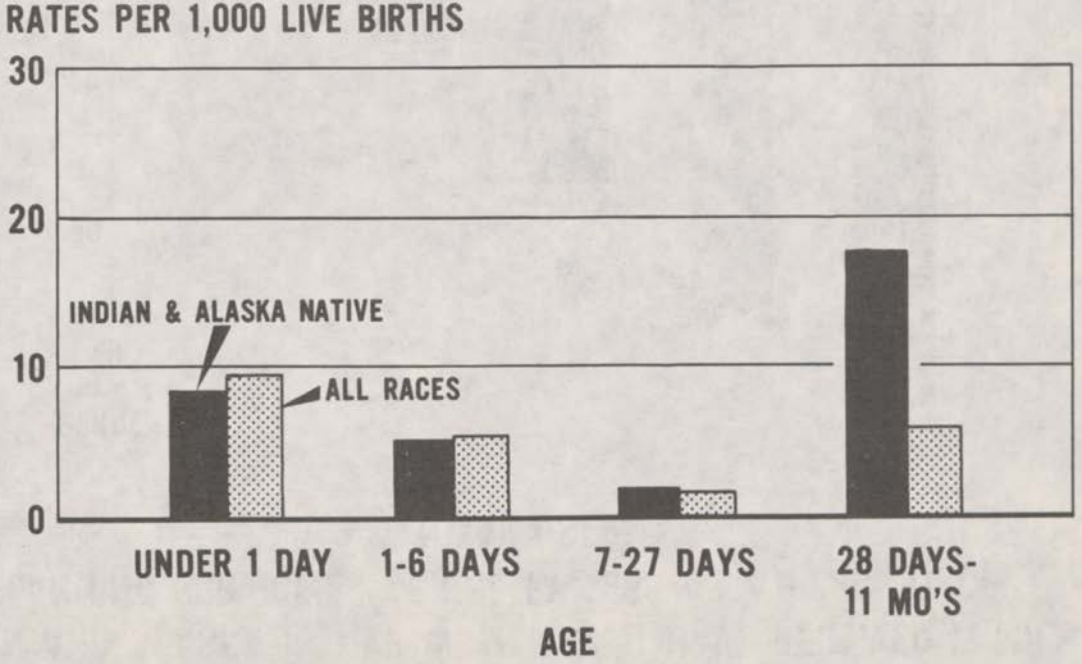
1/ PROJECTION

INCIDENCE RATES FOR TUBERCULOSIS
INDIAN, ALASKA NATIVE, AND U.S. ALL RACES



INFANT DEATH RATES BY AGE AT DEATH

INDIAN AND ALASKA NATIVE, AND U.S. ALL RACES
CALENDAR YEAR 1968 PROJECTIONS



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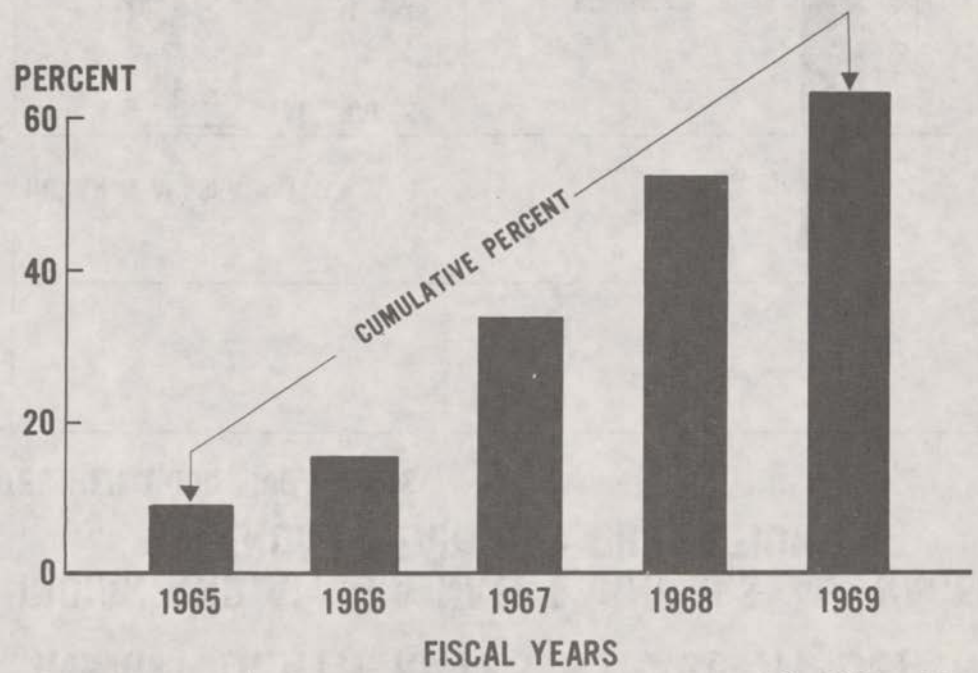
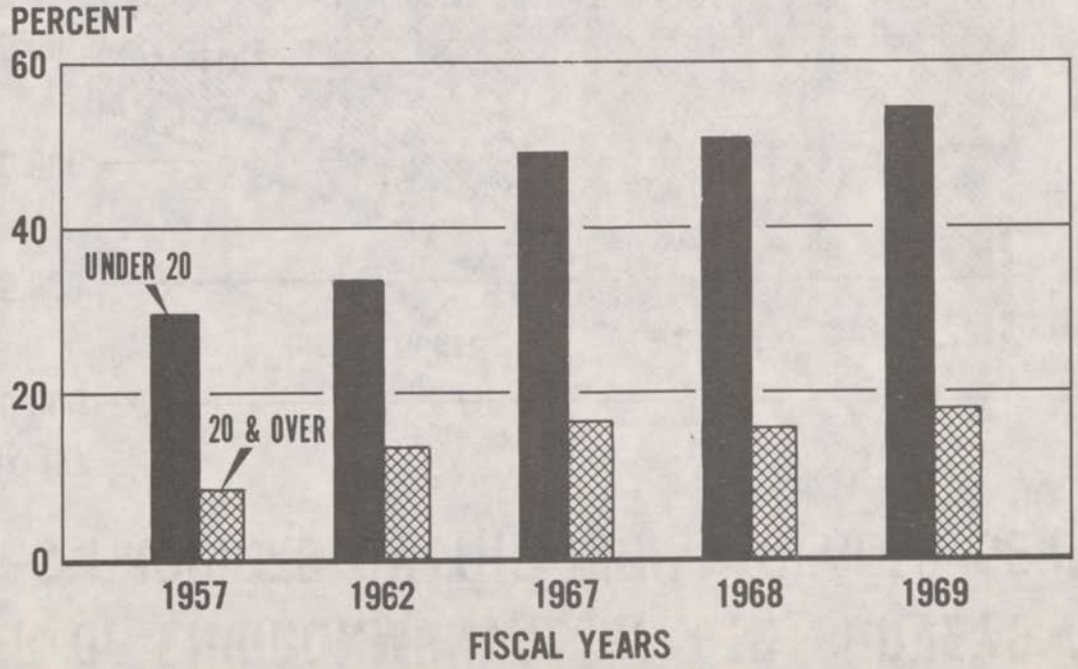
INDIAN AND ALASKA NATIVE WOMEN WHO HAVE RECEIVED FAMILY PLANNING SERVICES [1/] SINCE FY 1965 AS A PERCENT OF POTENTIAL USERS [2/]



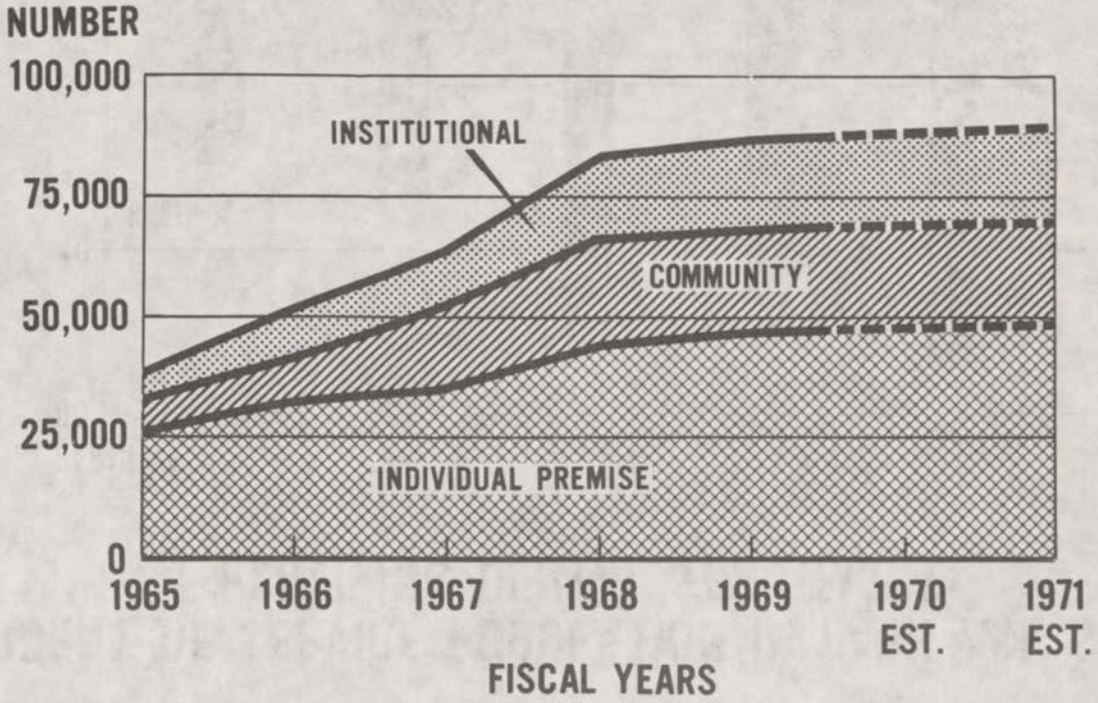
1/ IRRESPECTIVE OF DURATION OF USE. 2/ AS DEFINED BY POLGAR FORMULA

6/80 43-216 2824

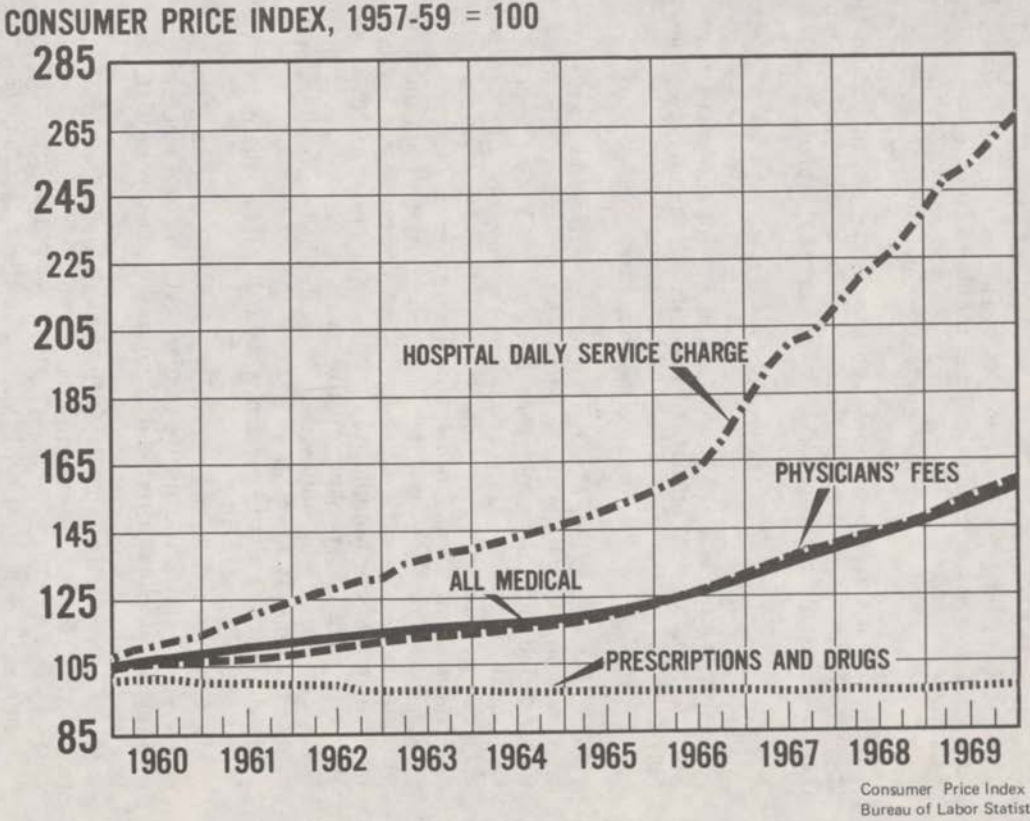
PERCENT OF SERVICE POPULATION IN EACH AGE GROUP RECEIVING DENTAL TREATMENT



NUMBER OF ENVIRONMENTAL HEALTH SURVEYS AND SERVICES PROVIDED BY THE INDIAN HEALTH SERVICE



MEDICAL CARE COST



Consumer Price Index
Bureau of Labor Statistics

Dr. JOHNSON. One of the primary things that our program initially had was the concept that in order to have a program that is going to be viable in meeting its goal, which is to elevate the health status of Indian people, the program would have to be one that would be accessible to the Indian people and acceptable to them. You could have the finest medical program in the world on the reservation. However, if it was not accessible and acceptable to Indian people it would be a waste.

HOSPITAL ADMISSIONS

I think chart 1, which shows you the admissions to Indian Health Service hospitals, is a graphic illustration of what we mean by acceptance. Admissions since 1955 have almost doubled.

OUTPATIENT VISITS

If you look at chart 2, which is the one on the outpatient visits, you see the number of outpatient visits have gone up better than three times.

PERSONNEL CEILINGS

Mrs. HANSEN. When Mr. Reifel and I visited the Navajo reservation we stopped at some of the outpatient centers. The facilities were understaffed and the people were overworked. Your personnel limitations have forced the doctors and nurses to work more hours than they can possibly manage from the standpoint of their own health.

Dr. JOHNSON. It is, unfortunately, very true.

Mrs. HANSEN. Why have personnel limitations been imposed on a program that is greatly dependent upon personnel for better health in a segment of our population that has a very poor health experience. Who established the personnel ceilings?

Dr. JOHNSON. It is policy that is established at higher levels.

Mrs. HANSEN. Whose policy?

Dr. JOHNSON. I would certainly say it is higher than our program. We are simply responding.

Mr. CARDWELL. The policy, really, Madam Chairman, goes back to the Revenue and Expenditure Control Act of 1968 wherein the Congress set limitations. President Nixon asked last year that the act be repealed.

Mrs. HANSEN. But can't priorities be established within that structure to allow for certain exemptions?

Mr. CARDWELL. We have done so. We have exempted from the policy certain specified medical skills and medically-related skills.

Mrs. HANSEN. But the personnel limitations have had a direct bearing on the quality of health service in the Navajo country.

Mr. CARDWELL. We have not exempted the Indian Health Service program, per se. It is too large a program. It represents too significant a share of the total employment of the Department to make this possible. That is one reason. The second reason is there is a theory, and it is a theory that you might disagree with, that in large programs such as this one, reasonable limitations do force better manpower utilization, and that is one of our objectives.

Mrs. HANSEN. If you force a doctor to work 18 hours a day it will not improve the quality of the medical service. I don't want to go to a doctor that is physically exhausted. The conditions in the clinics on the Navaho were disgraceful.

Mr. CARDWELL. I believe this was directly—

Mrs. HANSEN. This was directly attributable to personnel ceilings. I have spoken often against personnel ceilings. I don't think a program that directly relates to the health and betterment of people's lives should have personnel ceilings.

Mr. REIFEL. Madam Chairman, if I may——

Mrs. HANSEN. Mr. Reifel.

Mr. REIFEL (continuing). Maybe you are doing it in the Department, but here is an operational unit for which the Department is responsible. The President of the United States has made pronouncements about helping this particular minority group improve its health, and it is probably the most deteriorated health condition, not the service itself, but I mean the Indian people. The Secretary himself, Mr. Finch, has talked about the need for helping the disadvantaged, and here is one instance where there seems to be a case where this can really be done because you have a huge bureau over there from which this little unit could get some additional attention.

Mrs. HANSEN. What is the total personnel of HEW?

Mr. CARDWELL. About 102,000 employees.

Mrs. HANSEN. What is the total personnel of Indian Health?

Mr. CARDWELL. A little over 6,500 in the budget.

Mrs. HANSEN. It seems to me that it would be possible to remove the personnel ceilings on Indian Health. In one clinic it was reported that the nurses had such long hours that they could no longer stand the work.

Mr. CARDWELL. Are you sure in those instances that the problem is entirely one of a restrictive personnel ceiling, or is it a matter of recruitment and the capacity to get people to accept assignments in that particular area?

Mrs. HANSEN. The recruitment problem is made more difficult by imposing personnel ceilings because an individual may be forced to work 20 hours a day. Recruitment also becomes more difficult because of the rather lonely, remote lands. You don't have the customary social activities that you have in Washington, D.C. You compound this with extra hours and poor living quarters and recruitment becomes almost impossible.

Mr. CARDWELL. I appreciate that.

Mrs. HANSEN. What do you have to offer an individual? Most professional people aside from their missionary activities, require a reasonable standard of living.

Mr. REIFEL. Speaking to the point that you just raised about just purely not being able to get people, this committee and the committee in the other body went along with establishing a mental health pilot project at Pine Ridge. Now, it started off very well with an M.D. who was a psychiatrist, with a fairly adequate staff, but with the personnel ceilings, it was just not possible to have proper staffing for that program out there because the area office in Aberdeen, S. Dak. had a health personnel limitation.

Mr. CARDWELL. I have a hard time believing that. Let me tell you why. Let me review the Department's policies. There is for the Government as a whole an employment ceiling established by the President. The ceiling established for our Department is 102,000. The 102,000 is about 4,000 employees below the cumulative level of approved budgets for HEW. In other words, before we start out we will have absorbed 4,000 positions during the period that we are now talking about. Former Secretary Cohen, exempted direct patient care activities of our Department—they include the Indian health service hospitals and clinics, the public health service hospitals for merchant seamen and for dependents of the commissioned corps, St. Elizabeths Hospital and several other health installations. They add up to about 18,000 employees for the Department as a whole. Back in December of 1968 former Secretary Cohen directed that physicians, dentists, dental auxiliary personnel, nurses, practical nurses, nursing assistants, and a whole list of skills be exempted. I would be glad to put the list in the record. This meant that employment levels for those existing classes of employment would be at the level that prevailed in September of 1968. In other words, they would not be cut, under any circumstance, below that level.

It was up to the management of the Indian health program to take its shock elsewhere, to do so by improved management at the area office level and at headquarters level, but not take it against direct patient care. So I think we have here what may be in some ways a management problem as much as it is an employment ceiling problem.

Mr. REIFEL. You are talking about taking a shock elsewhere.

Mr. CARDWELL. I am saying that the whole Department had to assimilate a reduction of 4,000 employees and we said to the Indian health program, "You must take your share of this."

Mr. REIFEL. This is the very point I am making.

Mr. CARDWELL. But not in direct patient care.

Mr. REIFEL. This is the very point I am making. Here you have this huge agency over there in the Department of HEW and this concern with the health of the Indian people which is in the papers everywhere. Sometimes it is exaggerated. But there is not brought into account what Dr. Johnson has just pointed out this morning: the tremendous decrease in the health difficulties that the Indians have had in the last 15 years. It is still a pretty sad situation and it would seem to me that, with a small agency charged with trying to meet the needs of a minority in this country, it is certainly as neglected as any, and that a huge agency like that would not say to the Division of Indian Health Service, "You take your share of the cut."

Mr. CARDWELL. No, we do not do that. We said to Indian Health, "you do not have to take your share against your direct patient care activity."

Mr. REIFEL. But it is a small operating agency and, as you just said, it has to take the shock someplace else. Then the shock someplace else is a real shock, because it is a little operating hospital out there on some reservation. It has to take its cut in management. I don't see how you can do it otherwise. I was the area director out there in the Indian Bureau in this same area, and when we start making these cuts it runs deep when you have just a little operating unit like the

Pine Ridge Hospital or the Winnebago Hospital, or the one on the Red Lake reservation.

Mr. CARDWELL. Let me give you some figures. Between 1968 and 1971, the increase is not marked, but the employment in the Indian health program is higher.

Mr. REIFEL. For that period of time the salary increases have been up, costs of operating the hospitals have been up, and so whatever little increase is a retardation of what is going on.

Mrs. HANSEN. Please insert in the record your appropriations for 1960 through 1970.

Mr. CARDWELL. I will be glad to put that in the record. I have with me 1968 through 1971.

Mrs. HANSEN. I want it from 1960.

Mr. CARDWELL. Yes; we will be glad to give you that for the record. It does show an increase in employment for the Indian Health programs through that period.

Mrs. HANSEN. Haven't the appropriations also increased?

Mr. CARDWELL. Yes, ma'am.

Mrs. HANSEN. What has been the increase in appropriations?

Mr. CARDWELL. For the Department as a whole, or for——

Mrs. HANSEN. What has been the increase in appropriations for the Indian Health Service?

Mr. CARDWELL. Could you give the chairman those figures?

Mrs. HANSEN. Mr. Chadwick.

APPROPRIATION HISTORY

Mr. CHADWICK. The appropriation history from 1960 through the current fiscal year, Madam Chairman: the appropriation for 1960 was $45,700,000; 1961 was $50,271,000; 1962 was $53,010,000; 1963 was $56,836,250; 1964 was $59,711,750; 1965 was $62,940,000; 1966 was $67,548,000; 1967 was $76,336,000; 1968 was $84,862,000; 1969 was $94,350,000. The appropriation to date, excluding pending supplementals, is $101,529,000.

Mrs. HANSEN. You can easily see that this committee has more than doubled the appropriations since 1960. The committee has made a desperate attempt to try and close the gap in Indian Health services, recognizing the tragedy that results to the Indian people if something isn't done. The committee has made this effort and there should be a corresponding effort by the allocating agency to eliminate the personnel ceilings.

PERSONNEL LIMITATIONS

Mr. CARDWELL. Madam Chairman, we have made an effort and it has been in the area of direct patient care, and we have tried to exempt those employees from any personnel restrictions. I would like to emphasize that. I don't think you really give us credit for it.

Mrs. HANSEN. All I have seen is understaffed facilities. Isn't this correct, Dr. Johnson?

Dr. JOHNSON. That is correct, Madam Chairman.

Mrs. HANSEN. I saw them in Alaska. I saw them in the Navajo area. I have seen them in other areas, and it seems to me that personnel ceilings have no place in Indian Health. The hours are long and the quarters are poor. I have had reports from several Members of Congress that you have not had adequate medicines available, in spite of the fact that you have had increasing appropriations. I have a great many letters on my desk from Members of Congress who are deeply concerned about the situation.

Mr. WYATT. Madam Chairman, I would like to ask Mr. Cardwell if he has the figures on the number of personnel in the Indian Health Service for the years 1968, 1969, 1970, and proposed in 1971?

Mr. CARDWELL. Yes, sir; 6,239 in 1968; 6,258 in 1969; 6,362 in 1970; 6,540 in 1971.

Mr. WYATT. Do you have the number of doctors that are included in those figures?

Mr. CARDWELL. I can give you the total number of field health employees categorized as direct patient care. It would include physicians, nurses, and auxiliary care: In 1968, 4,412; in 1969, 4,309; in 1970, 4,413; in 1971, 4,451.

Mr. WYATT. Now, I don't suppose you have any breakdown in those people as between here in Washington and in the field, Mr. Cardwell, do you?

Mr. CARDWELL. I do not have those available. Do you have them, Mr. Chadwick? We can give them to you; we have them.

(The information follows:)

No positions related to direct patient care are located in Washington.

Dr. JOHNSON. 111 in Washington, I believe.

Mr. CARDWELL. This is essentially a field program. It operates outside of Washington.

Mr. WYATT. Have you had new hospitals in the last couple of years?

Mr. CALDWELL. We have had enlarged facilities to operate during that period; yes, sir.

Mr. WYATT. Which then could account for a shortage in other hospitals?

Mr. CARDWELL. Yes, sir.

Mr. WYATT. In other areas.

Mr. CARDWELL. This is really true of the Department as a whole. If you examine our problem, and it is a serious problem, half of our staffing is made up by the Social Security Administration. They are under a fixed ceiling during the period when they have had to take on the administration of medicare, one of the largest programs ever established. They have just recently been authorized to give benefit increases to the more than 25 million beneficiaries who receive such payments, but with little or no increase in staff.

We have 18,000 direct patient care employees, of which roughly 6,000 are in Indian Health programs. The other patient-care activities have the same problem, except we also exempted the same class of direct patient care employees from the ceiling. We are trying to tighten our belt, and it is very tough. I think that what happens often when you try to do this, though, is that this effort is blamed for some other basic problems and I think in this program we do have basic

problems. I think one of our basic problems, despite your support and despite the support of former Secretaries of HEW and the current Secretary, is that this program still does not have all the resources it needs to do its job. You could go and visit some of our other hospitals and clinics outside of the Indian Health field. I think they would tell you they have the same kind of problem. They don't have enough nurses, physicians, and don't have enough supplies. Their maintenance budgets aren't large enough. What you are seeing here is not really peculiar to this program. It is a problem inherent in our efforts to provide services to people. We rarely have large enough budgets.

Mrs. HANSEN. This committee has endeavored to increase your appropriations.

Mr. CARDWELL. I am well aware of that.

Mrs. HANSEN. This committee is deeply interested in, and committed to, the Indian Health program because of the years of neglect. The number of Indian and Alaska native admissions to IHS and contract hospitals have increased greatly, but the number of employees has not increased in proportion, due to the personnel ceilings. I can't help but sympathize with the problems of these people in our hospitals who are overworked.

Mr. WYATT. Madam Chairman?

Mrs. HANSEN. Mr. Wyatt.

Mr. WYATT. As I understand, your direct patient care people have been exempted from the personnel ceilings; is that correct?

Mr. CARDWELL. Yes, sir. That is going back to the fall of 1968. In other words, the original ceiling imposed by Congress went back to June 30, 1968, and in the winter of 1969 former Secretary Cohen said, "You can raise them up to what the level was in the fall, and in no event may they be cut below that." Secretary Finch has extended that exemption. I would like to get just one word—I don't want to get at odds with this subcommittee.

Mrs. HANSEN. You already are.

CONCERN OF DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE FOR INDIAN PROGRAM

Mr. CARDWELL. I can sense that, Madam Chairman. Our Department is concerned about the Indians. Secretary Finch is concerned about the Indians. He has supported larger budgets. If there were some way that he could exempt them from this employment ceiling without having to take it out of the hide of some other program that is also important, also provides a service to the people, I am sure he would do so. Frankly, we are just not that ingenious. We haven't been able to figure out a way to do it.

Mr. WYATT. I don't understand. If your direct patient care people are exempt from the personnel ceiling, then it seems to me that the conditions such as the chairman and Congressman Reifel saw, which indicate an obvious shortage of personnel, either have to be due to recruiting difficulties or dollar difficulties, if the ceiling doesn't apply.

Mr. CARDWELL. Or decisions as to the distribution of manpower. Those decisions are not made at the Secretary's level.

Mr. WYATT. You mean within the Indian Health Service?

Mr. CARDWELL. Yes. I would leave that to Dr. Johnson to explain.

Mr. WYATT. That clarifies it to an extent.

Mrs. HANSEN. Dr. Johnson, the number of Indian and Alaska native admissions are increasing dramatically every year. This would mean that you would also have to increase the medical services and the nursing services to take care of these people. In the Navajo area the statement was made repeatedly that young doctors, some on their first tour of duty, after working a 12- or 13-hour day, were unable in an emergency to make a life-or-death decision for a patient. They themselves felt incompetent to make these decisions. They felt that they would have preferred more consultation. Yet, the problems exist and have to be met. A doctor exhausted from overwork isn't going to do the kind of job that is expected of him. Isn't this true, Dr. Johnson?

Dr. JOHNSON. Yes, Madam Chairman, this is true. I personally feel very strongly about this because, as Congressman Reifel knows, I was one of those doctors and for many months was all alone as the only physician running a hospital and field clinics. I know what it is like to work not just 18 hours a day but 24 hours a day, if it is necessary. There is a limit, really, to one's ability to respond appropriately under those kinds of conditions. I think that what is really—maybe I am out of order, and, if I am sure Mr. Cardwell will explain to me later—but I think that it is important to look at it this way: We started out in 1955 with a catastrophically poor program. I came in on June 30, 1955, and I know what we had to work with. When looking at increases in budget and increases in staff over the years, I think one must compare this to what is an acceptable standard of quality. If you started with such a poor base, and your loads have increased as significantly as ours have, and even though our budget and staff might have increased comparatively——

Mrs. HANSEN. Even though you have had increases in personnel and appropriations this hasn't been enough to meet the health needs of the Indians. Isn't this correct?

Dr. JOHNSON. This is correct. Every measure that we have of standards of staffing versus workloads, whether we use the University of Michigan staffing Methodology Studies Commission, the Committee for Administrative Services, in hospitals from California, the Joint Commission on Accreditation of Hospitals, whatever standard we apply, we come up with the same answer. In spite of the fact that we have put our emphasis on filling direct patient care positions, and have cut back our positions in administrative roles, we have still found ourselves falling behind in our ability to provide the high quality of services that we feel ought to be provided. It has only been the dedication of the kinds of people that you talked to on Navajo that has kept this health program afloat at all over these years.

Mrs. HANSEN. Dr. Johnson, we open this hearing with a feeling of deep sympathy and compassion for the Indian Health Service employees who are very dedicated people. I hope the committee's remarks are not misconstrued because we feel the Indian Health

Service has done a topflight job, within the personnel and financial restrictions that have been imposed.

Mr. CARDWELL. Madam Chairman, may I have a word?

Mrs. HANSEN. Not at this time.

Mr. CARDWELL. Thank you.

Mrs. HANSEN. Dr. Johnson, will you please continue.

OUTPATIENT VISITS

Dr. JOHNSON. Yes, ma'am. We were talking about the outpatient visits chart Number 2, and I think we are talking about accessibility. I think you will notice in the very beginning almost everything we did was within the four walls of the hospitals, waiting for people to come, and, as you see, over the years the great increase of program activity has been in the field clinics. These are the doctors and nurses, and others, that go out into the Indian communities, the places where the people are, because you don't want to wait until people are so desperately sick before they get themselves to the hospital. You want to try to catch illness early. You want to try to prevent illness. So this is the reason for the great increase in the field clinic activities.

The next chart, No. 3, is another example of the acceptance of the program.

INFANT MORTALITY

Mrs. HANSEN. Dr. Johnson, please insert in the record the infant mortality rate in Alaska and compare it with similar sections of New York, Mississippi, the Navajo reservation, and the Sioux reservation.

Dr. JOHNSON. We will be glad to.

(The information follows:)

INFANT DEATHS PER 1,000 LIVE BIRTHS, SPECIFIED POPULATION GROUPS, CALENDAR YEARS 1965-67

	1967	1966	1965
United States:			
All races	22.4	23.7	24.7
Whites	19.7	20.6	21.5
Nonwhites	35.9	38.8	40.3
Indians and Alaska Natives (24 reservation States)	32.2	39.0	39.0
Alaska:			
All races	29.2	31.3	38.1
Whites	19.1	22.0	24.0
Indians, Aleuts, and Eskimos	55.6	51.4	65.4
New York City, selected districts:			
City as whole	23.9	24.9	25.7
Central Harlem	39.3	43.5	37.2
East Harlem	35.8	33.6	34.8
Flushing	14.2	13.7	16.1
Forest Hills	11.0	14.8	17.9
Mississippi:			
All races	35.5	38.8	40.6
Whites	22.8	23.1	24.5
Nonwhites	47.4	52.6	54.4
Navajo Indians	38.7	52.3	46.2
Sioux Indians	35.7	45.8	50.1

Dr. JOHNSON. I think the rather heartening decrease in infant mortality that has taken place is really the result of some of the things that we have seen in the three previous charts, and as we have been able to really improve the clinical capability and the accessibility of our health programs and get into the preventive fields, this is, I think,

a very fine offshoot. We talk about the things that we haven't done, I guess, and sort of overlook the good things that have happened. Sure, I was the only physician but that is not true any more. We have two or three or four physicians now, where 15 years ago we had one, but when you start from an inadequate base it is awfully hard to catch up.

INCREASED DEMAND FOR SERVICES

Mr. REIFEL. In addition, Dr. Johnson, with the excellent and marvelous work you have done to get the Indian people concerned with the germ theory of disease, for one thing, and the opportunities that are provided at the hospitals and clinics, there is an increasing demand that didn't exist 15 years ago.

Dr. JOHNSON. That is a very good point, Congressman Reifel. We have in part, you see, created our own problem. Back in the old days when all we were providing was bed, board and aspirin, it was a very simple a very cheap program. The Indian people accepted that. We have developed for them the concept of modern scientific health care, the concept of really doing something within their community to meet the tremendous needs that they have, and we really have a burgeoning of their desire, really, and demand, which I think is what we are seeing now, for high quality health services. This is another disheartening thing for professional staff to find it so difficult to meet this demand which, you know, we have through health education and promotion, working within these communities for so many years, really helped to develop.

Mrs. HANSEN. The committee understands.

INFANT DEATH RATES

Dr. JOHNSON. We do have, Madam Chairman, chart No. 4, which shows the infant death rates of Indian and Alaska natives together, and, as you can see, it has been cut almost in half in this 15-year period. However, you can see it is still 1.4 times as high as the general population.

Mrs. HANSEN. The death rate is higher than the average white population?

Dr. JOHNSON. Yes, average white.

Mrs. HANSEN. How does this rate compare to the black population?

Dr. JOHNSON. It is less Madam Chairman, this is one of the changes that I would like to highlight. When the Indian health program was established in 1955 the infant mortality of Indian infants was, as you see here, about 62½ per thousand live births. The U.S. non-white was somewhere around 43. Over the years it has reversed, so that now the Indian rate is roughly 32, and the non-white has been running in the neighborhood of 35, 38, 40, something in that general range. The Indian now has changed places. He is not the most disadvantaged in terms of infant mortality, at least. But I think it gives you a good example of what can happen when you have a program which is specifically targeted to a group of people and professionally organized with the complete involvement of that target group. I think you see these things can happen even though other beneficial things in those communities did not occur.

Mr. LEWIS. In some census tracts in major metropolitan cities the rate of infant mortality for blacks was as high as 60 to 70 per thousand live births.

Mrs. HANSEN. That is very significant. Thank you very much.

TUBERCULOSIS DEATH RATES AND INCIDENCE

Dr. JOHNSON. Chart 5, Madam Chairman, will show you the tuberculosis death rates, again which shows the tremendous drop in the death rate. We show for 1968 no death rates in Alaska natives. We are not absolutely sure that it is going to hold out as we further analyze the data, but if that is the case it will be the first time in all of recorded history that there has not been a death of a native from tuberculosis in Alaska.

We did have last year for the first time again in anybody's memory no children being hospitalized for tuberculosis in Alaska.

Mrs. HANSEN. To what do you attribute this, Dr. Johnson?

Dr. JOHNSON. Well, I think it is primarily due to the very aggressive tuberculosis control program that has been carried on in Alaska, starting in 1955, when massive hospitalization of patients took place, and we went in village by village and provided prophylactic treatment to entire villages under the leadership of what they called in those days village medication aides, who have now been transformed into the village health aides, and by these activities tremendously cut down the reservoir of tuberculosis cases and the opportunity for the children to be exposed to the disease.

We can show, for example, the rates of tuberculin positive children over time. Back around 1948—I may have my dates off a little, you used to get up in the 90-plus percentage of children having positive tuberculins by the time they were 3 or 4 years old. Now you don't get up to that percentage really. You just don't get up to that percentage any more. The line of tuberculin positivity has moved back out so that you may get up to 50 percent at the time the child is 14. What you have really done is wiped out an entire reservoir of infectivity and as time goes on and as the older ones who are infected, pass on, you are really cleaning the slate of tuberculosis infection.

Mr. WYATT. Do you still have some village where you have 50 percent of the 14-year-old children with positive tests?

Dr. JOHNSON. No, I don't believe so any more.

Mr. WYATT. How high would it get, Doctor?

Dr. JOHNSON. I really couldn't give you a specific answer on that. I could provide that for the record.

Mr. WYATT. Much lower than 50 percent, though?

Dr. JOHNSON. We could provide you for the record an analysis of the tuberculin positivity in Alaska. We have done some fairly careful studies of this and I think it would be very interesting.

Mr. WYATT. I think it would be very good for the record, specifically maybe broken down by some representative villages, showing the worst and the best, and maybe something in between.

Dr. JOHNSON. I don't believe we have anything by villages. Of course, they are so small that any village, you know, could just through accident turn up with a very high rate.

Mr. WYATT. I think the general figures would be helpful, Madam Chairman.

(The information follows:)

TUBERCULIN SENSITIVITY AMONG ESKIMO CHILDREN

The prevalence of tuberculin sensitivity among Eskimo children, 0–9 years of age, in 26 villages of the Yukon-Kuskovin delta was determined in four successive surveys from 1949 to 1964. Under an intensive chemoprophylactic program the results were impressive, for instance, at age 6, in 1950 there were about 90 percent of positive reactors; in 1964, there were less than 8 percent. Tuberculin testing results for Alaska school age children in 1968 showed the following: (a) positive kindergarten and first grade children, urban, 0.7 percent; rural 1.9 percent. (b) Positive 14-year-old children, urban, 2.3 percent; rural 13.1 percent.

Dr. JOHNSON. When you talk about real small numbers statistics aren't very helpful, but when you look at 50,000 Alaska natives then I think the changes are significant.

Mr. OBEY. Madam Chairman, may I ask a question here?

Mr. HANSEN. Surely.

Mr. OBEY. I am curious. Why, in your judgment, have you been able to be so much more successful with the Alaskan native than you have with the Indian, for instance?

Dr. JOHNSON. I think the major reason is because we have a specific program energized for the tuberculosis problem in the Alaskan natives. Such a concentrated program has not been provided for the Indian population in the south 48.

Mrs. HANSEN. Why?

Dr. JOHNSON. It has been a matter of priorities and the use of resources. We have been attempting to get funding from other agencies of Government that have interest in tuberculosis control to specifically fund——

Mrs. HANSEN, What agencies?

Dr. JOHNSON. The most recent one we have been working with is the Community Health Service of the Public Health Service.

Mrs. HANSEN. Is this the Communicable Disease Center?

Dr. JOHNSON. No, the Communicable Disease Center in Atlanta, another part of the Public Health Service, has been very helpful but they are not funded sufficiently, as you know, any more either. Tuberculosis is not a particularly high priority disease.

PROVIDING RESOURCES COMMENSURATE WITH HEALTH STANDARDS

Mrs. HANSEN. Isn't it true, Dr. Johnson, that as people's health standards rise in the United States, that the problem of securing sufficient funding has been monumental?

Dr. JOHNSON. Yes, ma'am.

Mrs. HANSEN. For example, many years ago in my own small town, it was a rare occasion when anybody went to the doctor because it meant about a $30 trip into Portland and it involved a lot of travel. The average income didn't support this kind of expenditure. Therefore, health needs went untended. They went unreported and ignored. The funding wasn't available. Then all of a sudden the Government of the United States became conscious of these problems, and the people responded. Television and the press have had their impact. People are more acutely aware today of the health needs. At the same time budgetary restrictions make this problem more difficult. No agency dealing with health is funded to the extent of its needs to adequately solve the problems. Isn't this true?

Dr. JOHNSON. This is very true. I think what you have to do is really target your efforts very specifically for a disease entity or for a group of people and try to tie together all of the kinds of resources that you could possibly get your hands on for a concentrated effort in that one area rather than just shotgunning the horizon. This is really the approach that we have tried to take, recognizing that you will not likely ever have unlimited resources and you must make the best use of what you have. We will get in a little bit later, I think, to a couple of examples of the way we have attempted to do that.

Mr. LEWIS. Madam Chairman, in this terribly complicated health area it would be wrong for us not to think beyond just spending enormous amounts both in society and the Federal Government.

Mrs. HANSEN. You have enormous demands.

Mr. LEWIS. And it is one of these areas where finiteness is not easily found. I think part of the problem has been as the society has become more affluent, a $30 trip which may have become a $50 trip is of less concern to the more affluent society. Therefore, the demand has become, in a sense, effective, and the Federal Government has actually $18 billion in health which is not really recognized. We actually spend with medicare and medicaid, a grand total of about $18 billion. It is not usually understood that there is that much being spent.

NATIONAL PRIORITIES

Mrs. HANSEN. The $18 billion that is being spent on health services is necessary so that 202 million Americans, can live longer, better, and happier lives.

Mr. LEWIS. But 10 years ago we were spending substantially less. That is the point I wanted to make.

Mrs. HANSEN. I think a very interesting simile is that if the moonshot had been postponed it would have cost the taxpayers of the United States a minimum of $800,000. Apparently somebody wasn't vaccinated against German measles. What does a vaccination shot cost?

Mr. LEWIS. About $1.40.

SAVINGS RESULTING FROM PREVENTIVE PROGRAMS

Mrs. HANSEN. For $1.40 we might have saved the taxpayers about $800,000.

Dr. Johnson, how much would an undetected case of tuberculosis in a child or an undetected case of venereal disease cost as compared to what it would cost to prevent this from happening?

Dr. JOHNSON. We have done some interesting studies on that. It has been shown that an average case of tuberculosis will cost around $23,000. Calculating what it would take to provide a program for the Navajos specifically, we have determined that with about $250,000 per year over a 5-year period we could expect to reduce the tuberculosis load of that reservation by 60 percent. Using the $23,000 per case, it seems to me that for the cost of $1.25 million we would save $16.5 million over the 5-year period in terms of tuberculosis hospitalization.

Mrs. HANSEN. Thank you very much. We will adjourn until 1 o'clock.

AFTERNOON SESSION

Mrs. HANSEN. The committee will come to order. Dr. Johnson please continue your discussion.

GASTROENTERIC DEATH RATES

Dr. JOHNSON. I have one more chart No. 6 relating to the accomplishments—gastroenteric death rate. For the record, we can see a 60-percent decrease. I think this has some significance in that it is the one most closely related to the beneficial results one would expect from the sanitation facilities construction program. I think you can see we were sort of staying level here until about 1960–61 when the sanitation construction started. The rate has been going down very steadily ever since. This, again, is an example of the progress one makes in a clear programmatic effort to handle a disease process. It really pays off in the long run.

FAMILY PLANNING AND BIRTH RATES

Mrs. HANSEN. You have provided the Indian and Alaska native women with a family planning service. There is a great deal of discussion in the United States about the population explosion. What is the birth rate among the Indian population as compared to the birth rate of the rest of the population.

Dr. JOHNSON. Yes, ma'am. For 1968 calendar year, the latest year we have for the entire group, for Indian and Alaska natives combined, it is 38.5 per 1,000 population. Indian alone 39.2, Alaska separately 31.5. United States, all races 17.5, U.S. whites 16.6, and U.S. nonwhites 24.2.

DENTAL PROGRAM

Mrs. HANSEN. Thank you. I notice that your dental treatment service is reaching a larger percent of the population.

Dr. JOHNSON. Yes.

Mrs. HANSEN. Are you now reaching adults as well as children?

Dr. JOHNSON. Yes, ma'am. If you will notice the hatched areas in chart No. 10 you will see since 1957 there has been about a doubling of the percent of service population in the above 20-and-over age group that has received dental services. However, in 1967, 1968, and 1969 you will see the percentage is essentially static. I believe that the issue here is that the dental resources have been able to keep up with the population increase but there hasn't been any significant increase in the percentage of unmet needs that has been reached by the dental program.

Mrs. HANSEN. What percent of the total dental needs are you meeting?

Dr. JOHNSON. We are meeting about 24 percent of the known dental needs of the Indian population, and it has been in the range of 23 to 24 percent for the last 3 years.

Mrs. HANSEN. When will this program reach its maximum potential?

Dr. JOHNSON. The studies that our dental program has done of dentistry and the state of the art is that you should expect to be able to reach approximately 53 percent of your population in any 1 year. What they say is that in no year does every member of your population come

and seek dental care. The things that we know about motivation and accessibility would indicate that 53 percent is what we should be shooting for. So, we are meeting roughly a little less than half of what we would think at this time would be the optimum dental program. Obviously, to reach that optimum or make strides toward it would require additional resources.

HOSPITAL COSTS

Mrs. HANSEN. Your hospital daily service charge has gone up astronomically. The physician fee charge has gone up less and your prescription and drug charges are apparently about constant. What are the basic ingredients of the hospital service charges that cause them to rise to such a high level?

Dr. JOHNSON. That is the hospital room charge, the lab fees, the drugs, all of the things that go along with inpatient hospital care. This medical care cost is the national average.

Mrs. HANSEN. Thank you very much.

LIFE EXPECTANCY

Mr. REIFEL. May I ask a question? With regard to life expectancy, I know it is difficult to say, but what do you estimate is the life expectancy of the Indians as compared to the general population, what the increased life expectancy has been over the past 15 years on the kind of baseline you used earlier?

Dr. JOHNSON. Congressman Reifel, the last year that we are able to get adequate statistics would be 1967 and for that year the life expectancy of Indians and Alaska Natives was 64, as compared to 70.5 for the general population and 64.6 for the nonwhite United States.

Mr. REIFEL. Is that above the nonwhite?

Dr. JOHNSON. It is about the same.

Mr. REIFEL. What was that comparison, say 15 years ago, or do you go that far back?

Dr. JOHNSON. I can take you back to 1950 where the Indian life expectancy was 60, the general population was 68.2, and the nonwhite was 60.8. You can see the Indian life expectancy has increased by 4 years whereas the general population increased by 2.3 years over this span of time and the nonwhite 3.8. In other words, the Indian life expectancy is increasing about double the rate of the general population. Again, the gap is narrowing but you can see we still have a 6½-year gap in life expectancy.

Mr. REIFEL. I think that is a dramatic figure compared to, say, 50 years ago.

Dr. JOHNSON. It certainly is.

Mrs. HANSEN. Please insert pages 2 through 43 of the justifications in the record.

(The pages follow:)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION
INDIAN HEALTH SERVICE

Highlight Statement

Introduction

Approximately 415,000 American Indians and Alaska natives look to the Indian Health Service for a total range of comprehensive health services. The program goal is to raise the health of these populations to the highest possible level.

Services to Indians, Eskimos, and Aleuts in fiscal year 1971 will be provided through a system of 51 hospitals, 71 health centers (including 24 centers at large Bureau of Indian Affairs boarding schools) and over 300 other health facilities, including health stations and satellite field clinics. The direct care program will be supplemented through contractual arrangements with non-federal hospitals, private physicians, dentists, and other professionals, state and local agencies and other federal health facilities.

The health of Indians and Alaska natives has steadily improved since 1955. In spite of this improvement, however, their health status remains comparable to that of the general population 20 to 25 years ago.

Mortality and morbidity among Indians and Alaska natives are considerably higher than among the general population. The health problems of these population groups are caused by the extreme hardship of their physical environment, gross insanitary conditions, poor and crowded housing, unsafe water supplies, inadequate nutrition, emotional problems inherent in a transitional culture, impoverished socio-economic status, and limited educational opportunities.

1. Mortality

The latest available (1967) age adjusted mortality data for Indians and Alaska natives is considerably higher than the general population except for heart disease, malignant neoplasms, vascular lesions, and certain diseases of early infancy. The higher ratios are as follows:

	Mortality Ratio Indian to U. S.
All causes of death per 100,000 population	1.4
Accidents	3.9
Influenza & pneumonia (excl. newborn)	2.4
Cirrhosis of liver	4.4
Homicide	3.5
Diabetes	2.1
Suicide	2.1
Gastritis	3.3
Tuberculosis, all forms	8.0

Moreover, the Indian and Alaska native infant death rate per 1,000 live births was about 1.4 times higher than the U. S. all races rate of 22.4. This high rate is primarily due to deaths in the post-neonatal period when infants leave the hospital and return to the complex problems that accompany a poverty-oriented environment.

Approximately 1/5 of all Indian and Alaska native deaths in 1967 were due to accidents, 1/4 to disease of the heart and neoplasms, and 1/7 to infective and parasitic and respiratory diseases.

The life expectancy at birth for Indian and Alaska natives is 64.0 as compared with 70.5 for the general population.

2. Morbidity

Infectious Diseases - Large numbers of episodes of illness requiring hospital or outpatient care are due to infectious diseases and their residuals. These diseases include gastroenteritis, dysentery, influenza, tuberculosis, otitis media, trachoma, pneumonia, and common childhood communicable diseases.

Mental Health - The effects of poverty, cultural clash, geographic isolation, unemployment, lack of education, downgrading of the role of the father in the family, and adverse physical environment--all combine to develop in the reservation Indian a frustration and sense of hopelessness. The results of these feelings are shown in the form of excessive use of alcohol, suicide, violence, disintegration of the family and child neglect. This situation is further complicated by a school system where a child frequently must live in what he feels to be a hostile environment, separated from his parents and unable to converse in his native language.

Nutrition - For a number of years poor nutritional status has been identified as a major health problem among the Indian and Alaska native population. Mild and moderately severe nutritional deficiencies are relatively common with infants, preschool children and women in the childbearing years (15-44) who are particularly vulnerable to malnutrition. Malnutrition occurs per se and as a contributing or complicating factor in a wide variety of other health problems and illness such as infectious disease, retarded physical growth, high infant morbidity and mortality, maternal morbidity, nutritional anemia, significant overweight or underweight, and chronic diseases.

A major problem faced by the Indian and Alaska native population is lack of food and economic resources to provide adequate diets and lack of knowledge of the relationship of food to health which motivates the best use of the resources that are available.

Dental Problems - Dental caries, periodontal disease, orthodontic conditions, and missing teeth comprise a major health problem afflicting Indian and Alaska native populations. The average school child between 6-17 years of age experiences more than six decayed teeth and the average number of unfilled decayed teeth per adult between the ages of 18-79 years is more than three times that for the general population. For each 1,000 persons, on the average more than 400 dentures are required and about 240 persons are experiencing periodontal disease.

Notifiable Diseases - 1967 (per 100,000 population)	Indians in U.S.	United States
Tuberculosis--new active	170	23
Rheumatic Fever	22	2
Strep Throat	2,943	229
Hepatitis	294	21
Measles	553	32
Gonorrhea	770	207
Syphilis	123	52
Pneumonia	3,680	NR*
Otitis Media	8,099	NR*
Gastroenteritis	6,713	NR*
Influenza	993	NR*
Trachoma	1,077	NR*

*NR - Not reported.

3. Health Related Problems

In addition to the health problems discussed above, a number of related problems impact upon the health status of Indians or upon the effective delivery of services. These include:

a. Housing: The average family of five or six lives in a one or two-room house.

b. Sanitation: Even after construction in fiscal year 1971, approximately 28% of the estimated 76,800 Indian homes will still lack running water and will have inadequate means of waste disposal.

c. Income: In 50% of the households the income is under $2,000 a year--hardly enough to sustain life much less maintain it in a healthy condition. Part of this problem is the unemployment rate, as high as 80% in some areas.

d. Communication: Deep cultural, linguistic, and psychological isolation exists in addition to the geographic barriers. Consideration must be given to the differences between Indian and non-Indian cultures and to the many differences among the various Indian communities. Related to communication are the problems of literacy and educational levels and the amount of understanding of good health practices. Considerable effort is expended on securing participation by the Indian people in the planning, operation, and evaluation of the health program in order to insure program effectiveness.

e. Family Planning: A responsibility of the Indian Health Service is to provide family planning information and services to Indian families in order to maintain and improve the health of the mother and child. Such services are provided in a broader context of family life education to help families plan their growth commensurate with their desires and economic resources.

4. Measurement of Health Status

The Indian Health Service uses a variety of tools to measure the effectiveness of program efforts. Among these are mortality and morbidity rates, service statistics and the "Q" index which is an indicator of health status levels. The "Q" index is based on time lost from normal activities in terms of mortality, morbidity, and disability days. These health index values are not finite, but may be used to show status, change and trends in health problems. Values are determined and ranked for 17 disease categories based on the International Classification of Diseases Adapted, (ICDA). In general, lower values indicate a less severe health problem relative to those with higher values. This trend and ranking information is thus used to provide some insight into which problems may be more amenable to solution and where greatest program emphasis should be placed among disease categories.

Available information suggests the following groupings of health problems.

a. Disease classifications where the Health Index Value indicates improvement has been occurring:

Infective and Parasitic Diseases
Diseases of the Respiratory System
Diseases of the Digestive System
Symptoms, Senility and Ill-defined Conditions

b. Disease classifications where the Health Index Values indicate maintenance of essentially static levels:

Neoplasms
Allergic, Endocrine System, Metabolic, and Nutritional Diseases
Diseases of Blood and Blood-forming Organs
Mental, Psychoneurotic and Personality Disorders
Diseases of Nervous System and Sense Organs
Diseases of Circulatory System
Diseases of the Genito-urinary System
Deliveries, Complications of Pregnancy, Childbirth and Puerperium

Diseases of the Skin and Cellular Tissue
Diseases of Bones and Organs of Movement
Congenital Malformations
Certain Diseases of Early Infancy

c. Disease classifications where the Health Index Values indicate a possible rise in the levels:

Injuries and Adverse Effects of Chemicals and Other External Agents

5. Program Operations

In order to conduct a comprehensive health services program for Indians and Alaska natives, it has been necessary to develop a total system for planning, implementing, and evaluating the services provided. First, health needs must be determined, resources must be identified, services then must be provided to meet the health needs, the services should be of high quality, and adequate controls must be in effect to manage the program. Indian participation is an essential part of all phases of the system.

This system also has the following characteristics:

(1) It assures the carrying out of Federal Indian policy, particularly the right of Indian self-determination in regard to matters of health.

(2) It provides for Indians the concern, attention, and services emanating from national health priorities.

(3) It insures flexibility and options in order to most effectively achieve the Indian Health goal and objectives.

(4) It provides a process which moves over a period of time toward the objective of Indian control and administration of the Indian health program.

a. Indian participation

Indian participation is woven through all three of the basic program components--planning, implementation, and evaluation. Experience has shown that participation by the people in all program aspects is indispensable in the reduction of health problems or other social problems.

Indian participation has been provided for in a formal way since the Indian Reorganization Act of 1934. The most recently issued Indian Health Service statement concerning Indian participation is contained in the 1969 Annual Report to the First Americans. It states:

> "The Indian health program is your program, to be carried out in accordance with your wishes and requirements. To meet our common goal--to raise your health to the highest possible level--your involvement and participation in every phase of the program is essential.
>
> "Only with your advice, guidance, and assistance can we assure true identification of your health problems and undertake proper action to meet your needs."

Indian involvement may be viewed as the lattice through which the whole program for Indian health operates. Indians now are participating in the development of plans, in operations, and in the evaluation of programs in each of the 85 IHS service units.

Indians and Alaska natives who serve as community health representatives in the lower United States and native village health aides in Alaska receive training by the Indian Health Service and are employed by Indian tribes or the Alaskan villages.

The function of the trained community health representative and Alaska native village health aide is to serve as a member of the health team serving the community, to effectively speak for the community and to secure community support for health programs. In this connection, these representatives participate by: (1) making people aware of their health conditions and the availability of health services; (2) assisting families in doing things for themselves to improve and maintain their health; (3) conducting surveys and accumulating vital data; (4) interpreting to the families, the environmental conditions that need attention for improving health and participating in planned programs; (5) referring individuals to professional health personnel and following up on these referrals to insure that the individuals are following prescribed instructions and keeping scheduled appointments; and (6) educating and advising communities and individuals on non-professional aspects of all phases of the health program.

b. Identification of health needs

A key condition to be fulfilled in order to logically plan for the provision of health services is to define the health problems as determined by health statistics and professional analysis and as reflected by the felt needs and demands of the consumer. Community profiles are essential in appraising health needs since the social, economic and cultural makeup of a community affects the nature and extent of its health problems.

Health statistics are collected and computer programming is currently underway to facilitate timely retrieval of data for analysis. Community profiles are being developed for Indian Health Service Units. The felt needs of the Indian people are being expressed through their involvement in planning and in their demands for service.

c. Identification and selection of resources

The identification and selection of health resources must consider (1) direct services provided by the Indian Health Service, (2) services for which the Indian Health Service pays through contracts with private vendors, and (3) alternate services--services available to Indians from resources other than the Indian Health Service.

An accurate assessment of direct care capabilities is maintained and continuously updated. Information about the availability of alternate resources is being refined to assess the impact of these other resources in meeting Indian health needs. The amount and kinds of services that need to be provided through contract sources can then be more precisely determined. The objective is to synthesize alternative health services systems (direct, contract, and alternate services) for each IHS service unit and select the optimal system which also considers individual needs and tribal desires.

This step is the heart of a comprehensive system for Indian health with IHS as the focal and coordinating point in the process. Critical to the process is the establishment of interagency resources planning groups so that agencies can work with each other and with tribes in developing comprehensive health plans and in identifying resources.

d. The provision of services

Provision of services is not assured until a resource is known to be available, the appropriate source of service is selected to meet the identified need, and the person requiring assistance is actually in receipt of the service.

Resource directories are being developed and maintained current for Indian Health Service Areas. Resource selection is based on considering the need of the patient while providing the most efficient and accessible health care at an equitable fee. To complete the link between beneficiary and resource, a proper method of patient referral is insured and an adequate professional follow through established.

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e. Assurance of high quality

Nationally accepted standards as they exist for all facets of the health care system have been applied to direct and contract health services provided by the Indian Health Service. Audit procedures are established and employed to assure that services are of a high quality. Research and development in the area of health services delivery systems is being conducted at the IHS systems research center in Tucson. Training and personnel development programs are being expanded particularly for Indian people engaged in or interested in health careers.

f. Provision of management controls

To carry out continuous evaluation and support all of the previous parts of this system, management controls that are concerned with efficiency, effectiveness and economy must be established. Within the Indian Health Service data systems, fiscal and procedural controls, and administrative analyses are in effect by which health services are provided through funding prorated in accordance with need. Special emphasis is placed on manpower deployment, administrative audit, and cost containment activities.

There follows the narrative justification for the 1971 Indian Health Service Budget by activity and subactivity.

HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION
Indian Health Service

Appropriation, 1969 (adjusted)		$94,282,171
Total amount available		94,282,171
Appropriation, 1970	$99,481,000	
1970 supplemental to cover increased cost of patient care, P.L. 91-166	2,048,000	
Transferred to other accounts (GSA)	-18,672	
Comparative transfer to "Office of the Administrator"	-50,000	
Comparative transfer from "Departmental Management"	59,000	
Proposed transfer from "National Institute of General Medical Sciences" for pay increases	4,464,000	
Total amount available, 1970		105,983,328

Summary of Increases and Decreases, 1971

Patient Care	
To provide for mandatory increases for direct care at IHS facilities ($3,175,000) and indirect contract care ($2,252,000); program increases for direct care at IHS facilities ($410,672) and program decreases for direct care at IHS facilities (-$505,000) and indirect contract care (-$177,000) and payments to working capital fund, DHEW ($29,000) and service and supply fund ($104,000)	+ 5,288,672
Net change - patient care	+ 5,288,672
Field Health Services	
To provide for mandatory increases for sanitation ($100,000) dental ($284,000), public health nursing ($78,000), health education ($58,000), and field medical services ($1,708,000); a program increase for field medical services ($475,000) and program decreases for sanitation (-$52,000), dental (-$43,000), public health nursing (-$39,000), health education (-$9,000), and field medical services (-$309,000)	+ 2,251,000
Net change - field health services	+ 2,251,000
Special Assistance to the Menominee Indian people	
To reflect termination of assistance provided in 1970	-350,000
Net change - Menominee	-350,000
Administration	
To provide for mandatory increase ($44,000)	+ 44,000
Net change - administration	+ 44,000
Net change - 1971	+ 7,233,672
Budget estimate, 1971	113,217,000

INDIAN HEALTH SERVICES
Analysis by Activities

Activity	Amount Available 1969	Amount Available 1970	Estimate 1971	Increase (+) Decrease (-)
	1/2/	1/2/		
Patient care	$68,972,994	$76,906,328	$82,195,000	+$5,288,672
Field Health Services	22,754,855	26,633,000	28,884,000	+ 2,251,000
Special assistance to the Menominee Indian people ..	350,000	350,000	---	-350,000
Administration ...	1,873,135	2,094,000	2,138,000	+ 44,000
Unobligated balance lapsing	349,868	---	---	---
	1/2/3/	1/2/3/	3/	
Total	94,300,852	105,983,328	113,217,000	+ 7,233,672

1. Patient Care

Sub-Activity	Amount Available 1969	Amount Available 1970	Estimate 1971	Increase (+) Decrease (-)
(a) Direct - Operation of IHS hospitals:				
Positions .	4,289	4,383	4,421	38
Amount	51,297,015 1/	56,811,328 1/	60,025,000	+ 3,213,672
(b) Indirect Contractual:				
Positions .	20	30	30	--
Amount ...	17,675,979 2/	20,095,000 2/	22,170,000	+ 2,075,000
Total Patient Care:				
Positions .	4,309	4,413	4,451	+ 38
Amount	68,972,994	76,906,328	82,195,000	+ 5,288,672

1/ Reflects comparative transfer from "Departmental Management" as follows: 1969 + $58,000; 1970 + $59,000

2/ Reflects comparative transfer to "Office of the Administrator" as follows: 1969 -$39,319; 1970 -$50,000

3/ Excludes reimbursements as follows: 1969 - $1,259,370; 1970 - $1,550,000; 1971 - $1,550,000

1. Patient Care

SUMMARY OF CHANGE

Mandatory increase:	
Statutory salary promotions	$431,000
Annualization of 1970 wage board increases	195,000
Annualization of Phase III civilian pay act increase, P.L. 90-206	72,000
Additional cost in 1971 of civil service retirement contribution, P.L. 91-93	68,000
Increased cost of medical care under contract	2,236,000
Increased cost of supplies	330,000
FICA rate increase	18,000
Increased payments for Bureau of Employees Compensation beneficiaries	27,000
Staffing related to newly constructed facilities	2,050,000
Total mandatory increase	5,427,000
Payments to working capital fund, DHEW	29,000
Payments to service and supply fund	104,000
Program increase:	
Pilot inpatient mental health program (15 positions)	185,672
Nutrition and dietetic program (23 positions)	225,000
Total program increase	410,672
Program decrease:	
Reduction in other objects	-505,000
Decrease in contract tuberculosis A.D.P.L.	-177,000
Total program decrease	-682,000
Net program decrease	-271,328
Total increase	5,288,672

(a) Direct -- The 1971 estimate of 4,421 positions and $60,025,000 provides an increase of 38 positions and $3,213,672 over the 1970 estimate of 4,383 positions and $56,811,328.

Need for Increase

The requested increase consists of:

Mandatory increase:	
Statutory salary promotions	$416,000
Annualization of 1970 wage board increases	195,000
Annualization of Phase III civilian pay act increase, P.L. 90-206	71,000
Additional cost in 1971 of civil service retirement contributions, P.L. 91-93	68,000
Increased cost of supplies	330,000
FICA rate increase	18,000
Increased payments for Bureau of Employees Compensation beneficiaries	27,000
Staffing related to newly constructed facilities	2,050,000
Total mandatory increase	3,175,000
Payments to working capital fund, DHEW	29,000
Payments to service and supply fund	104,000
Program increase:	
Pilot inpatient mental health program (15 positions)	185,672
Nutrition and dietetic program (23 positions)	225,000
Total program increase	410,672
Program decrease:	
Reduction in other objects	-505,000
Total program decrease	-505,000
Net program decrease	- 94,328
Total increase	3,213,672

Pilot inpatient mental health program -- $185,672 and 15 positions

In 1968 the Congress provided $100,000 for a mental health program in the combined Albuquerque and Navajo Areas and in 1969 approved additional funds to strengthen the ongoing program. While success and accomplishments of this program have exceeded our expectations, they have identified a need for further implementation.

The basic program consists of a psychiatric team which provides services to the Navajo Area on a limited basis. Their findings indicate that there is a critical need for a psychiatric ward at an Indian hospital to provide effective treatment locally, and avoid separation from the native culture, language, and family.

A program has now been developed in the Navajo Area which will include a psychiatric ward in the Gallup Medical Center, the only location on the entire reservation where continuous emergency psychiatric coverage is currently provided. Presently, many psychiatric patients are being treated in medical or general wards, but this is an unsatisfactory makeshift system due to lack of * privacy and lack of trained staff. With the establishment of a 25 bed unit in the Gallup Medical Center, all types of psychiatric patients will be kept in this facility except very long term cases which will be referred to the State Hospital. Psychiatric care in this facility will cost less than utilization of contract care services. Ten beds of this ward will be for alcoholic patients and the remainder will be for all other psychiatric problems. Admission of patients to the inpatient ward will be limited to acutely ill patients. In addition, the psychiatric staff will provide outpatient diagnostic and therapeutic services to an average of 8 patients per day. An increase of $185,672 and 15 positions (12 man years) is requested in 1971 in order to implement this program.

Nutrition and dietetics program

1. Direct Patient Care - $225,000 and 23 positions
2. Field Medical Services - $257,000 and 20 positions

Poor nutritional status has continued for a number of years to be a major health problem among the Indian and Alaska native population. Mild and moderately severe nutritional deficiencies are relatively common among infants, preschool children, and women of childbearing age (15-44). Malnutrition occurs per se and is a contributing or complicating factor in many other prevalent health problems and illnesses such as infectious disease, retarded physical growth, high infant morbidity and mortality, maternal morbidity, nutritional anemia, obesity, and chronic disease.

The major problems faced by the Indian and Alaska native population are lack of food and economic resources and a lack of knowledge of the relationship of food to health which results in failure to make the best use of the limited food and funds available. Studies of dietary intakes reveal gross to moderate deficiencies in nutritional adequacy of foods consumed. Dietary interviews suggest that large numbers of homemakers and other family members do not know what comprises a nutritionally adequate diet.

Education is a significant and essential tool in any program designed to combat nutritional problems. Nutrition education efforts of the small staff of Indian Health Service nutritionists and dietitians have documented the effectiveness of practical, applied nutrition teaching in improving food practices. A good example is education in the use of commodity foods. Where it has been possible to extend such efforts there have been notable increases in the use of often hitherto discarded items such as nonfat dry milk. Work with mothers on diets of infants and preschoolers within available resources has brought considerable improvement in the food intakes of these children. Without doubt, this has contributed to declining

morbidity and mortality rates in this age group. However, nutrition and dietetic services are reaching less than 15% of the service population.

1. Direct patient care - 23 positions and $225,000

From 50 to 75% of all patients receiving IHS hospital and ambulatory care must follow medically prescribed diets. Skilled, often prolonged, patient counseling and guidance requiring familiarity with individual and tribal resources and customs are needed to accomplish this. Furthermore, all patients should receive careful counseling and guidance in normal diet as a preventive and maintenance health measure, also tailored to resources and customs. This is particularly needed for the child-bearing years, infancy, and childhood, on a family-centered basis.

However, only 1/3 of the 51 IHS hospitals have a dietitian on the staff. And there are frequently too few ancillary dietetic staff, particularly at supervisory and aide levels, to permit a dietitian to extend and expand her professional skills and knowledge much beyond food services to bed patients.

The 23 positions (18 man years) and $225,000 requested for direct patient care will provide for the addition of professional dietitians and ancillary dietetic staff. This resource will permit more hospitals to begin to offer the foregoing dietetic services to patients. Additional ancillary dietetic staff will permit dietitians to intensify their efforts to reach more patients directly and also indirectly through consultation and training of medical and paramedical staff in normal and clinical nutrition so as to enhance their skills in dealing with patients.

2. Field medical services

Budgeted under field medical services - see page 37
Nutrition and dietetics program - 20 positions and $257,000

These field medical service positions will permit the intensification of efforts needed to lessen the problem of malnutrition and hunger. The Indian Health Service proposes to establish a nutrition aide training program to train 24 nutrition aides by 1973, and 24 each year thereafter through 1975. The nutrition aides will be bilingual Indians and Alaska natives. They will work under the general supervision and direction of a nutritionist in assisting families to improve nutritional health through the best utilization of all economic and food resources available to them, and in obtaining data about dietary intakes and family food consumption. Their familiarity with language, environment, traditions, cultural food practices, and indigenous food resources will make them especially effective in extending the skills and knowledge of the professional nutritionist.

The 20 positions (15 man years) and $257,000 requested under the field medical services program in 1971 will permit the addition of 12 nutritionist positions and the initial implementation of a nutrition aide training program in which 8 nutrition aides will be trained in 1971.

Reduction in other objects - (-$505,000)

The 1971 estimate reflects a reduction of $505,000 in other objects of expenditure.

Plan of work

For 1971 an appropriation in the amount of $60,025,000 is requested for the direct care (operation of Indian Health Service hospitals) to cover (1) the operation of 51 Indian Health Service hospitals and attached outpatient clinics (2) a nurse training program associated with Indian Health Service hospitals (3) the maintenance of all Indian Health Service facilities consisting of hospitals, health centers, health stations, school clinics, and staff quarters.

The replacement medical center at Phoenix, Arizona, will be in full operation in 1971. The 1971 request includes under mandatory increases the full year funding for the 200 positions authorized for the Phoenix Medical Center in 1970.

A pilot inpatient mental health program will be fully implemented at the Gallup Medical Center, Gallup, New Mexico in 1971.

Expected workloads for the hospital program are shown on the following table:

INDIAN HEALTH SERVICE HOSPITALS
Workload Data

Average Daily Patient Census by Type of Patient (Excl. newborn)	1969 Actual	1970 Estimate	1971 Estimate	Increase(+) Decrease(-)
Inpatient load by type of patient:				
General patients	1,724	1,685	1,720	+ 35
Tuberculosis patients	125	115	105	- 10
Total inpatient load	1,849	1,800	1,825	+ 25
Total admissions (excl.births)	69,560	71,000	73,000	+ 2,000
Average length of stay (days) General patients	9.9	8.7	8.7	...
Total births-All Indian Health Service Hospitals	8,560	8,600	8,600	...
Outpatient visits to hospital facilities	982,187	1,050,000	1,110,000	+60,000

(b) Indirect -- The 1971 estimate of 30 positions and $22,170,000 provides an increase of $2,075,000 over the 1970 estimate of 30 positions and $20,095,000.

Need for increase

The requested increase consists of:

Mandatory increase:	
Statutory salary promotions	$ 15,000
Annualization of Phase III civilian pay act increase, P.L. 90-206	1,000
Increased cost of medical care under contract	2,236,000
Total mandatory increase	2,252,000
Program decrease:	
Decrease in contract tuberculosis A.D.P.L.	-177,000
Total program decrease	-177,000
Total increase	2,075,000

An analysis of the rates negotiated in agreements with the various hospitals, clinics, physicians, and dentists with which the Indian Health Service has current formal contracts, indicates a steady upward trend. Published continuing surveys of health care costs corroborate this trend. In order to continue the approximate level of services provided under this program in 1969, it is necessary to plan for this added cost and request funds sufficient to cover the increase. An increase of $2,236,000 is requested in 1971 for the rising costs in contract rates necessary for program operation. The following table reflects the percentage increase in hospitalization costs projected for 1971.

Contract Hospitalization	1969 Actual over 1968 Actual	1970 Estimate over 1969 Actual	1971 Estimate over 1970 Estimate
General	18.2%	16.9%	10.7%
Tuberculosis	23.0%	7.7%	7.4%
Neuropsychiatric	17.9%	12.7%	12.6%

An increase of $15,000 is requested to provide funds for mandatory within-grade promotions and $1,000 to cover increases due to the civil service pay act.

A decrease of $177,000 results from a decrease of 18 tuberculosis A.D.P.L. (-$177,000).

Plan of work

The request of $22,170,000 is for the purchase of medical care through contractual arrangements and is an essential element of the Indian Health Service program. Formal agreements are entered into with community hospitals, private physicians and clinic groups, dentists and providers of ancillary health services, to assure that quality care is obtained. Through this mechanism health services are practically and effectively provided for the widely scattered and small groups of Indian people who urgently need such services. In addition, the use of contract services makes possible special diagnostic and therapeutic services which many small-sized and intermediate-sized Indian Health Service 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 Indian Health Service program. The Indian Health Service does not operate any long-term inpatient facilities equipped to provide psychiatric care to Indian people 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 1971 program. It also shows how 1969 funds were obligated and the plan of funding for 1970 operations based on 1969 actual experience. The actual experience of average daily patient loads are reported for 1969 together with expected levels of 1970 and 1971.

INDIAN HEALTH SERVICES
Indirect - Contractual

	1969 Actual			1970 Estimate			1971 Estimate		
	Average Daily Pt.Load	Rate	Amount	Average Daily Pt.Load	Rate	Amount	Average Daily Pt.Load	Rate	Amount
Hospitalization:									
General	425	$53.09	$8,236,482	418	$62.05	$9,467,000	418	$68.71	$10,483,000
Tuberculosis	117	25.21	1,076,944	117	27.15	1,158,000	99	29.17	1,054,000
Neuropsychiatric	162	12.01	710,326	159	13.53	785,000	159	15.23	884,000
Total	704		10,023,752	694		11,410,000	676		12,421,000
Patient and escort travel			412,151			406,000			406,000
Professional field supervision			290,077			341,000			357,000
Physicians' services (inpatient fees, office visits, consultation services			4,609,431			5,188,000			5,873,000
Dental services (emergency services, dental laboratory prosthesis)			707,675			866,000			928,000
Other costs (lab and X-ray services, pharmaceuticals, drugs for inpatients and outpatients, prosthesis and burials)			1,632,893			1,884,000			2,185,000
Total			17,675,979			20,095,000			22,170,000

ITEMIZATION OF ESTIMATE
Patient Care

Obligation by Object	Actual 1969	Amount Available 1970	Estimate 1971	Increase (+) Decrease (-)
11 Personnel compensation	$33,053,249	$37,240,000	$39,392,000	+$2,152,000
12 Personnel benefits	4,391,167	5,025,000	5,342,000	+ 317,000
21 Travel and transportation of persons	1,961,786	2,029,000	2,237,000	+ 208,000
22 Transportation of things	740,522	774,000	864,000	+ 90,000
23 Rent, communication, and utilities	2,627,357	2,760,328	2,875,000	+ 114,672
24 Printing and reproduction	164,304	153,000	153,000	---
25 Other services	18,902,976	21,248,000	23,414,000	+ 2,166,000
26 Supplies and materials	6,010,781	7,099,000	7,154,000	+ 55,000
31 Equipment	1,657,275	1,158,000	1,344,000	+ 186,000
32 Lands and structures	39,537	---	---	---
42 Insurance, claims, and indemnities	4,203	---	---	---
Sub-total	69,553,157	77,486,328	82,775,000	+ 5,288,672
Deduct quarters and subsistence charges	-580,163 1/2/3/	-580,000 1/2/3/	-580,000 1/	---
Net obligations	68,972,994	76,906,328	82,195,000	+ 5,288,672

1/ Excludes reimbursements as follows: 1969 - $1,153,212; 1970 - $1,437,000; 1971 - $1,437,000.

2/ Reflects comparative transfer to "Office of the Administrator" as follows: 1969 - $39,319; 1970 - $50,000

3/ Reflects comparative transfer from "Departmental Management" as follows: 1969 + $58,000; 1970 + $59,000

2. Field Health Services

Sub-activity	Amount Available 1969		Amount Available 1970		Estimate 1971		Increase (+) Decrease (-)	
	Pos.	Amount	Pos.	Amount	Pos.	Amount	Pos.	Amount
(a) Sanitation	332	$3,729,370	332	$4,153,000	332	$4,201,000	---	+ $ 48,000
(b) Dental	294	3,262,459	294	3,457,000	325	3,698,000	+ 31	+ 241,000
(c) Public Health Nursing	270	2,683,276	270	3,079,000	275	3,118,000	+ 5	+ 39,000
(d) Health Education	94	1,062,488	94	1,306,000	99	1,355,000	+ 5	+ 49,000
(e) Field Medical Services	831	12,017,262	831	14,638,000	930	16,512,000	+ 99	+ 1,874,000
Total	1,821	22,754,855	1,821	26,633,000	1,961	28,884,000	+140	+ 2,251,000

SUMMARY OF CHANGE

Mandatory increase	
Statutory salary promotions	$ 329,000
Annualization of Phase III civilian pay act increase, P.L. 90-206	34,000
Additional cost in 1971 of civil service retirement contributions, P.L. 91-93	14,000
Additional cost in 1971 of increased per diem, P.L. 91-114	100,000
Full year cost of 125 community health representatives trained in 1970	782,000
Salary increase from 1/2 to 3/4 full annual salary for 185 Alaska native health aides employed in 1969	298,000
Periodic salary increase for 185 community health representatives employed in 1969	54,000
Increased cost of supplies and materials	150,000
F.I.C.A. rate increase	17,000
Staffing related to newly constructed facilities (100 positions)	450,000
Total mandatory increase	2,228,000
Program increase	
Mental health program (20 positions)	218,000
Nutrition and dietetic program (20 positions)	257,000
Total program increase	475,000
Program decrease	
Reduction in other objects	- 452,000
Total program decrease	- 452,000
Net program increase	+ 23,000
Total increase	2,251,000

(a) Sanitation -- The 1971 estimate of 332 positions and $4,201,000 provides an increase of $48,000 over the 1970 estimate of 332 positions and $4,153,000.

Need for increase

The requested increase consists of:

Mandatory increase:	
Statutory salary promotions	$65,000
Annualization of Phase III civilian pay act increase, P.L. 90-206	4,000
Additional cost in 1971 of increased per diem (P.L. 91-114)	26,000
FICA rate increase	5,000
Total mandatory increase	100,000
Program decrease:	
Reduction in other objects	-52,000
Total program decrease	-52,000
Net increase	48,000

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. Surveys made during the period 1957 to 1964 on Indian reservations representing more than 10 percent of the total population showed that: (1) one-half of the Indian families lived in one and two-room houses; (2) more than 70 percent hauled or carried water from potentially contaminated sources; (3) more than 75 percent had grossly inadequate facilities for sanitary waste disposal. These conditions, together with lack of understanding of modern environmental health practices, in large measure are responsible for the high incidence of preventable disease and needless premature deaths, particularly among Indian infants. Diarrhea, dysentery, and respiratory ailments continue to cause a significant patient load on Indian health hospitals, clinics, and contract facilities. Other environmental conditions including insect and wild rodent vectors continue to result in sporadic epidemics on Indian reservations.

The staff of the sanitation program provides basic environmental health services, engineering and technical support in the development of sanitation facilities projects, coordination with Federal and tribal housing agencies, negotiation of agreements, securing tribal participation in the work, logistical support and supervision of the installation of facilities, and provides essential training to Indian people in sanitation practices and the operation, maintenance, and care of sanitation facilities completed under the Public Law 86-121 sanitation facilities construction activity.

Basic environmental health activities

A continuing program of consultation and service is made available to Indian tribes, groups and families for the purpose of helping them improve and maintain a healthful home and community environment. These basic services are concerned with improving sanitation conditions at home, at Indian celebrations, and at trading posts and other commercial establishments serving Indians. Consultation is also provided on sanitation problems associated with tribal economic development projects, including the rapidly growing tourist industry. Particular emphasis is placed on the adoption of sanitation codes by tribal governing bodies. Considerable effort is expanded in follow-up surveys of completed sanitation facilities projects and in training of householders to assure that maintenance and care are being furnished and that the facilities are being properly used.

In the provision of these basic services, the Indian and Alaska native sanitarian aides are key members of the staff who help bridge the gap of cultural differences to bring modern environmental sanitation practices to Indian communities and groups. These aides are trained by the Indian Health Service in the basic elements of sanitation and they, in turn, impart this knowledge to their own people. Ninety-six full-time and three part-time sanitarian aides are currently authorized to provide services on Indian reservations and in Alaska native villages.

In addition to the foregoing, the basic environmental health activities incorporate a consultative service to assure that a high level of eivironmental sanitation is maintained in federal facilities serving Indians.

Sanitation facilities construction activity

The sanitation facilities construction activity complements the basic environmental health activity by providing tangible support in those situations where the need for facilities exceeds the available resources of the Indian people. The Indian Health Service is authorized to provide this assistance under Public Law 86-121, the Indian Sanitation Facilities Act.

The activity employs a coordinated tribal-federal attack to correct gross deficiencies in individual and community water supplies, waste disposal, and other sanitation facilities. Staffing to implement this work is supported under this program.

In the construction activity, Indians participate in project planning and construction and assume responsibility for the operation and maintenance of the completed facilities. The staff effort devoted to project engineering, technical support and motivation and training of Indian families and groups has resulted in notable Indian participation in the form of men, money, and materials.

Reduction in other objects - (-$52,000)

The 1971 estimate reflects a reduction of $52,000 in other objects of expenditure.

Plan of work

A review of the environmental health activities indicates that the 1969 level of 86,000 advisory and consultative services rendered to Indian homes and communities represents 61 percent of the estimated total need for such services. In 1970, the level is expected to increase to approximately 87,000 services and to remain the same in 1971. These figures represent 57 percent of the estimated total need for 1970 and 54 percent of the estimated need for 1971. As more Indian homes and communities receive sanitation facilities under P.L. 86-121, the need for advisory and consultative services will continue to increase.

During fiscal year 1971, the Indian Health Service will continue to cooperate with the Housing Assistance Administration, the Bureau of Indian Affairs, Office of Economic Opportunity and tribal governments by providing sanitation facilities for new and rehabilitated Indian housing construction. It is estimated that work on approximately 8,000 new or improved Indian housing units will be initiated, of which 7,100 will require sanitation facilities construction by the Indian Health Service and the remaining 900 units will require technical assistance concerning site location, facilities, design and construction inspection. (This compares with 7,100 units for 1970 and 3,330 units in 1969.)

The 1971 request will also permit the construction of new or improved facilities for Indian residents in California. The facilities to be constructed will provide running water and waste disposal facilities for approximately 210 Indian families and sanitation facilities improvements for another 240 families.

With the completion of all projects authorized or planned through fiscal year 1970 both running water and an adequate means of waste disposal will have been provided for approximately 48,000 Indian families. An additional 17,000 families will have been benefited by the construction of improved facilities.

The following table reflects the number of families served by the sanitation facilities construction activity.

Fiscal Year	Families Provided Running Water and Adequate Means of Waste Disposal	Additional Families to Benefit From Improved Facilities
1961 thru 1969	39,600	15,180
1970	8,730	2,600*
1971 Request	7,310	1,140*

*Includes 900 homes to be served by HUD which require site investigations, soil tests, and consultative and technical assistance by the Indian Health Service.

(b) Dental -- The 1971 estimate of 325 positions and $3,698,000 provides an increase of 31 positions and $241,000 over the 1970 estimate of 294 positions and $3,457,000.

Need for increase

The requested increase consists of:

Mandatory increase:	
Statutory salary promotions	$41,000
Annualization of Phase III civilian pay act increase, P.L. 90-206	3,000
Additional cost in 1971 of increased per diem (P.L. 91-114)	18,000
Increased cost of supplies and materials	38,000
FICA rate increase	4,000
Staffing related to newly constructed facilities (31 positions)	180,000
Total mandatory increase	284,000
Program decrease:	
Reduction in other objects	-43,000
Total program decrease	-43,000
Net increase	241,000

Dental caries, periodontal disease, orthodontic conditions, and missing teeth continue to be a major health problem afflicting Indian and Alaska native populations. The problems have been magnified by the great backlog of work and by the inability to increase the dental resources to keep up with the tremendous growth in the child population. During fiscal year 1969, 138,032 examined patients received 634,479 dental treatments. The persons examined represent 34 percent of the Indian and Alaska native population. Only 61.1 percent of the treatment required by the examined patients was provided and only 23.6 percent of the estimated number of treatments required by the total population was provided. The children were the recipients of most of the limited care that was rendered.

Although the dentist to general population ratio is about 1 to 1,900, in the Indian Health program there is only one clinician to about 3,400 people. The tremendous backlog of unmet dental needs further complicates this situation. 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.

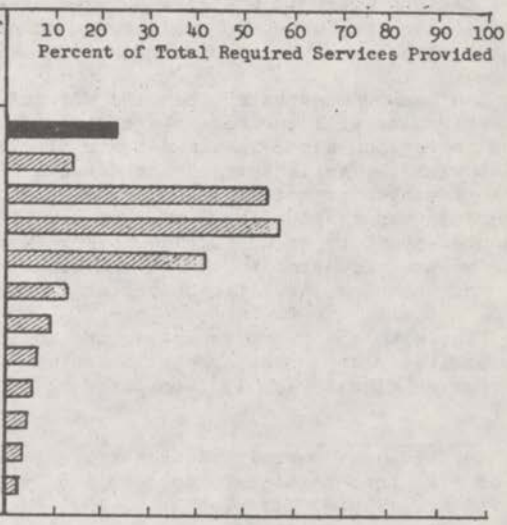
Through the years there has been a marked expansion of corrective and preventive services provided. For example, during fiscal year 1969 Indian Health clinicians provided fluoride treatments to 96,029 patients compared to 48,842 in fiscal year 1964 and 3,139 in fiscal year 1958. The number of filled teeth per patient examined between the ages of 6-17 years of age has increased from 1.13 in fiscal year 1958 to 3.13 in fiscal year 1969. With only a 69 percent increase in dental officer staff in fiscal year 1969 over fiscal year 1958, there has been a 33 fold increase in total topical

fluoride treatments provided, and threefold increase in filled teeth per patient 6-17 years of age examined. This increase has been 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.

The following table and graph illustrates the percent of required services provided:

PERCENT DENTAL SERVICES PROVIDED BY THOSE REQUIRED BY TOTAL INDIAN AND ALASKA NATIVE POPULATION FISCAL YEAR 1969

Age Group (In Years)	Percent of Required Services Provided
All Ages	23.6
3-4	13.5
5-9	55.5
10-14	57.8
15-19	42.6
20-24	12.2
25-34	9.1
35-44	7.3
45-54	5.9
55-64	4.9
65-74	3.7
75+	2.2



Reduction in other objects - (-$43,000)

The 1971 estimate reflects a reduction of $43,000 in other objects of expenditure.

Plan of work

For 1971 the dental program of the Indian Health Service will continue to emphasize preventive services. Concurrent with this emphasis there will be a continuing program of bringing the children to a maintenance level of dental care. More attention will be given to the dental needs of young adults to protect the care given them as children. Additional dental services will be provided to groups of Indian and Alaska native people through the utilization of recently constructed facilities and to small and/or isolated groups where it is most feasible to assign full-time staff.

The 1971 request includes 31 additional dental personnel (14 man years) under mandatory increases to staff newly constructed and enlarged facilities.

Fourteen dentists and seventeen dental assistants are required to provide services in fiscal year 1971 at seven newly constructed facilities where services previously have never been available and at two locations where it was necessary to enlarge the dental clinics because they were too small to accommodate the full demand for dental care.

It has been demonstrated that the effective utilization of dental assistants will increase the efficiency of the dental officer. Compared to working alone in a two-chair clinic, the productivity of a dentist with two assistants is increased by 51 percent.* In addition, a marked impact will be made in the preventive aspects of the program by increasing the number of auxiliary personnel who can provide preventive types of services. For these reasons, 17 dental auxiliaries are requested to assist the dental officers required by the new and expanded facilities for fiscal year 1971.

In line with the above increase, the following table sets forth major practices planned for accomplishment in the direct services program during fiscal year 1971 compared to 1969 and 1970.

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* The 1968 Survey of Dental Practice III. Income of Dentists by Type of Practice, Personnel Employed and Other Factors. JADA, Vol. 78, April 1969. (Table 12, p. 804)

Yield and Effort	1969 Actual	1970 Estimated	1971 Estimated
1. Oral Health Levels			
Decay experience per person ages 6-17 1/	5.88	5.57 2/	5.57
Periodontal disease per 1,000 persons 1/	249	245 2/	245
Dentures required per 1,000 persons 1/	416	412 2/	412
2. Workload which will result in the Above Levels or Oral Health			
Patients examined	138,032	135,000	148,800
Total services provided	634,479	620,500	683,700
Topical fluoride treatments	96,029	93,900	103,500
Dentures provided	2,823	2,760	2,990

1/ Age adjusted rates.

2/ Based on a 1.2 percent increase in all age groups with no increase in workload

(c) Public health nursing -- The 1971 estimate of 275 positions and $3,118,000 provides an increase of 5 positions and $39,000 over the 1970 estimate of 270 positions and $3,079,000

Need for Increase

The requested increase consists of:

Mandatory increase:	
Statutory salary promotions	$45,000
Annualization of Phase III civilian pay act increase, P.L. 90-206	5,000
Additional cost in 1971 of increased per diem (P.L. 91-114)	10,000
Staffing related to newly constructed facilities (5 positions)	18,000
Total mandatory increase	78,000
Program decrease:	
Reduction in other objects	-39,000
Total program decrease	-39,000
Net increase	39,000

The present health level of the Indian and Alaska native population and effort required to effect any significant progress in their health status clearly indicates the need for strengthening the public health nursing program. The public health nurse is the chief provider of health services at the community level. The activities of the public health nurse include case finding, health teaching, and follow-up services to provide continuity of care among the home, school, hospital, and clinic. The public health nurse makes her greatest contribution to improving the health level of the community by teaching good health practices to families in their own homes. Her effectiveness is largely dependent upon establishing and maintaining a relationship of mutual respect with the families she serves.

Home health services to the Indian and Alaska native population are dependent largely upon the availability of public health nursing personnel. Case finding, health teaching, and follow-up services to provide continuity of care among the home, school, hospital, and clinic are public health nursing activities essential to an effective generalized community public health program.

An increase of 5 public health nursing positions (2 man years) related to new construction will allow an improvement of preventive health services in the public health nursing program in 1971. It will make possible extension of services to an additional 600 families in 1971.

Reduction in other objects - (-$39,000)

The 1971 estimate reflects a reduction of $39,000 in other objects of expenditure.

Plan of work

With the addition of 5 public health nursing positions program efforts can be intensified, in the following areas:

1. In the additional locations to which these positions will be added, health teaching will be strengthened in the home, the hospital, the clinic, the school, and the community, with the goal of improving nutrition and general health status, home sanitation, dental care, mental health and prevention of illness and accidents.

2. Efforts will be intensified to reach expectant mothers early in pregnancy and to follow them throughout the pre and post-natal period, to prevent complications of pregnancy and improve their general health status. Greater emphasis will be placed on family planning education.

3. Emphasis will continue in following newborn infants through home visits beginning as soon as possible following discharge from the hospital, in an effort to further reduce infant morbidity and mortality.

4. Efforts will be aimed at raising the level of immunization in infants and children to prevent infectious diseases, especially measles.

5. Efforts will be aimed at increased services to Head-start children, and to providing greater coordination with Vista, OEO, tribal employees, etc., and increased guidance to the variety of their auxiliary personnel.

The 5 positions (2 man years) under mandatory increases related to newly constructed facilities, will permit the addition of 2 public health nursing professional personnel and three non-professional personnel and will allow a small increase in the depth of service, and the extension of services to 28,150 families, which is an additional 600 families over the 27,550 to be served in 1970.

(d) Health Education -- The 1971 estimate of 99 positions and $1,355,000 provides an increase of 5 positions and $49,000 over the 1970 estimate of 94 positions and $1,306,000

Need for Increase

The requested increase consists of:

Mandatory increase:	
Statutory salary promotions	$25,000
Annualization of Phase III civilian pay act increase, P.L. 90-206	3,000
Additional cost in 1971 of increased per diem (P.L. 91-114)	10,000
Staffing related to newly constructed facilities (5 positions)	20,000
Total mandatory increase	58,000
Program decrease:	
Reduction in other objects	-9,000
Total program decrease	-9,000
Net increase	49,000

Deficiencies in health education are evident in individual, family and community health behavior among the Indian and Alaska native people.

Lags in health behavior are implicit in three of the leading causes for hospital admissions among children -- respiratory infections, gastroenteric infections, and accidents. Problems made up of these causes have their beginning in unfavorable health behavior (attitudes, practices, and misunderstanding) which mitigates against health improvement. 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 only through changes in behavior that will lead to the proper care and full utilization of available facilities. Accidents to children in the home, burns, falls and poisonings can generally be attributed to improper human behavior.

Malnutrition, alcoholism and poor oral health are other areas of concern which reflect improper attitudes toward recommended health practices and scientifically correct health knowledge.

Health education is concerned with the organized approach to all educational deficiencies related to specific diseases as well as to those of health and safety hazards. Its aims are to prevent the recurrence and spread of disease and to reduce the risk from disease and injury by providing the necessary learning experiences among the Indian and Alaska natives. This will not only increase knowledge about health and disease, but will foster attitudes and practices needed for wholesome and responsive livelihood.

The increase of 5 positions in FY 1971 is related to newly constructed facilities and will permit the addition of three professional staff and two non-professional supporting staff.

The results are as follows:

Health education services: 1/	1969	1970	1971
Educational services to individuals in health facilities	30,300	30,000	30,900
Educational services to groups in health facilities	3,440	3,100	3,780
Educational services in homes	18,950	18,200	19,150
Educational services for groups on general community health	615	600	680
Educational services in support of environmental sanitation:			
Groups	600	590	675
Individuals	2,400	2,150	2,740

The program is and will be providing services to approximately 50% of the service units.

1/ Provision for educational sessions which provide learning experiences in a medical care (hospital, health center, clinic, etc.) or in a community (home, school, or church, etc.) setting, in order to motivate people to act in applying knowledge about health practices to their way of life and increase the value the person places on health.

The health education program of the Indian Health Service is designed to help the Indians and Alaska natives acquire the knowledge and attitudes which will enable them to use their own responsibility in initiating positive action in health matters. The program makes it possible educationally for them to strengthen their desires, capacities, and competency for managing their own health affairs for improving their personal, family and community health.

Reduction in other objects - ($ -9,000)

The 1971 estimate reflects a reduction of $9,000 in other objects of expenditure.

Plan of work

With the addition of five health education positions, (2 man years) emphasis will be placed on efforts to achieve greater involvement of the Indian and Alaska natives in their own health and welfare affairs in order to enhance:

1. community participation -- involve the Indian and Alaska natives in all health activities along with the health staff for the kind of interplay in which the learner participates not only in dialogue but also in actions and making decisions about his way of learning and living.

2. community acceptance and use of health care services and preventive resources more advantageously.

3. the development of decision-making skills among the Indian and Alaska natives.

4. the development of a learning atmosphere for joint inquiry and the exploration among the provider and recipient of health services. Such health promotional activities will involve more completely other agencies and organizations that have potentials for contributing to a program of necessary magnitude to cause an impact on the problems.

5. opportunities for use of educational potentials in health program planning and operation.

6. coordination of activities to incorporate health instruction in the curriculum of school - encourage the health instruction concept among teachers - tie in community education programs with school health projects to increase knowledge of wholesome living conditions.

(e) Field Medical Services -- The 1971 estimate of 930 positions and $16,512,000 provides an increase of 99 positions and $1,874,000 over the 1970 estimate of 831 positions and $14,638,000.

Need for Increase

The requested increase consists of:

Mandatory increase:	
Statutory salary promotions	$153,000
Annualization of Phase III civilian pay act increase, P.L. 90-206	19,000
Additional cost in 1971 of civil service retirement contributions (P.L. 91-93	14,000
Additional cost in 1971 of increased per diem (P.L. 91-114)	36,000
Full year cost of 125 community health representatives trained in 1970	782,000
Salary increase from 1/2 to 3/4 full annual salary for 185 Alaska native health aides employed in 1969	298,000
Periodic salary increase for 185 community health representatives employed in 1969	54,000
Increased cost of supplies and materials	112,000
F.I.C.A. rate increase	8,000
Staffing related to newly constructed facilities (59 positions)	232,000
Total mandatory increase	1,708,000
Program increase:	
Mental health program (20 positions)	218,000
Nutrition and dietetic program (20 positions)	257,000
Total program increase	475,000
Program decrease:	
Reduction in other objects	-309,000
Total program decrease	-309,000
Net program increase	166,000
Total increase	1,874,000

The field medical services program is the medical arm of the field health program. It is through the field medical services program that the health team develops close working relationships with the Indian people in their homes and communities. Leading health problems are high infant and maternal mortality rates, high incidence of communicable diseases, increasing prevalence of chronic conditions, crippling conditions in children, accidents, and mental health problems including alcoholism and nutritional deficiencies. The isolation of the areas in which Indians and Alaska natives live and the attendant transportation difficulties make it necessary for services to be made available within their communities.

A full range of health services is provided at health centers and health stations. In addition, specialty clinics are held both at these facilities and in schools and communities for immunizations, tuberculosis and venereal disease case finding, control of trachoma, diabetes, otitis media and other diseases, health education, environmental health and mental health services. Family planning consultation and services are provided under this program. Visits are made to homes and schools to provide preventive and curative medical services and education in good health principles and practices. Community health representatives extend and increase the effectiveness of professional health services in their capacity of on-the-scene assistance to the health team and at the same time serve as a communications bridge between the Indian people and the health staff. Demands for services have continued to increase as a result of better acceptance of care by the Indian and Alaska native people.

Mental Health Program -- $218,000 and 20 positions

The Congress has consistently recognized the necessity for immediate action to combat mental health problems among Indians and Alaska native people by adding funds through congressional acts to initiate mental health programs for implementation by the Indian Health Service.

The effects of poverty, cultural clash, geographic isolation, unemployment, lack of education, degradation of the role of the father in the family, and an adverse physical environment all combine to develop in the reservation Indian a frustration and sense of hopelessness against which he feels he must lash out as best he knows how. The results of this are seen in the form of excessive use of alcohol, suicide, violence, disintegration of the family, and child neglect and abuse. A child growing up in the atmosphere of hostility and/or neglect soon begins to fight back through the mechanisms of overt hostility, delinquency, truancy, or, even worse, introversion and withdrawal.

Two basic requirements for mental health work with Indian groups have become clear: a continuing effort to understand Indian life, ideas, and language; and the participation of Indian people in our programs.

The Indian Health Service proposes to complete the establishment of professional mental health teams in each of the eight Areas, and to utilize indigenous Indian workers as Mental Health Aides in selected Indian communities.

The mental health teams work in a variety of ways. Directly, traditional techniques of outpatient and inpatient psychotherapy are most useful in helping individual patients, and are of benefit to families of patients, and to their communities. With the aid of the mental health professionals, many patients can now be treated in our own facilities and often can be discharged in a much shorter time, thus saving a costly and sometimes destructive hospitalization.

Indirectly, the members of the mental health program also spend a good part of their time as consultants to professionals and non-professionals at the service unit level. Consultation is also provided to a wide variety of organizations outside of the Public Health Service. Mental health teams are working with tribal governments, welfare organizations, police departments, church groups, legal service groups, and most importantly with schools.

The use of indigenous Indian health workers is an important component of the program and has the advantage of increased Indian community participation and involvement. The Indian worker also has a greater ability to communicate in a meaningful fashion with those for whom the program is intended - the Indian people. The specialized training in mental health provided on the job to these indigenous employees will be one step in a possible career development program. The role of the community mental health workers is threefold:

1. To identify potential or developing mental health problems within the community.
2. To identify resources for early treatment of these problems and make appropriate referrals.
3. To assist in the rehabilitation of mental patients and their re-insertion into the community after they have been absent for treatment. The community mental health workers will maintain continued contact with returned mental patients.

The requested resources of $218,000 and 20 positions (10 man years) in 1971 will provide:

1. twelve positions (4 psychiatrists, 2 psychiatric social workers, 3 mental health nurses and 3 clerks) to provide services to Oklahoma Area and to supplement existing mental health programs in each area.
2. eight Mental Health Aides will be added to selected Indian communities as appropriate Indian people are identified and trained.

In addition to the above, funds are requested for a pilot in-patient mental health program at the Gallup Medical Center, Gallup, New Mexico. See page 14.

Nutrition and dietetic program -- $257,000 and 20 positions

See narrative justification under Patient Care page 16.

Reduction in other objects -- (-$309,000)

The 1971 estimate reflects a reduction of $309,000 in other objects of expenditure.

Plan of work

The 1971 request of $16,512,000 for field medical services encompasses ambulatory medical care and preventive health services provided at fixed facilities, outside of hospitals, and at numerous field locations as close as practicable to the widely scattered and isolated groups of Indian and Alaska native people.

The therapeutic services include diagnosis and treatment, referral of persons needing hospital care and follow-up 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 and screening and follow-up of cases and contacts, e.g., tuberculosis, venereal diseases and trachoma, early detection and prevention of chronic diseases such as diabetes, deficiency diseases and mental health. Associated with this activity are medical social services and epidemiology training.

The prevention and early identification of diseases will be accomplished by an increase in the number of scheduled general and specialty clinics that will be held in the present clinics and new clinics to be constructed. The new clinics will make the services more easily available to the Indians by being closer to where they live.

The number of outpatient preventive and therapeutic medical visits to health centers, health stations, satellite field clinics and schools will be increased from approximately 679,000 in 1969 and 1970 to 700,000 in 1971.

The increased services will also assist in the identification and coordination of activities with all community resources toward the prevention of accidents and alcoholism, and prevention and treatment of tuberculosis, venereal diseases, and mental disorders, and the early identification and correction of crippling conditions in children.

The facilities in which these services are provided include 71 health centers (which include 24 school health centers at the large BIA boarding schools) and more than three hundred other locations which include health stations and satellite field clinics.

The mental health program will be expanded to complete the establishment of professional mental health teams at each of eight area offices, and train and directly employ 8 community mental health workers in 1971.

The nutrition and dietetic program will be expanded to permit intensification of services and provision of at least minimal nutrition and dietetic services to 18% of the Indian and Alaska native population as compared to less than 15% in 1969 and 1970.

A nutrition aide training program will be implemented in which 8 nutrition aides will be trained and employed in 1971.

The 310 community health representatives trained in 1969 and 1970 will continue employment in 1971. The number of community health representatives to be trained in 1971 will be 100 as compared to 185 in 1969 and 125 in 1970.

ITEMIZATION OF ESTIMATE

Field Health Services

Obligation by Object	Actual 1969	Amount Available 1970	Estimate 1971	Increase (+) Decrease (-)
11 Personnel compensation ...	$13,765,457	$15,031,000	$15,856,000	+ $825,000
12 Personnel benefits	2,051,646	2,240,000	2,348,000	+ 108,000
21 Travel and transportation of persons	1,487,366	1,700,000	1,976,000	+ 276,000
22 Transportation of things	673,521	774,000	814,000	+ 40,000
23 Rent, communication, and utilities ...	932,747	1,050,000	1,107,000	+ 57,000
24 Printing and reproduction	60,730	67,000	74,000	+ 7,000
25 Other services ...	1,658,903	3,345,000	4,501,000	+ 1,156,000
26 Supplies and materials	1,624,599	2,084,000	1,906,000	- 178,000
31 Equipment	640,363	487,000	447,000	- 40,000
42 Insurance, claims, and indemnities	4,206	---	---	---
Subtotal	22,899,538	26,778,000	29,029,000	+ 2,251,000
Deduct quarters and subsistence charges	144,683	145,000	145,000	---
Net obligations	22,754,855 1/	26,633,000 1/	28,884,000 1/	+ 2,251,000

1/ Excludes reimbursments as follows: 1969 - $106,158; 1970 - $113,000; 1971 - $113,000

INDIAN HEALTH SERVICES

3. Special Assistance to the Menominee Indian People

Activity	Amount Available 1969	Amount Available 1970	Estimate 1971	Increase (+) Decrease (-)
Special assistance to the Menominee Indian people ...	$350,000	$350,000	---	- $350,000

The decrease of $350,000 reflects the termination of the program that provided special assistance to the Menominee Indian people.

A four year program to assist the Menominee Indian people of Menominee County, Wisconsin authorized by Public Law 89-653 dated 10/14/66 and commencing with fiscal year 1967, terminated in fiscal year 1970. The four year program provided for joint school district costs of $150,000 per annum, public welfare benefits costs of $100,000 per annum (including administrative costs, public assistance, indigent medical care services, child welfare, veterans services, surplus commodities, general relief, and the services of state hospitals, mental institutions and industrial schools), and health and sanitation services costs of $100,000 per annum (including hospitalization of the tubercular, employment of public health nurse and sanitary aide, immunization against communicable diseases, collection and disposal of garbage and refuse, and collecting and recording vital statistics).

ITEMIZATION OF ESTIMATE

Obligations by Object	Actual 1969	Amount Available 1970	Estimate 1971	Increase (+) Decrease (-)
11 Personnel compensation	---	---	---	---
12 Personnel benefits	---	---	---	---
21 Travel and transportation of persons	---	---	---	---
22 Transportation of things	---	---	---	---
23 Rent, communication, and utilities	---	---	---	---
24 Printing and reproduction	---	---	---	---
25 Other services	---	---	---	---
26 Supplies and materials ...	---	---	---	---
31 Equipment	---	---	---	---
32 Lands and structures	---	---	---	---
41 Grants, subsidies, and contributions	$350,000	$350,000	---	-$350,000
Subtotal	350,000	350,000	---	- 350,000
Deduct quarters and subsistence charges.....	---	---	---	---
Net obligations	350,000	350,000	---	- 350,000

INDIAN HEALTH SERVICES
4. Administration

Activity	Amount Available 1969	Amount Available 1970	Estimate 1971	Increase (+) Decrease (-)
Administration	$1,873,135	$2,094,000	$2,138,000	+ $44,000

The 1971 estimate of 128 positions and $2,138,000 provides an increase of $44,000 over the 1970 estimate of 128 positions and $2,094,000.

Need for Increase

The requested increase consists of:

Mandatory increase:	
Statutory salary promotion	$40,000
Annualization of Phase III civilian pay act increase, P.L. 90-206	4,000
Total mandatory increase	44,000
Total increase	44,000

The Indian Health Service 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 fields as nutrition, medical records, medical social work, statistics, financial management, program planning, and general services.

The 1971 estimate of $2,138,000 for the administration activity provides for a continuation of a level of operation in 1971 comparable to that of 1970.

ITEMIZATION OF ESTIMATE

Obligations by Object	Actual 1969	Amount Available 1970	Estimate 1971	Increase (+) Decrease (-)
11 Personnel compensation	$1,512,185	$1,713,000	$1,754,000	+$41,000
12 Personnel benefits ...	147,083	169,000	172,000	+ 3,000
21 Travel and transportation of persons	85,733	90,000	90,000	---
22 Transportation of things	10,017	10,000	10,000	---
23 Rent, communication, and utilities	71,250	71,000	71,000	---
24 Printing and reproduction	---	1,000	1,000	---
25 Other services	19,136	19,000	19,000	---
26 Supplies and materials	13,587	13,000	13,000	---
31 Equipment	14,144	8,000	8,000	---
32 Lands and structures	---	---	---	---
42 Insurance, claims, and indemnities	---	---	---	---
Subtotal	1,873,135	2,094,000	2,138,000	+ 44,000
Deduct quarters and subsistence charges ...	---	---	---	---
Net obligations	1,873,135	2,094,000	2,138,000	+ 44,000

ITEMIZATION OF ESTIMATE
Department of Health, Education, and Welfare
Health Services and Mental Health Administration
Appropriation Title: Indian Health Services

	Actual 1969	Amount Available 1970	Estimate 1971	Increase (+) Decrease (-)
Obligations	$93,950,984	$105,983,328	$113,217,000	+$7,233,672
Unobligated balance lapsing	349,868	...	...	...
Total amount available	94,300,852 1/	105,983,328 1/	113,217,000 1/	+ 7,233,672
Transferred to "operating expenses, public building service," GSA	67,829	18,672	...	- 18,672
Comparative transfer to "salaries and expenses, Office of the Administrator"	39,319	50,000	...	- 50,000
Comparative transfer from "Departmental Management"	-58,000	-59,000	...	+ 59,000
Proposed transfer from "National Institute of General Medical Sciences" for pay increases		-4,464,000	...	+ 4,464,000
Transferred from "Communicable Diseases" for pay increases	-2,640,000	...	...	...
Appropriation	91,710,000	101,529,000	113,217,000	+11,688,000
Obligations by Objects				
11 Personnel compensation.	48,330,891	53,984,000	57,002,000	+ 3,018,000
12 Personnel benefits	6,589,896	7,434,000	7,862,000	+ 428,000
21 Travel and transportation of persons	3,534,885	3,819,000	4,303,000	+ 484,000
22 Transportation of things	1,424,060	1,558,000	1,688,000	+ 130,000
23 Rent, communication, and utilities	3,631,354	3,881,328	4,053,000	+ 171,672
24 Printing and reproduction	225,034	221,000	228,000	+ 7,000
25 Other services	20,581,015	24,612,000	27,934,000	+ 3,322,000
26 Supplies and materials.	7,648,967	9,196,000	9,073,000	- 123,000
31 Equipment	2,311,782	1,653,000	1,799,000	+ 146,000
32 Lands and structures	39,537	...	...	...
41 Grants, subsidies, and contributions	350,000	350,000	...	- 350,000
42 Insurance, claims, and indemnities	8,409	...	...	...
Subtotal	94,675,830	106,708,328	113,942,000	+ 7,233,672
Deduct quarters and subsistence charges	-724,846	-725,000	-725,000	...
Total obligations	93,950,984	105,983,328	113,217,000	+ 7,233,672

1/ Excludes reimbursements as follows: 1969 - $1,259,370; 1970 - $1,550,000; 1971 - $1,550,000.

Indian Health Services

Summary of Positions and Average Employment

Positions

Activity	1969	1970	1971
Patient Care:			
Direct	4,289	4,383	4,421
Indirect	20	30	30
Total Patient Care	4,309	4,413	4,451
Field Health Services:			
Sanitation	332	332	332
Dental	294	294	325
Public Health Nursing	270	270	275
Health Education	94	94	99
Field Medical Services	831	831	930
Total Field Health	1,821	1,821	1,961
Administration	128	128	128
Total	6,258 1/	6,362 1/	6,540 1/

Average Employment

Patient Care:			
Direct	4,177	4,191	4,356
Indirect	27	27	27
Total Patient Care	4,204	4,218	4,383
Field Health Services:			
Sanitation	311	303	303
Dental	284	283	297
Public Health Nursing	243	255	257
Health Education	79	91	93
Field Medical Services	812	825	870
Total Field Health	1,729	1,757	1,820
Administration	124	122	122
Total	6,057 2/	6,097 2/	6,325 2/

1/ Excludes reimbursable positions as follows: 1969-54; 1970-54; 1971-54

2/ Excludes reimbursable average employment as follows: 1969-54; 1970-54; 1971-54

CHANGE OF LANGUAGE FOR PAYMENT OF CONSULTANTS

Mrs. HANSEN. What is the explanation for the proposed change in language of your administrative provisions in section 1001?

Mr. CHADWICK. Madam Chairman, this change is in the rate of pay for consultants which we currently pay at a rate of $50 or $100 a day. The change is Section 1001 permits payments that equates not to exceed that of GS–18 level.

Mrs. HANSEN. What is the GS–18 rate?

Mr. CARDWELL. It is about $33,500 a year on an annual basis.

Mr. CHADWICK. $33,495.

Mrs. HANSEN. How many GS–18's do you anticipate employing?

Mr. CHADWICK. These are maximum rates that we may pay, Madam Chairman, the consultants that we do use in the system. For 1969 and 1970 it was $456,000 and $609,000—respectively.

Mrs. HANSEN. Is this to avoid personnel ceilings?

Mr. CHADWICK. No, ma'am, this is not.

Mrs. HANSEN. Please insert in the record a list of the consultants that you employed during 1969 and 1970 and the rates that you paid.

Mr. CHADWICK. We will.

(The information follows:)

CONSULTANT SERVICES

The Indian Health Service utilizes the services of physicians and other professional medical personnel to provide professional consultation to existing staff at Indian Health Service hospitals and field facilities in order to assure the provision of a consistently high quality of medical services to the Indian people. The use of such consultants is recommended by the Joint Committee on Accreditation of Hospitals and is a requirement in order to meet and maintain minimal standards of accreditation. Funds for consultant services are utilized to purchase the services of various specialists such as pathologists and radiologists on a part-time basis where such skills are not feasible to provide by full-time Indian Health Service staff. In addition, the services of specialists in such fields as surgery, orthopedics, internal medicine and anesthesia are used to provide professional support, advice and assistance to the existing Indian Health Service staff in the provision of a comprehensive health program at Indian Health Service hospitals and field facilities. A total of 4,610 consultant days of service averaging $99.00 per day were provided in 1969 for the Indian Health Service direct care program. It is estimated that this level will be maintained in 1970. The average cost includes both the service and travel cost.

Mr. CARDWELL. I might add this rate is the rate that prevails for the Department as a whole and without this language we would find ourselves in a situation with this particular program of being forced to hire consultants at a lower rate than is authorized elsewhere in the Department.

Mrs. HANSEN. Maybe the consultants should have the missionary spirit like your overworked doctors.

MANDATORY INCREASES

You are requesting an increase of $3,175,000 for various mandatory salary costs. Justify this request.

Mr. CHADWICK. Madam Chairman, the statutory salary increases are the within-grade promotions that by law are given people that start at step 1 through step 7 and so forth.

Mrs. HANSEN. How many people are involved in this increase?

Mr. CHADWICK. All of our civil service personnel we have in the system framework, which would be some 67 percent of our total employment.

Mrs. HANSEN. What is your current position ceiling?

Mr. CHADWICK. 6,036 is our current position ceiling.

Mrs. HANSEN. You are requesting an increase of $195,000 for Wage Board costs. Justify this request.

Mr. CHADWICK. The Wage Board increases, Madam Chairman, we budget Wage Board increases in a budget year that has occurred up through September 15 and then in that manner include all of the Wage Board increases that occur as wage rates change. This is the computed rate of the changes that did occur in our wage rate system. We do not set the wage rate, it is set by the entire Federal Government. And as these occur, this is our part of the change in the salaries.

Mrs. HANSEN. Does your Wage Board increases affect janitors and custodians?

Mr. CHADWICK. Yes.

Mrs. HANSEN. Do the wage board rates vary in various parts of the United States?

Mr. CHADWICK. Yes, they do, Madam Chairman. They vary by geography and by type of people. Laundry workers and such get one rate versus another category.

APPLICATION OF PERSONNEL CEILING TO 1971 REQUEST

Mr. REIFEL. If this is not an appropriate question at this point you may answer it later. You have a personnel ceiling that will apply in 1971, is that right?

Mr. CARDWELL. Yes.

Mr. REIFEL. And if that ceiling does prevail, what about the funding as projected in this budget request in relationship to meeting that ceiling which would be needed if the kind of services that the Indian health program requires are met? In other words, is there going to be enough money in the budget request so as to even meet the ceilings now established by the Department in this program.

Mr. CARDWELL. We believe so, sir. The ceiling for 1971 would be increased by 178 for this program in total and funds have been increased correspondingly.

Mr. REIFEL. So that in your judgment, whatever this ceiling may be, the budget request if funded, would have enough in it?

Mr. CARDWELL. Yes; I think Dr. Johnson ought to speak to that, also, though.

Dr. JOHNSON. The money in the budget for personnel salary costs is based upon meeting the personnel ceiling in this budget.

Mr. REIFEL. But beyond that what is the situation going to be? You have a ceiling of so many people and so much money and you have salary increases that—we are voting one now, I believe, or are about to.

PAY INCREASES

Mr. CALDWELL. The pay increases authorized to date are covered in this budget. Any additional increase, such as the one now under consideration, would require additional funding at some later time.

Mrs. HANSEN. Will the additional increases be requested in a supplemental appropriation?

Mr. CALDWELL. Yes, madam.

CIVIL SERVICE RETIREMENT CONTRIBUTIONS

Mrs. HANSEN. You are requesting an increase of $68,000 for additional Civil Service retirement contributions. Justify this request.

Mr. CHADWICK. Yes, madam. This is related to the change when the past pay act provision was made to change the Civil Service retirement from 6½ to 7 percent and this is the computed cost of that.

INCREASED COST OF SUPPLIES

Mrs. HANSEN. You are requesting an increase of $330,000 for supplies. Justify this request.

Mr. CHADWICK. Yes, Madam Chairman. As you recall, when we were here previously, price increases for supplies served to erode our personal services that were provided by the Congress. We have made provision for 6 percent anticipated cost increase in our supplies for the next year.

Mrs. HANSEN. What do these supplies include?

Mr. CHADWICK. These supplies include medical supplies and it also involves raw food. It involves our total supply costs.

Mrs. HANSEN. Are these supplies used in all of your facilities?

Mr. CHADWICK. Yes, madam.

STAFFING FOR NEW FACILITIES

Mrs. HANSEN. You are requesting an increase of $2,050,000 for staffing related to newly constructed facilities. Justify this request.

Mr. CHADWICK. Madam Chairman, this is the Phoenix Medical Center in which the Congress provided $125,000 last year to employ 200 people at the very end of this current year. The $2,050,000 would be the cost of retaining those 200 people throughout the entire fiscal year 1971.

Mrs. HANSEN. Is the hospital open and operating?

Mr. CHADWICK. The hospital will open in May.

Mrs. HANSEN. Mr. Reifel?

Mr. REIFEL. In that connection, Madam Chairman, in addition to this one facility there are other facilities being opened up. I am still concerned about these ceilings on personnel and direct services. Are these being taken into account so that you will have the necessary and adequate staffing of the installations as we move into the fiscal year?

Mr. CHADWICK. Yes, sir. Of the 178 additional positions that we are requesting money for this year, there is provision for 100 positions in the budget for staffing the various and sundry new facilities like the health centers and so on. As Mr. Cardwell pointed out, recognition was given to this in the position structure in the 1971 budget to accommodate these positions.

RECONSIDERATION OF EMPLOYEE CEILINGS

Mr. CARDWELL. Mr. Reifel, I mentioned to Mrs. Hansen at the close of the session this morning, I think after the hearing finished for the morning, that I was going to go back and talk to Secretary Finch and relay to him your concern and her concern and the concern of this committee about the impact of ceilings on this particular program and suggest that we take a new look. We have looked at this problem before. We are concerned about it, we do care about the program. But we shall take a new look at it and Secretary Finch will report back to you, hopefully, before you mark up.

ON DUTY PERSONNEL

Mr. REIFEL. You mentioned this morning that these ceilings on direct patient care were considered adequate, but if it is you wouldn't find the things I find in the hospitals. What is actually the number that were employed a year ago as against now in this particular group of people that we are talking about? I have a suspicion it is less. Maybe I am wrong. The reason I have the suspicion is if you are out there where the services are given on the ground and the people aren't there to provide the services, something is wrong.

Mr. CHADWICK. I will give you our employment levels in total for various periods of time. I don't have it by each category.

Dr. JOHNSON. I can give it to you by the category of patient care. Between June 30th of 1968, to the end of December of 1969, there are actually full time employment 209 less in the patient care activities and 65 less in the field health activities.

Mr. REIFEL. This is what I thought. I suspicioned something here; otherwise, the patient wouldn't be sitting in the waiting room waiting for attention.

Mr. CARDWELL. But I don't believe this is the function of the ceiling because the ceiling is not lower. The ceiling is not higher, but it is not lower.

Dr. JOHNSON. We had on duty at the end of June of 1968, 6,142 and our ceiling for this year is 6,036.

Mr. REIFEL. So, the ceiling is even less this fiscal year than last?

Mr. CARDWELL. Not for patient care. The total ceiling is slightly lower, but patient care is not lower. That is the point I want to make. The choice between patient care and total operations is being made by the program and is not a function of the ceiling.

Mr. REIFEL. You have a kind of intrastructure for the direct medical care services to be provided. If you cut down you reduce the capacity in some instances, not even filling the positions for patient because the supporting service is not there.

ADEQUACY OF STAFF FOR INDIAN HEALTH PROGRAM

Mr. CARDWELL. This is true. I would also like to emphasize that we don't believe that the numbers are adequate. We just said that we would not force them to be cut below the levels that prevailed in the fall of 1968. That does not mean those numbers were adequate.

We don't believe they were. But it was during that period and up to and through the current period that the Government as a whole has been operating under ceilings and our Department has been operating under ceilings. We told the administraters of these programs they should not cut back on those positions that provide direct care to patients in need of care that could not be referred. That was our policy and it is still our policy. That doesn't mean their job is not more difficult by the ceilings—there isn't any doubt about that. But we at least took steps to try to assure we were not falling behind in the delivery of essential patient care.

Mr. REIFEL. Policy is good but if it isn't providing the care of the person who is sick, it is pretty hollow. I am glad you are going to go to Secretary Finch and see what can be done because this is one area where I think we ought to come through very loud and clear as an administration. So far we haven't had any sit-ins, that I am aware of in medical facilities. We haven't had the Indians moving in as they have with the Indian Bureau and they won't if we provide the kind of services that need to be provided. But they could be on our doorstep too.

Mr. LEWIS. May I add one thing from the standpoint of the Health Services and Mental Health Administration? The Indian health program is one of our three major direct patient care areas. The administration as a whole has probably lost in the range of about 1,500 to 2,000 people as a result of, first, the position ceiling applied by the Congress and then our share of the total ceiling that the Department has. Within that number, one priority for attention of ceiling has been given to the direct patient care area including the Indian Health Service. We could show this for the committee in the record.

There was very definitely in the early application of the Revenue and Expenditure and Control Act, an attrition across the board. Later it was possible to get preferred treatment for direct patient care. This does not for a moment say there are enough people to do the total job.

Mrs. HANSEN. On page 15 of your justifications you say: "Admission of patients to the inpatient ward will be limited to acutely ill patients." This is an admission that you can't provide care until a patient is near death.

Mr. REIFEL. You have limitations on ceiling and then you are going to have limitations on patients.

Mr. LEWIS. That is within the context of the pilot program.

Mrs. HANSEN. Is this the pilot program at Gallup?

Mr. LEWIS. I assume there is justification for acutely ill cases as opposed to chronic.

Mrs. HANSEN. What you are asking a doctor to do is to make the decision whether a patient is acutely ill or would perhaps need further treatment to prevent his illness from becoming worse.

EFFECTS OF PERSONNEL CEILINGS

Mr. CARDWELL. That is correct. And if you look at the record we can't deny that the situation that has prevailed since 1968 through the present has involved the kind of decisions by individual physicians on the scene that the chairwoman speaks of. We have to admit that.

We have deferred what we have considered to be deferrable care and the decision as to what is deferrable care really rests with the individual physicians.

Mrs. HANSEN. When Mr. Reifel and I visited the Fort Wingate school, we discovered there were 160 youngsters in a dormitory at night with only one counselor. The Wingate School is old, it is a firetrap, and has a great many problems. There could be something done about these problems if the personnel ceilings were not imposed. This committee last year provided funds for the Navajo area to train people for night counselors. A similar approach could be taken by the Indian Health Service. If children of 9 or 10 can be given the proper care and attention while they are young you might eliminate many alcoholic and drug problems. This type of approach is far better and far less expensive for a community. Steps must be taken at an early age, rather than letting them accrue until a young Indian becomes totally discouraged with life. This is the reason this committee is concerned about the level of funding and the personnel ceilings.

MENTAL PROJECT AT PINE RIDGE

Mr. REIFEL. Madam Chairman, this is where I have been concerned about the personnel ceilings. The pilot project at Pine Ridge had to be slowed down. As a kid on the Indian reservation, I don't know what happened in my family; my father and mother were getting along all right but he was having difficulties with the neighbors so he thought everything would quiet down by going back to visit his relatives over the winter in Indiana. He left plenty of money for my mother to take care of us. At the same time the Indian Bureau had closed the day schools. So, I was shuffled off to a boarding school not far away but didn't get to see my parents at the age of 7. I don't remember what it was all about. But when one goes through these rather distressing experiences, you know how much more these kids are affected that are completely abandoned by their parents. Some in the boarding schools don't even know where their parents are in some instances, we find. This is one reason Mrs. Hansen and I are terribly interested in these things. With me it is a very personal experience and with Mrs. Hansen it is an understanding of what these problems are that causes us to take these positions. I hope you can get this through to the Secretary. I think he is a man of compassion and wants to understand and do something for the poor.

Mr. CARDWELL. Yes.

NEED FOR MENTAL HEALTH PROGRAMS

Mrs. HANSEN. Amplifying Mr. Reifel's remarks, there are some very good psychiatrists in the Navajo area employed by the Indian Health Service. They tell me that if they had the personnel and the funds to visit the Navajo families many problems that exist today could be avoided in the future. Many parents are not aware of the kind of things that need to be done for their youngsters. Many times discussions between the youngsters and the psychiatrist at the family level, can correct these situations. It is the feeling of many people

in the Navajo that if they had more counseling opportunity steps could be taken to improve the youngsters' opportunities.

MODEL DORMITORY PROGRAM

Dr. JOHNSON. I would like to respond to your question about the dormitories. As you know, this has been very high priority for our program and for Dr. Bergman, who is our chief psychiatrist.

Mrs. HANSEN. He does an excellent job.

Dr. JOHNSON. You will be happy to know Dr. Bergman is now the chief psychiatrist with the Indian Health Service, but will remain at Window Rock. It is our belief that clinical specialists such as Dr. Bergman perform more effectively if located where the real people are rather than get lost in the jungle of Washington. He is directing the total mental health program from the field. Because of our concern we have implemented a very small piece of the model dormitory program at Toyei. As of January or February of this year we assigned a model dormitory director who supervises 35 or so Bureau of Indian Affairs dormitory attendants, counselors and matrons. The dormitory is under completely different administration from the school. The dormitory is under an Indian Health Service model dormitory director.

Mrs. HANSEN. How is this program progressing?

Dr. JOHNSON. We had an evaluation visit by the University of Colorado behavorial scientists who are evaluating the program for us. We have nothing in writing and, of course, two or three months is much too early to conclude anything specifically, but the information I am given is that the University of Colorado people say they can already see changes and improvement in the relationship of these kids to each other and to the school. We are very hopeful. This is one of the positions we just simply took out of our hide. We just felt it was critical to move ahead and we couldn't wait until there is a wonderful time when we have all resources. This is only 168 children in this dormitory out of 30,000, a drop in the bucket.

Mrs. HANSEN. You are exactly right. These are programs that need the interest and adequate funds now.

WORKING CAPITAL FUND

You are requesting an increase of $29,000 for the working capital fund. Justify the request.

Mr. CHADWICK. Madam Chairman, the working capital fund is a portion of the Department's central payroll system that they maintain for us in which is now being incorporated in the department a data system on personnel statistics. Our part of the charge for this program by the department is a $29,000 increase over the current $249,000 we are paying to the department.

REQUEST FOR PILOT INPATIENT MENTAL HEALTH PROGRAM

Mrs. HANSEN. You are requesting $185,672 and 15 positions for the pilot inpatient mental health program. Justify this request.

Dr. JOHNSON. This is a part of it, that is correct. We have had a mental health program on the Navajo reservation since fiscal year

1968, and we have learned a good bit about the effectiveness of working among the Navajo people. We found that they do respond and relate to the mental health program particularly in the way we are providing services, which is largely having the therapy provided by the Navajo mental health workers with our psychiatrists serving as the consultants. Our mental health team works with other professional staff, they work with teachers, with the Navajo council, with traders, whatever the key people are in a community, to attempt to obtain early identification of mental health problems and to get people to professional help as soon as possible. They have worked very closely incidentally, with the medicine man. As you may know, there is a school out there for training Navajo medicine men. Our psychiatrist is the only non-Navajo on the faculty. To us, it is a very exciting program and one that we believe has significant benefit for the mental health of the Navajo people. In learning these things about the mental health of the Navajos, we found a very significant defect in the overall system. We have found there are certain patients who become acutely ill, violent or otherwise, unable to be cared for in a normal community setting, who must have hospitalization. The hospitals on the Navajo, as you know, are relatively small, very busy, and very crowded. Since they are marginally staffed, you simply do not have the capacity to take care of acutely ill psychiatric patients under today's circumstances.

The alternative has been to send them to the State mental hospitals or to private psychiatric hospitals where you run into an even more significant problem. They are taken away from the reservation, they are in a strange environment where no one speaks Navajo, they are off their land. The last rock that they really could cling to maintain their role in society was their family and their land. They now must be taken from their land and family to the State mental hospital or wherever else you may have psychiatric care available.

And really, what was happening to a large extent, they were getting worse and not better, and we were ending up with really long term commitment of patients. So, it has been our feeling, and I believe this will be demonstrated, that if we could have an acute mental health unit for hospitalization in a Navajo hospital where there are Navajo speaking people around them that they can relate to—Navajo mental health workers and so forth—then we can keep many of these people from long term hospitalization. So that they can be given intensive therapy and returned back to their community. This is the purpose of this specific item in the budget. This would be at the Gallup Hospital where we would have a 25-bed ward staffed with a psychiatrist and other supporting staff, the majority of whom would be Navajo people. This program would be an integral part of the total Navajo mental health program.

Mrs. HANSEN. You are requesting $225,000 and 23 positions for nutrition and dietetic programs. Justify this request.

NUTRITION PROGRAM

Dr. JOHNSON. As you know, Madam Chairman, the problem of nutrition among the Indian people has been one of concern to the Indian health program and to this committee for a number of years.

We know there are severe nutritional deficiencies particularly common among infants and preschool children and women of childbearing age. This is related to a number of things such as infectious diseases, growth retardation, high infant mortality and diabetes. The whole range of problems are related to a nutritional problem.

There are really two elements to it, I believe. One is simply the absence of sufficient resources to purchase food or the absence of sufficient food itself through whatever mechanism.

The second part of it is one of helping the people to do the best they can with whatever resources may in fact be available. The program that we are talking about is directed primarily to the second item, that is, the education element where we would propose here to increase the number of dietitians and the number of high level food service supervisors, thereby freeing the dietitians we have to do more patient education and community education in the nutrition field.

Obviously related to this is the program of encouraging other agencies who have a nutrition responsibility to make these other programs more available to the Indian people. We are discouraged when we see how few Indian people are really able to participate in the food stamp program or the commodity distribution program or the supplementary food and nutrition program.

Mrs. HANSEN. Why are they not able to participate?

Dr. JOHNSON. There are a number of specific administrative types of arrangements that seem——

Mrs. HANSEN. You mean, redtape?

Dr. JOHNSON. All right. It is another agency.

Mrs. HANSEN. During the BIA hearings we discovered that the welfare payments on part of the Navajo area were only $39 per month. I am glad they are not buying food in Washington, D.C.

Dr. JOHNSON. Prices on the Navajo are probably even higher at the trading post.

Mrs. HANSEN. Why isn't there a provision that allows for direct shipment of our food surpluses to low-income Indian families?

Dr. JOHNSON. I can only give you my personal feelings since this is not a program within our area of responsibility. I have met with the Assistant Secretary of Agriculture who is responsible for this program and discussed some of the problems that they see. We certainly have met with the OEO people who are involved in emergency food programs. In fact, we met with them last week.

The problem, it seems to me, is trying to fit people to programs rather than the way we like to look at it—to define the people, what are their problems, what are their needs, and then fit the programs to meet them.

Mrs. HANSEN. Why wouldn't it be possible for the BIA to go to the Department of Agriculture and say "We have a certain number of people of substandard income who we feel are entitled to assistance through your food program." You don't have to answer because I know what the answer is.

Mr. REIFEL. Madam Chairman, is this related to what each State set out as its policy with respect to funding stamps?

INDIANS AS STATE RESIDENTS

Mrs. HANSEN. My State does not separate its population into Indian or white but there are a few States that do this.

(Discussion off the record.)

Mrs. HANSEN. The funds a school district receives from the impacted area aid program should be handled in such a way so that they are reflected in increased services for the Indian children in that school district who may need increased counseling, and increased assistance in the matter of languages and culture. But under the present impacted area program, I am very doubtful that this ever takes place.

NUTRITION AND DIETETIC PROGRAM

Mr. REIFEL. Madam Chairman, I would like to go back to the nutrition and dietetic program. I think Dr. Johnson, that the division of Indian Health Services probably is in the best position of any Federal agency to do this kind of changing of the cultural value system as it is related to food. This is what it amounts to, really. And with the work that you are doing so effectively with this utilization of the aides and other individuals within the tribes and in some instances you are contracting with the tribes for some of these services, and also the professional services you are able to bring to bear on mental health activities, the Indian mothers really want to do something for their children as you have found out and know so well. I recall as a young worker on the Pine Ridge Reservation there was a Nancy Star Comes Out. This was in the thirties, rather difficult times. I saw this woman out on the prairie rounding up a cow. I drove over and she had one of the rancher's cows out there, a cow with a calf. I said, "Nancy, what are you trying to do?" She said, "My baby is sick, I haven't any milk and I know the cow has. If I can just get it in the corral and get some milk out of her I can save my baby." Desperate efforts of this nature will be made by people if they know what food really means to their survival. I think your health service is able to do this better than any other because of the orientation you have.

The Indian Bureau, and I don't depreciate it for one second, because I think it is doing a marvelous job also with limited funds, deals with so many other things, the property of the Indians, and this makes the Indians unhappy in some instances. So you don't have the free flow of communication about education with respect to health that your particular agency does. So, I commend you for promoting this aspect of it and hope that it will demonstrate its value and move on from there.

Thank you.

REQUEST FOR FIELD MEDICAL SERVICES

Mrs. HANSEN. You are requesting $257,000 and 20 positions for field medical services. Justify this request.

Dr. JOHNSON. This is what we would call our outreach part of the nutrition services. These are the nutritionists who work out in the

community and with community groups. They would work with schools, with the public health nurses, the community health representatives and others out in the field. In addition, that particular program identifies the training of our first eight nutrition aides. These would be Indian people specially selected and trained by the Indian Health Service to go out and work among their people—not necessarily to change Indian diets but rather to build on the strength of Indian diets. In other words, there are many things in the Indian diet that are basically very nutritious. We hope to help them unlearn some of the bad habits they have learned from us—the soda pop and sweet roll approach to nutrition.

Mrs. HANSEN. The BIA has some very excellent laboratories and home economics departments that could be geared to do preparatory training of young Indian girls who could be of enormous assistance in your nutrition and dietetics programs.

Dr. JOHNSON. This would certainly be our intent.

Mrs. HANSEN. Good.

1970 RESERVE AND REDUCTION IN 1971 REQUEST FOR OTHER OBJECTS OF EXPENSE

You are requesting a reduction of $505,000 in other objects. Justify this request.

Mr. CHADWICK. Madam Chairman, subsequent to the submission of our 1971 budget, the Department took out the $957,000 that had been in reserve up until that time.

Mrs. HANSEN. Do you mean that these funds have been placed in reserve by the Indian Health Service?

Mr. CHADWICK. For the initial part of the year, yes, ma'am.

Mrs. HANSEN. Nobody placed the health problems in reserve.

Why was $957,000 placed in reserve?

Mr. CHADWICK. The $957,000, Madam Chairman, was derived by an amount of 5 percent of objects other than personnel services in the budget for Indian Health Service and other than contract medical care.

Mrs. HANSEN. When last year's supplemental was before this committee we discussed the availability of medicine to the Indian people. The distinguished gentleman from Oklahoma, Mr. Edmondson presented me with a bill of particulars on the hospital's inability to keep an adequate supply of aspirin and other medical supplies. So now, tell me why this $957,000 was placed in reserve.

Mr. CHADWICK. We would be happy to.

Mrs. HANSEN. How long have these funds been in reserve?

Mr. CHADWICK. The $957,000 was made available to spend in the Indian Health Service on February 4.

Mrs. HANSEN. What were the items in reserve?

Mr. CHADWICK. The items in the freeze, Madam Chairman, affected all of the items of expense in our budget, travel, supplies, communications, utilities, and such items other than personal services and other than the contract medical care.

Mrs. HANSEN. Were medical items in reserve?

Mr. CHADWICK. Yes, ma'am, medicines were included. Up until February, Madam Chairman, we did not have the use of the $957,000.

Mrs. HANSEN. You were supposed to have those funds to distribute throughout the year and spend a certain portion each month.

Mr. CALDWELL. Could I give this a try?

Mrs. HANSEN. Yes.

Mr. CARDWELL. If you remember back in July, the latter part of July, the President announced that he was going to reduce expenditures in the budget by $3 billion. He was doing this partly as a result of the congressional expenditure ceiling which appeared in the second supplemental apropriation bill for 1969. Our Department got a $300 million share of that $3 billion. One of the things we did was to say that across the board we would reduce supplies, equipment, travel, and other direct operation expenses by 5 percent. When you enacted the supplemental appropriation, it didn't make any sense that we should on one hand increase these functions and also keep moneys frozen as a part of the $300 million. At that time we released the $957,000 and applied the million dollars you had in the supplemental to cover increased pay costs.

Mrs. HANSEN. It is very difficult to explain why Oklahoma hospitals, for example, do not have an adequate supply of aspirin, bandages, and medicine, while at the same time funds to purchase these items are in reserve. I can't explain it.

Mr. CARDWELL. I can't either.

NATIONAL PRIORITIES

Mrs. HANSEN. The problems of illness and hunger still exist.

The United States doesn't limit its foreign expenditures but it curtails funds to the neediest people in our Nation. I doubt that you can find any poverty worse than what we encountered in Alaska and on the Indian reservations. It is poverty that is deep and grievous.

REQUEST FOR CONTRACT MEDICAL CARE

The sum of $22,170,000 is requested for contract medical care. This is an increase of $2,075,000 over 1970. Justify this request, how firm is this estimate?

Mr. CHADWICK. Madam Chairman, the budget we have before you reflects the success story of the tuberculosis program. It is estimated that the 117 average TB patients in 1970 would go down to 99 in 1971. This is a true program estimated reduction in the tuberculosis incidence of disease. This decrease would save $177,000 for those 18 average patients. The primary remainder of that increase, $2,236,000, is price index increase estimated at 10.7 percent.

Mrs. HANSEN. Is this a reliable estimate?

Mr. CHADWICK. It is considerably below that which we have experienced to date.

Mrs. HANSEN. Mr. Chadwick, do you anticipate that there will be other costs accruing later in the year?

Mr. CHADWICK. Yes, on the basis of our experience, it would. Mr.

Cardwell in testifying before the Senate committee indicated that the Department would submit a supplemental to the degree that this amount proved inadequate to maintain the 1970 level.

Mr. CARDWELL. That is right. It would be directly related to rising costs of medical care and if we should experience them here, they will show up in the places like medicare, medicaid. It will be a general supplemental for medical care.

COMPARISON OF INDIAN HEALTH PROGRAM WITH VETERANS' ADMINISTRATION

Mrs. HANSEN. The President has indicated that he will increase the budget for VA hospital care. How many doctors do the VA hospitals presently have per thousand patients as compared to the Indian Health Service facilities?

Dr. JOHNSON. I don't have the figure of doctors as such. We have some comparisons of ratios.

Mrs. HANSEN. Insert the information in the record.

Dr. JOHNSON. Yes.

(The information follows:)

Ratio of doctors per 1,000 population (admissions)

The ratio of doctors to 1,000 admissions for general hospitals follow:

VA	8.3
IHS	3.9

Note: The above ratios are based on the following data:

	VA	IHS
Number of doctors	5,013	268
Admissions	602,845	68,910

Dr. JOHNSON. One that comes to mind is outpatient visits, the one you were talking about this morning. We have, I believe, 0.53 employees per 1,000 outpatient visits. The VA's ratio is something like 2.3 per 1,000 outpatient visits.

Mr. REIFEL. Almost five times as many.

Dr. JOHNSON. That is right.

Mr. REIFEL. They are going to get an increase over the budget as I understand it.

Mrs. HANSEN. Please insert in the record what the ratio of doctors to patients is in the private clinics.

Dr. JOHNSON. I will be glad to.

(The information follows:)

RATIO OF PRIVATE CLINICS TO INDIAN HEALTH SERVICE FACILITIES

Information provided by two Pacific Northwest group practice prepayment clinics indicate a staffing ratio of 0.92 employees per 1,000 outpatient visits, compared to the Indian Health Service ratio of 0.5. These private clinics serve a population of approximately 60,000.

The inpatient employee ratio for general inpatient community hospitals is 276 compared to 161 for the Indian Health Service.

MENTAL HEALTH PROGRAM FOR WASHINGTON AND OREGON

Mrs. HANSEN. Did you have any mental health programs for the Washington and Oregon tribes last year?

Dr. JOHNSON. Yes; we started a mental health program in the Portland area. We have a full-time psychiatrist and a full-time psychologist in the Portland area office. This team visits all of the reservations in the Portland area on a regular basis. They have been developing mental health groups on the reservations to work with them.

Mrs. HANSEN. Do you feel that you have sufficient staff to develop effective mental health programs in all areas?

Dr. JOHNSON. Madam Chairman, looking at priorities against all of the acute needs of the program, we believe that the program that is in this budget is the best utilization of those resources.

Mrs. HANSEN. After you complete your experimental work, would it be your goal to increase the number of mental health workers?

Dr. JOHNSON. Yes, ma'am.

Mrs. HANSEN. Do you have any Indian people doing mental health work in the Portland area?

Dr. JOHNSON. No; not as such.

Mrs. HANSEN. Have you found in other areas that it was desirable to have them working in the mental health programs?

Dr. JOHNSON. Yes, ma'am; we do.

TRAINING OF INDIAN MENTAL HEALTH WORKERS IN 1971

Mrs. HANSEN. What is the total number of Indian mental health workers that you will train next year?

Dr. JOHNSON. That will be eight.

Mrs. HANSEN. This is not adequate. Is this the best you can do?

Dr. JOHNSON. That we believe is the best mix of the resources that we have available to us.

Mrs. HANSEN. How many tribes will this reach?

Dr. JOHNSON. This will meet, we would think right now, approximately 20 percent of what we now would identify as the need for Indian mental health workers. I think you should recognize here that you will not necessarily have a mental health worker serving each small tribe.

Mrs. HANSEN. I understand.

Dr. JOHNSON. We have identified in our master plan which Dr. Bergman has worked out a need for some 40 Indian mental health workers to serve throughout the Indian country, to work with the health professionals and develop the local programs.

EAR DISEASE IN INDIAN CHILDREN

Mrs. HANSEN. Have you had an increase in the incidence of ear disease among Indian children?

Dr. JOHNSON. Of course, we have the highest incidence of chronic ear disease that we know of. We found that as high as 10 to 15 percent of Indian children will have chronic otitis media, chronic middle ear disease.

Mrs. HANSEN. To what do you attribute this?

Dr. JOHNSON. There is no known specific etiology for middle ear disease. It is an infectious disease. As to the precipitating factors, some have thought it is an anatomical difference in the Indian children where the Eustachian canal in the Indian race is more horizontal as compared to the Caucasian which slants for better drainage. Others have said that it may be due to the shallow pharynx. Others feel it is due to the lack of humidity. When you have all these different reasons, you obviously know that no one really knows why. Certainly, it is related to, we believe, overcrowding, the nutritional problems, to the frequent upper respiratory infections, the rather harsh environment in which people find themselves, and poverty. We are beginning to see a rather high incidence of middle ear disease in the poverty populations of the inner cities taking place.

Mrs. HANSEN. Does this interfere with the educational and emotional development of the youngster?

Dr. JOHNSON. Yes; very, very much so, because a child, of course, who can't hear is going to have an awfully hard time in learning the language and certainly in going to school. The sad part of the middle ear problem is that the beginning of this disease process usually occurs the first 2 years of life and a child is well on his way to chronic hearing deficiency by the time he is 2 or 3 years of age. This is the time when language is being formulated and many of the children that turn up looking as though they are retarded are victims of not being able to hear.

Mrs. HANSEN. What are you doing to correct this situation and is this a maximum effort?

Dr. JOHNSON. Well, again, balancing all of the priorities that one has to balance, at the moment we have been attempting to provide the acute treatment for acute otitis media. We have determined that if you can treat the disease early and vigorously you can cut down the number of these children who have gone on to the chronic and disabling disease. Secondly, within our ability we have been providing the rehabilitative surgery, the reconstructive surgery, tympanoplasty, myringoplasty, this type of very specialized surgical procedure, to attempt to correct their hearing deficiency.

We did a study in Alaska that I think would be of interest to the committee. We went to Bethel and examined some 760 youngsters and found about half of them with reduced hearing. We then did a more definitive examination and ultimately brought 138 of these children to surgery and very happily ended up with 90 percent of these children having adequate hearing in at least one ear. This meant that 90 percent of the 138 were not deaf. Here again is an example where one can do a cost-benefit analysis, as we are inclined to do in this program. If you have limited resources you want to see where you can use them best.

We know, for example, that it costs anywhere from $3,000 to $4,500 a year to provide special education for a hard-of-hearing child. The cost of treating the middle ear disease and the cost of providing remedial education for the kids that are deaf would give you about a 3-to-1 benefit-cost ratio.

Here is an investment of resource which brings you a dollar return, as well as the value of the child being able to hear and being able to subsequently become a productive member of society.

Mrs. HANSEN. If a hearing difficulty persists and a child is relegated to oblivion, he could eventually become a social problem. The cost of custodial care in one of the penal institutions in this country averages about $100,000 a year.

Dr. Johnson, you can't solve the problems of today by making payments. You must attack the root causes before a youngster gets to school age. If you don't reach these children you are going to spend far more over the life of that individual than you would have if the child's problems were corrected at the beginning.

Dr. JOHNSON. That is very correct, Madam Chairman.

Mrs. HANSEN. That is why this committee becomes disturbed when adequate funds are not provided.

Dr. JOHNSON. Our calculations are that if 50 percent of the deaf children in Alaska had to be on welfare for a 50-year lifespan it is another $20 million.

SANITATION SERVICES

Mrs. HANSEN. That is right. You are requesting 332 positions and $4.2 million for sanitation. This is a program the committee has been deeply interested in. Justify this request?

Dr. JOHNSON. Yes; I believe I would like to have Mr. Green—this is his program—respond to it.

Mr. GREEN. This particular item in the budget, Madam Chairman, as noted, has no increase this year.

Mrs. HANSEN. What percent of the total sanitation needs will this meet?

Mr. GREEN. Madam Chairman, do you refer to the construction part of it?

Mrs. HANSEN. No; I mean the services.

Mr. GREEN. We estimate that in fiscal year 1970 we are reaching about 57 percent of our needed total services.

Mrs. HANSEN. What will this enable you to reach?

Mr. GREEN. In view of the population increase and other factors that are associated therewith, the 1971 budget based on the same ground rules would reach only 54 percent.

Mrs. HANSEN. So you are not moving ahead?

Dr. JOHNSON. That is correct. As you develop more and more sanitation facilities, Madam Chairman, the work of the environmental health staff in the field becomes evermore necessary because to put in a relatively sophisticated water system without doing the necessary training, the necessary followup, surveys, the assistance to help the family maintain the system, is really not a very good use of resources. The more facilities that we construct, the greater is the need, and in the absence of staff to do it——

Mrs. HANSEN. You must construct these facilities or you will not meet the demands of the people to protect our environment.

Dr. JOHNSON. That is correct.

Mrs. HANSEN. The people of this country are just as concerned about the environment of their youngsters as they are about their natural environment.

SANITATION FACILITIES PROGRAM

Dr. JOHNSON. I think that the Indian health sanitation facilities program is a good way to exemplify the change that is occurring in Indian communities that I know the committee is interested in.

When we first started this program some 10 years ago, and Congressman Reifel would remember this, I am sure, it was very difficult many times to get the family to even agree to what we used to call a type 1 system, which was just a hand pump and privy. Now, today, because of the education and the example that has been shown by the communities in developing water systems and sanitation facilities, you couldn't give away a hand pump and a privy to most of these communities. They are now in the position of saying "We want running water in the home. We would like to have hot water. We want to have a washing machine and a shower and all of the other things that all of us have felt for so long are so necessary," and the ultimate uplifting of the quality of life of these people. I think it is an excellent success story of imaginative funding of the program by the committees of Congress and the response of the Indian people to this type of a program.

Mrs. HANSEN. Your program is 3 percent less effective this year. What is it going to be next year?

Dr. JOHNSON. We always look for better things next year.

Mrs. HANSEN. Yes, but will you be able to increase this program to pick up enough to make up for this 3-percent loss?

LOSS OF MOMENTUM IN PROGRAM

Dr. JOHNSON. I think one of the things that concerns me as someone who has worked in this program for so many years is a concern for the loss of momentum. When you have people who are ready and able and willing to move forward and they want to move forward and cannot, I think it is very difficult. The next time it is going to be just that much harder to get the enthusiasm, the support, and the movement of the people. I now see the Indian people in this country really at the point where they desire to move. Their capacity to move ahead is outstanding.

Mrs. HANSEN. I have a report on the Indian Health Service program in the State of Washington. It is a profile on the population of western Washington. The population is young, 53 percent under 20, 60 percent under 25, 22.4 percent between 20 and 39, 17.6 percent in the 46 to 64 age group, and 6 percent over 65. Therefore, when you reach the young with your health program you establish a health pattern for the next 10 years.

Dr. JOHNSON. That is correct.

Mrs. HANSEN. I don't think you can afford to lose momentum with that segment of our population.

REDUCTION IN 1971 REQUEST

You are requesting a reduction of $52,000 for other objects. Justify this request.

Mr. CHADWICK. Madam Chairman, the $505,000 we mentioned previously was a part of the $957,000. $52,000 is that part of the amount applicable to the sanitation program, the total for all the field health being $452,000, this being a $52,000 portion of that.

SANITATION FACILITIES STATISTICS AND WORKLOADS

Mrs. HANSEN. On page 25 of your justifications you say that the number of families provided with running water and an adequate means of waste disposal in 1961 through 1969, was 39,600. Is that correct?

Dr. JOHNSON. That is correct.

Mrs. HANSEN. In 1970, 8,730 families will be served by the sanitation facilities, which is 1,420 more families than you will serve in 1971. Isn't that correct?

Mr. GREEN. That is correct, Madam Chairman.

Mrs. HANSEN. You also indicate in your justifications that in 1971 1,140 families will have the benefit of improved facilities. Where are these families located?

Mr. GREEN. 240 of those families in the 1,140 group will be in California, specifically in California. The rest of them are not yet identified because they will be scattered throughout all the other areas.

FEDERAL RESPONSIBILITY FOR CALIFORNIA INDIANS

Mrs. HANSEN. I have a question from a very distinguished Member of Congress, Congressman Don Clausen.

It is his understanding that the Department of Health, Education, and Welfare through policy pronouncements by Secretary Finch in late January of this year resumed the Federal health responsibility for the Indian groups in California who would otherwise qualify for the Indian Health Services program. Please describe briefly the background that necessitated this policy decision.

Dr. JOHNSON. Madam Chairman, in 1953 the California State Legislature passed a resolution requesting the Federal Government to discontinue services for Indians in California. The Congress of the United States later that same year passed Joint Resolution 108, which is more familiarly known as the Termination Resolution, which called for the termination of the Federal relationship to Indian people, and specifically pointed out California as one of the States where this should be done with all great haste. At that point in time, Federal services were over the next 2 or 3 years withdrawn from the State. A number of the rancherias in the State of California were in fact terminated and most of the others were scheduled for later termination.

This basic approach, of course, has remained in effect until this last year. As a result of our program in the Southwest we early became aware of the fact that rural California Indian people, that is, those who are related to reservations and rancherias, were not getting adequate health services, in spite of the State's statement that they were going to take care of them. Consequently, about 2 years ago the Indian Health Service funded a demonstration project with the State Health Department of California where a series of nine project areas were set up which had essentially what we call in the rest of the country

community health representatives. These were community development motivators, people who went out to try to obtain other resources for assisting the California Indian people in their health programs.

As a result of that project, the proposal was made to the Secretary by the Indian Health Service that we reconsider the policy decision that health services for Indians in California were not a Federal responsibility. On the basis of our recommendation and that of other parts of the Department that have studied this problem, the Secretary in January established the policy that we would consider the Indians of California on the same basis as Indians in other States.

DIRECTION, SCOPE AND COST OF CALIFORNIA PROGRAM

Mrs. HANSEN. Will you please give the committee the scope, cost, and ratio of the Indians in the California program.

Dr. JOHNSON. This, to me, is one of the most exciting projects that we have going at the moment. The nine project areas of California are served by 16 community health representatives and five supervisors for a total annualized cost of $300,000. It is all administered by the California Rural Indian Health Board, which is the group of California Indians representing each of these project areas. Technically the contract is with the State Health Department in California, but the State health department has subcontracted the whole project to this Rural Indian Health Board. This is an Indian-administered health program on the same basis, really, that our CHR's programs are administered by the individual Indian tribe or the entire tribal council with the Indian Health Service funding base.

Mr. REIFEL. Madam Chairman; may I ask in that connection, Dr. Johnson, I would assume that it is your policy that in such agreements and contracts with Indian tribes or other groups you attempt to maintain the high standards that the Division of Indian Health Service has maintained all along, adequately funded so if the thing didn't function because of lack of funds the Indians wouldn't be blamed because someone would say, well, they shouldn't have handled it in the first place. It might have been funding that was the weakness in the arrangement, in the first place. Would you comment on this?

Dr. JOHNSON. I think you are raising a very significant point, Congressman Reifel. I believe that we have a responsibility to the Indian community not to let them get in the position of administering a program which is so inadequately funded that it will be poor or fail. I think there is the basic criteria before we would ask them to administer a program that it ought to have adequate funding, an adequate funding base.

Mr. REIFEL. Isn't it your experience, Dr. Johnson, that the capacity is there if the funding would follow, but to expect a group to do it even though they had the capacity without the funding, it would fail just on the face of it?

Dr. JOHNSON. Yes, I think it would be most unfair to them because the one thing that I think is important for the Indian community is that they have success. In other words, success breeds success and one should not be talking about programs for them to administer that are almost doomed to failure because of inadequate funding. We may have to face up to the criticism of marginal programs as a Federal

agency and we are sort of used to that kind of thing, but I don't think we should put the Indians in that position.

SANITATION FACILITIES FOR CALIFORNIA

Mrs. HANSEN. That is what disturbs me about this sanitation program. How many California families are you going to serve?

Mr. GREEN. In this package or group there are 240 families that would be served.

Mrs. HANSEN. Congressman Clausen goes on to say, "Does it not appear reasonable that the Indian Health Service should consider a program during the 1971 fiscal year that would double current expenditures and also to proceed with the orderly development of a comprehensive health program that will ultimately meet the needs of these deserving groups of Indian people." What specific steps are you taking to secure this end?

Dr. JOHNSON. Madam Chairman, we have been working with the California Rural Indian Health Board for some time now, particularly energized since the Secretary's new policy toward California, and have assisted them in developing some long-range plans which would permit them to have, I believe, an innovative and aggressive health program that they themselves could administer.

Mrs. HANSEN. They can't administer a program if funds aren't available.

Dr. JOHNSON. Very true.

Mrs. HANSEN. The Indian people are unable to provide the necessary facilities through their own funding. A small town has the mechanism to provide funds through the vote of the people, or upon the action of its city council but this is not always the case on an Indian reservation. Last year a Member of Congress came to me and told me of some conditions that existed in several areas in California. For example, many Indian people were forced to go down and wash their clothes in a small creek that was also their drinking supply. This is occurring in California, one of the wealthiest States in the Nation. In effect you are saying, We can't afford to provide you with the kind of sanitation facilities that will protect your health.

Mr. CHADWICK. Yes.

(Brief recess.)

Mrs. HANSEN. The subcommittee will come to order.

1971 REQUIREMENTS FOR SERVICES IN CALIFORNIA

Dr. JOHNSON. If we might clarify something on the California project, there is no figure in this activities budget for California at all, not even the $300,000 annualized that we are now talking about.

Mrs. HANSEN. Funds were provided in last year's appropriation for sanitation facilities in California. What happened to those funds?

Dr. JOHNSON. That was in the sanitation construction program.

Mrs. HANSEN. But no funds are included in this budget for these projects.

Dr. JOHNSON. Not for the kind of activities program we are talking about.

Mrs. HANSEN. How much would it cost to provide an adequate program?

Dr. JOHNSON. What I think for a minimal program would be about $750,000.

Mr. LEWIS. This item is now, however, in the Department for consideration as a possibility. I think the record should be clear.

Mrs. HANSEN. It is in the Department?

Mr. LEWIS. Under consideration.

Mrs. HANSEN. I hope the Secretary will take into consideration the importance of these funds.

Mr. CARDWELL. It hasn't actually gotten to his attention yet. It is now being reviewed by the Assistant Secretary for Health and Scientific Affairs. Being from California, the Secretary would be most interested, I expect.

Mrs. HANSEN. I know the Secretary is deeply aware of the needs in the Indian community.

Off the record.

(Discussion off the record.)

DENTAL SERVICES

Mrs. HANSEN. You are requesting $3,698,000 and 325 positions for dental services. Justify this request.

Dr. JOHNSON. This will permit us to provide for approximately 24 percent of the identified needs for dental services in the Indian population that we serve.

Mrs. HANSEN. Dr. Johnson, I attended the dedication of the Taholah Health Service Unit. You have some very dedicated people working in that dental facility. Do you have adequate staffing in the dental facility?

Dr. JOHNSON. Taholah has a dentist and a dental assistant.

Mrs. HANSEN. Do the Queets use this facility?

Dr. JOHNSON. Yes.

Mrs. HANSEN. This is why I am hoping that road is built between the Queets Reservation and Taholah Reservation, because it will shorten the traveltime for the Indian people.

Dr. JOHNSON. They do have a dental facility for Taholah. They have been using a dental trailer at Forks and Queets.

Mrs. HANSEN. Does the dental trailer also go to the Makah Reservation?

Dr. JOHNSON. They go up to Makah.

Mrs. HANSEN. If the State of Washington finishes the construction of that road you will shorten your mileage and save funds.

Dr. JOHNSON. They have had that bridge there for years, haven't they?

Mrs. HANSEN. Yes, but the State of Washington is supposed to be constructing the rest of that road.

How adequate are the dental services in Alaska?

Dr. JOHNSON. The dental services in Alaska are operated in really two fashions. One is the fixed facilities that we have in our hospitals and major centers.

Mrs. HANSEN. How many facilities do you have in Alaska?

Dr. JOHNSON. I can count eight. Pardon me. We have 10.

Mrs. HANSEN. How many dentists visit that area?

Dr. JOHNSON. Well, all of them really are visiting dental people. Rather than have one dentist spending his whole time in the bush they trade off, so that all of our dental officers, with the exception perhaps of the Chief of Service at Anchorage and at Mount Edgecumbe would be part of the year in the bush. They fly into the villages, bring along portable dental equipment, and spend a week, two, or three weeks, depending upon the size of the village, and attempt to provide as much care as they can while they are there. It is their intent to get into each village every year. However, this does not always happen. There are some villages that do not get the dentist in there each year.

Mrs. HANSEN. Insert in the record the number of villages per year that do not receive this service?

Dr. JOHNSON. Yes, ma'am.

(The information follows:)

Of the 209 villages and towns having Alaska Natives, 30 will not receive care in fiscal year 1970. One hundred sixty-four villages will receive care on an itinerant basis, 10 others are served by permanent facilities and five others where there are no Indian health facilities are served by local dentists under contract. A total of 945 days dental care will be provided the 164 villages served on an itinerant basis for an average of about 6 days per village. It is estimated that about 23,000 persons will receive some dental care in Alaska during fiscal year 1970 or about 47 percent of the population.

The list of 30 villages in Alaska not receiving any dental services in 1970 is as follows:

Cold Bay
Nunilchik
Talkeetna
Pauloff Harbor
Crooked Creek
Belkofski
Squaw Harbor
Newtok
Nightmute
Russian Mission (Yukon)
Scammon Bay
Sleetmute
Nelson Cagoon
Ugashik
Portage Creek
Bernite
Northeast Cape
Candle
Kulkwan
Pelican City
Skagway
Delta Junction
Chicken
Beetles
Birch Creek
Canyon Village
Circle
Rampart
Healy Lake
Cantwell

PUBLIC HEALTH NURSING

Mrs. HANSEN. You are requesting 275 positions and $3,118,000 for public health nursing. Are these your visiting nurses?

Dr. JOHNSON. Yes; these are the ones that work primarily out in the field, in the community, in the schools. They do the home visiting and teaching in the homes.

Mrs. HANSEN. You are requesting a decrease of $39,000 for this project. Justify this request.

Mr. CHADWICK. In each case, Madam Chairman, we have that portion of the $957,000 applicable to each part of the program. In other words, as the total amount of supplies and these items were applied to each, it was that 5 percent factor as we went through.

Mrs. HANSEN. Please insert in the record the number of public health nurses and where they are located in the United States.

Dr. JOHNSON. Yes.

(The information follows:)

Public Health nurses on duty

Location:	Number on duty	Location—Continued	Number on duty
Aberdeen, S. Dak	1	Watonga, Okla	1
Bemidji, Minn	1	Holton, Kans	1
Belcourt, N. Dak	1	Lawton, Okla	1
Chamberlain, S. Dak	1	Anadarko, Okla	1
Eagle Butte, S. Dak	1	Pawhuska, Okla	1
Fort Totten, N. Dak	1	Philadelphia, Miss	1
Fort Yates, N. Dak	1	Shawnee, Okla	1
Pine Ridge, S. Dak	5	Okemah, Okla	1
Rapid City, S. Dak	2	Tahlequah, Okla	1
Red Lake, Minn	2	Phoenix, Ariz	8
Rosebud, S. Dak	2	Parker, Ariz	1
Sisseton, S. Dak	1	Keams Canyon, Ariz	2
Wagner, S. Dak	1	Sacaton, Ariz	3
White Earth, Minn	1	San Carlos, Ariz	2
Winnebago, Nebr	1	Whiteriver, Ariz	5
Fort Berthold, N. Dak	2	Stewart, Nev	1
Albuquerque, N. Mex	2	Fort Yuma, Ariz	1
Dulce, N. Mex	1	Sells, Ariz	4
Laguna, N. Mex	1	Tucson, Ariz	2
Santa Fe, N. Mex	2	Portland, Oreg	2
Taos, N. Mex	1	Colville, Wash	1
Zuni, N. Mex	1	Fort Hall, Idaho	1
Anchorage, Alaska	1	Warm Springs, Oreg	1
Mount Edgecumbe, Alaska	1	Yakima, Wash	1
Billings, Mont	1	Window Rock, Ariz	1
Browning, Mont	2	Chinle, Ariz	3
Harlem, Mont	1	Crownpoint, N. Mex	4
Box Elder, Mont	1	Fort Defiance, Ariz	3
Crow Agency, Mont	1	Gallup, N. Mex	5
Lame Deer, Mont	1	Kayenta, Ariz	2
Poplar, Mont	1	Shonto, Ariz	1
St. Ignatius, Mont	1	Shiprock, N. Mex	6
Fort Washakie, Wyo	2	Tuba City, Ariz	3
Oklahoma City, Okla	1	Winslow, Ariz	2
Cherokee, N.C	1	Rockville, Md	3
Claremore, Okla	1		
Clinton, Okla	2	Total	127

CARE OF THE AGED IN ALASKA

Mrs. HANSEN. In Alaska you have a problem. We saw it at the Tanana Hospital. I think you see it in other hospitals. It is the problem of the aged who need a great deal of medical attention but there aren't enough adequate facilities to take care of them,. They cannot go back to their villages or to their homes easily because their families are unable to take care of them. The father is very busy with the customary chores of the North, particularly through the winter months. The mother usually has many youngsters to care for. We have asked repeatedly if the Indian Health Service couldn't investigate what can be done to alleviate this burden. The elderly person wants to be in the village where the language is spoken and where he has lived.

COMMUNITY CENTER APPROACH

Dr. JOHNSON. We have been working with the Alaska Federation of Natives and the OEO program in Bethel where, as you know,

we have a joint program administered by the Alaska Federation of Natives. The original concept was to develop the Bethel prematernity home and then develop the kind of facility that you are talking about, a place that would be accessible to ambulatory kinds of patients, as well as some custodial care patients. Unfortunately, the OEO grant did not get funded to the degree that we had hoped, and this is not a very good time to talk about constructing any kind of a facility, anyway, so that it remains just a dream at the moment.

I would see, Madam Chairman, the potentiality here of developing the community center type of approach where you would have your health facility, perhaps the central sanitation facility, and community activity center that would have the capability of providing a home for some of these people. These facilities would be feasible when you have a village health aide, who has the capability of providing some of the medical attention that they would need.

The problems here are, first of all, of constructing such a facility, and then, secondly, the supporting it. I think only through having a consolidated community facility which would be used for many different purposes, would it be economically feasible in the interior of Alaska. We have the need for this kind of facility for some of our own basic health purposes and I think these would fit together very neatly.

We were hoping with the OEO financial resources to be able to pilot one of these facilities, but——

Mrs. HANSEN. In one county of my district the unemployment rate is 14.8 percent. It was 14 percent in 1960 and now is 14.8 percent. If this continues OEO financial resources will be limited.

Dr. JOHNSON. That is right.

CASELOAD FOR PUBLIC HEALTH NURSES

Mrs. HANSEN. Please insert in the record the average caseload of your Public Health nurses.

Dr. JOHNSON. All right.

(The information follows:)

Average caseload

	Indian population served by each nurse[1]
Aberdeen	2,211
Alaska	2,353
Albuquerque	2,418
Billings	2,776
Oklahoma	1,724
Phoenix	2,593
Portland	2,617
Window Rock	4,796
Average for U.S.[1]	2,789

[1] Actual 1969.

Mrs. HANSEN. The U.S. Government sometimes fails to communicate to the American people the importance of their tax dollars. You shouldn't apologize for some of the services that are provided to the American people. These are things that you can take pride in.

HEALTH EDUCATION

You are requesting 99 positions and $1,355,000 for health education. Justify this request.

Dr. JOHNSON. Yes. This is an increase of five positions to staff newly constructed facilities. The health educators, are really community developers. They work with the health committees of the Council. They work with the school staffs to get health education into the school curriculums. They help develop some of the attitudes of the community, the kind of attitude change that Congressman Reifel was talking about a while ago—motivation, both groups and individuals, to be more conducive to healthful living. We feel they are very critical, a very key element within the program.

Mrs. HANSEN. What progress are you making on decreasing alcoholism? In some tribes, as you know, this is a real problem.

PROBLEMS OF ALCOHOLISM

Dr. JOHNSON. I think, Madam Chairman, that the Indian community, to generalize, and this is always dangerous, that they have accepted the problem of alcoholism. I think they now recognize the degree of the problem. In earlier days they were simply ignoring it or hoping it would go away. There are a number of, I believe, good community centered alcohol programs that have been developed in Indian communities through various funding mechanisms, mostly OEO and some of the church groups.

The National Indian Council on Alcoholism and Drugs was formed back in February, at a meeting in Denver, and they are providing a national focus for voluntary action, on the part of Indian communities to develop alcoholism programs.

Mrs. HANSEN. How many alcoholic centers are there in the United States?

Dr. JOHNSON. I couldn't give you a specific figure. We do know of quite a number of them but obviously don't know them all because they are under so many different types of sponsorship. We have in the Indian health program, of course, a real interest in the centers and it is very largely mediated through our mental health program. We do not fund any alcoholism programs specifically. It is always as a part of the mental health programs.

FIELD MEDICAL SERVICES

Mrs. HANSEN. You are requesting 930 positions and $16,512,000 for Field Medical Services. This has been something the committee has been very interested in. Justify this request.

Dr. JOHNSON. As you know, Madam Chairman, these are the programs that provide the community services in the home, the field clinics and the itinerant clinics in Alaska. This is the program that we showed you on the chart earlier today that has shown such a remarkable increase in its utilization by Indian people. This is the activity where the mental health services will be found, and where the major nutrition effort in the coming year will be placed. This is also the ac-

tivity where alcoholism programs, maternal and child health programs, immunization, and tuberculosis control programs are carried out—through the Field Medical Services.

The 99 positions shown here as a program increase are to staff newly constructed facilities, facilities that will be opened during this 1971 fiscal year.

USE OF PARAMEDICS

Mrs. HANSEN. How many paramedics do you have in the Indian Health Service?

Dr. JOHNSON. At the present time we have one independently practicing corpsman. He is a Blackfoot Indian who is a Vietnam Navy veteran who we trained in community medicine at our Desert Willow Training Center and at the Phoenix Medical Center. Since last fall he has been stationed down at the bottom of the Grand Canyon at the Havasupai Reservation. He has been doing an excellent job. He is the first full-time health person that the Supais have ever had. They are 70 miles from the nearest medical facility and 8 of those 70 miles are by horse down the side of the canyon. I think it has been a real improvement for them to have this corpsman in the valley with them.

We have one additional corpsman who is working in one of our hospitals in the outpatient clinic; but we have not been able to develop any sizable training program. We have done this on an ad hoc basis as really acute needs become apparent. It is again a matter of balancing your priorities against resources.

EFFECTS OF PHASEOUT OF THE MENOMINEE PROGRAM

Mrs. HANSEN. You are not requesting any funds for special assistance to the Menominee Indians. Dr. Johnson, what is going to happen to the Menominees?

Dr. JOHNSON. I think I can answer that best by outlining the use of the $100,000 a year in health and sanitation services. The major elements in their budget are sanitation, $34,000; tuberculosis control and tuberculosis hospitalization, approximately $19,000; about $12,000 for a county nurse; $8,000 for mental health services, including hospitalization; $6,000 for dental; $6,000 for eye care; and a number of smaller items.

As you can see, these are all rather significant public health and patient care types of activities. We are not aware that any provision has been made to pick up these kinds of programs——

Mrs. HANSEN. You mean health services will no longer be provided?

Dr. JOHNSON. To the best of our knowledge, this is what will happen. When this legislation expires. We have been unable to identify any source that will pick this up.

Mrs. HANSEN. I think this is tragic because I doubt that that county will have the fiscal resources to continue the $350,000 health care program.

Dr. JOHNSON. The reason for the special bill in the past, of course, was in fact really the deterioration of what up until termination was a reasonably adequate health program. They had a hospital and fairly

good medical program, as Congressman Reifel remembers, and most of that is now gone and this program is really the residual right now.

Mr. OBEY. Madam Chairman, if I may interject, that county happens to be in my district and I observed in the 7 years I was in the legislature before I came to Congress the deterioration of the situation in Menominee County. In my judgment, the whole process of termination was probably the biggest mistake the Federal Government could have made in that area. It is the biggest mistake the State people could have made in not advising against that action more strenuously than some of them did. They need that money. They need a lot more than that. There are strong attacks being made now, for instance, on the Menominee Enterprises, which is the only industry in the area, and it can't continue to provide nearly the tax base that is needed to support any of their social needs up there. It is just an incredibly bad situation.

Mrs. HANSEN. In response to Congressman Obey, I was on the Interior authorizing committee the year this was considered. At that time I raised grave questions on providing only a single industry economy for a county. I think Secretary Laird, at that time a Member of Congress, also raised the same question.

Mr. CARDWELL. That is right.

Mrs. HANSEN. We were both joined by several other Members who had grave questions about this kind of termination and the kind of disasters it would lead to.

Dr. Johnson, without this $350,000 you are going to lose all the momentum that you have had already established. Isn't that true?

Dr. JOHNSON. I am afraid so.

Mrs. HANSEN. Tragic. This is why the Indian people are a little worried about all these "termination" bills. Termination means usually the chance to starve or to lose all the basic ingredients of living.

INDIAN HEALTH FACILITIES

Please insert in the record justification pages 45 through 53.

(The pages follow:)

Indian Health Facilities

Appropriation, 1970		$20,952,000
Unobligated balance from prior years		8,085,079
Total available for obligations		29,037,079
Decreases:		
Hospitals	$1,984,005	
Outpatient care facilities	3,805,442	
Community facilities	1,952,000	
Sanitation facilities	19,120,792	
Personnel quarters	1,139,840	28,002,079
Carried into 1971		1,035,000
Increases (1971 appropriation request):		
Sanitation facilities		17,950,000
Total available for obligation		18,985,000

ANALYSIS BY ACTIVITY

Amounts Available for Obligation

	Amount Available 1970	Fiscal Year 1971 Unobligated Balance From Prior Years	Fiscal Year 1971 1971 Budget Requests	Fiscal Year 1971 Estimated Total Available	Total Available 1971 compared to Total Available 1970
Hospitals..	$2,014,705	$30,700	---	$30,700	$- 1,984,005
Outpatient care facilities.....	3,950,142	144,700	---	144,700	- 3,805,442
Community facilities	1,952,000	---	---	---	- 1,952,000
Sanitation facilities	19,965,792	845,000	17,950,000	18,795,000	- 1,170,792
Personnel Quarters..	1,154,440	14,600	---	14,600	- 1,139,840
Total	29,037,079	1,035,000	17,950,000	18,985,000	-10,052,079

Obligations by Activity

	1969 Actual	1970 Estimate	1971 Estimate	Increase (+) Decrease (-)
Hospitals	$ 721,930	$1,984,005	$ 30,700	$- 1,953,305
Outpatient care facilities ...	171,738	3,805,442	144,700	- 3,660,742
Community facilities ...	864,000	1,952,000	---	- 1,952,000
Sanitation facilities ...	15,974,848	19,120,792	17,950,000	- 1,170,792
Personnel Quarters	780,971	1,139,840	14,600	- 1,125,240
Total	18,513,487	28,002,079	18,140,000	- 9,862,079

ITEMIZATION OF ESTIMATE

	Actual 1969	Estimate 1970	Estimate 1971	Increase (+) Decrease (-)
Program and Financing				
Total obligations .	$18,513,487	$28,002,079	$18,140,000	$-9,862,079
Unobligated balance brought forward ...	- 8,442,566	- 8,085,079	- 1,035,000	+7,050,079
Unobligated balance carried forward ..	+ 8,085,079	+ 1,035,000	+ 845,000	- 190,000
Appropriation	18,156,000	20,952,000	17,950,000	-3,002,000
Obligations by Objects				
11 Personnel Compensation ..	$1,772,736	$2,125,000	$1,800,000	$-325,000
12 Personnel benefits	87,237	109,000	84,000	- 25,000
21 Travel and transportation of persons	45,558	99,000	57,000	- 42,000
22 Transportation of things	205,805	257,000	200,000	- 57,000
23 Rent, communications, and utilities .	46,640	71,000	50,000	- 21,000
24 Printing and Reproduction ..	27,289	23,000	7,000	- 16,000
25 Other services .	4,412,923	5,650,000	4,221,000	-1,429,000
26 Supplies and materials	322,626	400,000	250,000	-150,000
31 Equipment	118,797	116,000	100,000	- 16,000
32 Lands and structures	10,609,876	17,200,079	11,371,000	-5,829,079
41 Grants, subsidies and contributions	864,000	1,952,000	---	-1,952,000
Total obligations .	$18,513,487	$28,002,079	$18,140,000	$-9,862,079

Appropriation Title: Indian Health Facilities

Highlight Statement

Continued successful operation of the Indian Health program servicing approximately 415,000 Indian and Alaska natives will require 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.

Modern day Indians are afflicted with health problems that are not a serious problem throughout the non-Indian population but still cause untold illness, misery and death among Indians.

The lack of basic sanitation facilities, the deficiencies in sanitary conditions,and the substandard and overcrowded dwelling conditions are in large measure responsible for the high morbidity and mortality rates of the Indians. The Indian Health Service assists in the provision of sanitation facilities for housing units being constructed or improved by the Housing Assistance Administration, the Bureau of Indian Affairs and Indian tribes. The request for 1971 contains funds that will permit the Indian Health Service to construct sanitation facilities to serve an estimated 7,100 housing units. Included in the request to assist housing programs are funds that will permit the Indian Health Service to conduct site investigations and soil tests and to provide consultation and technical assistance for sanitation facilities to be constructed by the Housing Assistance Administration, Department of Housing and Urban Development, through local housing authorities for an estimated additional 900 housing units.

Funds are also included that will permit the Indian Health Service to provide new or improved sanitation facilities for residents on rancherias, reservations, and scattered land allotments in California. The facilities to be constructed will provide benefits to approximately 450 homes. In addition, special projects will be undertaken to provide facilities for Indian ceremonial areas and meeting places, to conduct necessary investigations, and to correct emergency problems resulting from unforeseen conditions that are beyond the capabilities and resources of the Indians.

Sanitation facilities $17,950,000

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. During the past ten years the Indian Health Service has worked with Indians and Alaska natives in a cooperative effort to correct the grossly unsanitary 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 disease that still prevails among Indians and Alaska natives, e.g.:

1. Gastroenteritis ranks second among the leading reportable diseases for Indians; incidence rates for amebic and bacillary dysentery are more than 35 times higher than the rate in the general population.

2. The Indian infant death rate is one and a half times (over two times in Alaska) that of the general population. For infants who have returned to their home environment after hospital birth, and particularly for infants one month through 11 months of age, the death rate is about three times that of comparable age groups in the general population. This condition is largely associated with the lack of sanitation facilities in the Indian home and with extremely crowded living conditions.

3. Approximately 25 percent of the Indian 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 a lack of running water, unsanitary conditions and an 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 one to three gallons per capita per day as compared to

five times this amount for the poorest rural families in the non-Indian population. Contaminated streams, irrigation ditches, stock ponds and unprotected wells and springs are often the only available supply. The excessive amount of time which Indians and Alaska natives must thus expend combating 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 problems of the Indian and Alaska natives. The absence of these facilities results in (1) spread of micro-organisms responsible for diarrheas and dysenteries, (2) insect and rodent infestations in both 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 Indian 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 Indian 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 responsibility for continued operation and maintenance of completed community sanitation facilities. Education and training activities are conducted to assure utilization, protection and maintenance of household sanitation facilities.

Projects for Indian people include one or more of the following features: water--source development, treatment, storage facility, distribution system; waste (liquid and solid)--collection system, sewage treatment; disposal facility; household appurtenances--sanitary pit privy or flush toilet and lavatory, 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. Indian governing bodies have shown a willingness to adopt the necessary measures which are required for continued operation and maintenance of completed facilities. These measures include appointment

of responsible maintenance personnel, 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

Since the inception of this program in 1960, through Fiscal Year 1969, 944 sanitation projects have been undertaken. These include: 776 construction projects (243 of which serve Federal and Tribal housing projects) and 168 engineering investigations, emergency works and other special projects. Of the 944 projects undertaken, 708 are completed or in operation, 181 are underway as of December 31, 1969, and 54 are in the final planning stages. One project has been deferred pending relocation of the Indian village.

The fiscal year 1970 appropriation included $16,905,000 for the construction of sanitation facilities and authorized the reprogramming of an additional $1,000,000 for this purpose. Of these funds, $13,130,000 will be used to construct facilities to serve approximately 7,100 new or improved housing units being constructed under Federal and Tribal housing programs. Technical assistance will be rendered for another 900 new housing units, facilities for which will be built by the housing agencies. The remaining $4,775,000 will provide for 34 regular projects and additional special projects to serve 1,630 Indian and Alaska Native homes with both running water and waste disposal facilities. An additional 1,700 homes will be benefitted by improved facilities.

With the completion of all projects authorized or planned through Fiscal Year 1970, both running water and an adequate means of waste disposal will have been provided for approximately 48,000 Indian families. Approximately 17,000 additional families will have been benefited by the construction of improved facilities. The 1971 request will enable both running water and waste facilities to be made available for another 7,100 families to be provided new houses under HUD, BIA, and tribal programs and technical assistance to another 900 other new or rehabilitated homes. In addition, new or improved sanitation facilities will be provided for approximately 450 Indian families residing on rancherias, reservations and scattered land allotments in California.

WORK PLANNED FOR F.Y. 1971

Sanitation Facilities for New or Improved Housing Constructed by Other Agencies

The request for $16,500,000 to assist Federal and Tribal housing programs during F.Y. 1971 will permit the construction of sanitation facilities to serve an estimated 7,100 housing units. It will also permit the Indian Health Service to participate in the provision of sanitation facilities for approximately 900 housing units that will be served by sanitation facilities constructed by HUD. In accordance with mutual agreements, the Indian Health Service conducts site investigations and soil tests, provides construction inspection of sanitation facilities for all housing, and constructs any sanitation facilities located outside of the house lot. The agency responsible for house construction provides interior fixtures and plumbing. Sanitation facilities located on the house lot are constructed by HUD for homes constructed under programs of the Housing Assistance Administration and by the Indian Health Service for homes constructed or improved under programs of the Bureau of Indian Affairs. Where feasible from engineering and cost viewpoints, existing Indian homes adjacent to the housing units are also served.

Other Sanitation Facilities Construction

The request includes $1,000,000 urgently needed to provide water supply and waste disposal facilities for Indian residents of rancherias, reservations and land allotments in California 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 facilities to be constructed will provide running water and waste disposal facilities for approximately 210 Indian families and sanitation facilities improvements for another 240 families.

Special Projects

The request includes $450,000 that provides for: Construction of facilities for Indian ceremonial areas and for Tribal buildings used for community gathering; investigation and planning funds for urgently needed construction projects for which additional technical information is necessary before a solution

can be recommended; correction of emergency problems related to Indian sanitation facilities such as occur from severe drought conditions, floods, failure of well casings and pumping equipment; and other unforeseen conditions which may require provision of materials, supplies and equipment for completing the construction or repair of sanitation facilities serving Indian and Alaska native communities.

The following table reflects the number of families served, actual through 1969 and the estimate for 1970 and 1971.

Fiscal Year	Appropriated Funds	Families Provided Running Water and Adequate Means of Waste Disposal	Additional Families to Benefit from Improved Facilities
1961 thru 1969	$63,756,000[a/]	39,600	15,180
1970	17,905,000[b/]	8,730	2,600[c/]
1971 request	17,950,000	7,310	1,140[c/]

a/ Includes $5,170,000 made available for 42 projects authorized in F.Y. 1963 and 1964 under the Public Works Acceleration Act. (Public Law 87-658)

b/ Includes $1,000,000 reprogrammed from other IHS construction funds.

c/ Includes 900 homes to be served by HUD but which require site investigations, soil tests and consultative and technical assistance by the Indian Health Service.

1971 REQUEST SUMMARY

ALL AREAS -	Assistance to Federal and Tribal Housing Programs	$16,500,000
CALIFORNIA-	Projects to provide essential sanitation facilities for residents of rancherias, reservations and scattered land allotments.	1,000,000
ALL AREAS -	Special Projects: To serve Indian ceremonial areas and Community Buildings; for engineering investigations; emergency works; supplies and equipment; and unforeseen conditions.	450,000
		$17,950,000

UNOBLIGATED AND UNEXPENDED BALANCES

Mrs. HANSEN. Please insert in the record your unexpended and unobligated balances as of March 31, 1970.

(The information follows:)

Current Unobligated Balances

Project and Location	Project Description	Unobligated	COMMENTS	Revised Estimated Unobligated Balances as of 6-30-70
HOSPITALS				
Claremore, Oklahoma	Plan 60-bed hospital	$ 93,000	A/E contract award for planning estimated for March 1971.	$ 93,000
Phoenix, Arizona	Construct 200-bed hospital	84,193	To complete on-going project. Obligation of funds anticipated by June 1970	
Tuba City, Arizona	Plan 125-bed hospital	214,506	A/E contract to complete second planning phase September 1970.	214,506
Philadelphia, Miss.	Plan 30-bed hospital	80,000	A/E contract award for planning estimated for April 1971.	80,000
Harlem, Montana	Plan 30-bed hospital	88,000	A/E contract award for planning estimated for April 1971.	88,000
Gallup, N. Mex.	Dental addition	270,954	Construction contract award anticipated for July 1970.	270,954
Mt. Edgecumbe, Alaska	Incinerator	86,525	Purchase and installation of incinerator scheduled for June 1970.	
Talihina, Oklahoma	Shop-incinerator	60,935	Construction contract award anticipated for May 1970.	
Anchorage, Alaska	Space rearrangement	121,027	Construction contract award scheduled for May 1970.	
Anchorage, Alaska	Auxiliary generator	72,000	Purchase and installation of generator scheduled for May 1970.	
Mt. Edgecumbe, Alaska	Auxiliary generator	32,000	Purchase and installation of generator scheduled for May 1970.	
Talihina, Oklahoma	Water tower	42,000	Award of construction contract scheduled for May 1970	
Clinton, Oklahoma	Water tower	35,000	Project anticipated to commence June 1970.	
Albuquerque, N. Mex.	Water mains	10,000	Award of construction contract anticipated for June 1970.	
Harlem, Montana	Fire deficiencies	5,000	Award of construction contract scheduled for May 1970.	
Lawton, Oklahoma	Access road	142,000	Administrative reserve, Expenditure Control Act.	142,000
Miscellaneous Projects		354,261		301,734
Total Hospitals		1,791,401		1,190,194
OUTPATIENT CARE FACILITIES				
Albuquerque, N. Mex.	School health center	592,000	Anticipate construction contract award. August 1970	592,000
Many Farms, Arizona	School health center	457,000	Anticipate construction contract award June 1970	
Wanblee, South Dakota	Health center	171,176	Under construction. Anticipate obligation of funds by September 1970.	139,800
Four Bears, N. Dak.	Health center	143,479	Under construction. Anticipate obligation of funds by September 1970.	38,200
Beshbitoh, Arizona	Health station	127,391	Anticipate construction contract award June 1970.	
Dilkon, Arizona	Health station	127,391	Anticipate construction contract award June 1970.	
Senostee, New Mexico	Health station	127,391	Anticipate construction contract award June 1970.	
San Felipe, N. Mex.	Health station	13,623	Under construction. Anticipate obligation of funds by June 1970.	
Wellpinit, Washington	Health station	17,150	Under construction. Anticipate obligation of funds by June 1970.	
Whiteshield, N. Dak.	Health station	60,549	Anticipate construction contract award June 1970.	
Teec Nos Pos, Ariz.	School health center	350,000	Anticipate construction contract award June 1970.	
Neah Bay, Washington	Health center	230,000	Anticipate construction contract award June 1970.	
Rock Point, Arizona	Health station	220,000	Anticipate construction contract award June 1970.	

Project and Location	Project Description	Unobligated	COMMENTS	Revised Estimated Unobligated Balances as of 6-30-70
OUTPATIENT CARE FACILITIES - Cont'd				
Red Water, Miss.	Health station	$ 143,000	Anticipate construction contract award June 1970.	
Noorvik, Alaska	Health station	127,000	Project estimated to commence May 1970.	
Savoonga, Alaska	Health station	124,000	Project estimated to commence May 1970.	
Toppenish, Washington	Ambulance storage	9,000	Anticipate construction contract award June 1970.	
Miscellaneous Projects		26,646	To complete on-going projects.	$ 5,159
Total Clinics		3,066,796		775,159
PERSONNEL QUARTERS				
Beshbitoh, Arizona	5 units	90,199	Will be constructed concurrently with clinic.	
Dilkon, Arizona	5 units	90,199	Will be constructed concurrently with clinic.	
Sanostee, N. Mexico	5 units	90,199	Will be constructed concurrently with clinic.	
Many Farms, Arizona	13 units	189,030	Will be constructed concurrently with clinic.	
Teec Nos Pos, Arizona	6 units	130,000	Will be constructed concurrently with clinic.	
Neah Bay, Washington	3 units	70,000	Will be constructed concurrently with clinic.	
Tuba City, Arizona	5 units	136,698	Administrative reserve, Expenditure Control Act.	136,698
Miscellaneous Projects		928	To complete on-going projects	
Total Quarters		797,253		136,698
SANITATION FACILITIES				
Regular projects	Water and waste facilities	4,788,452	Exclusive of $845,000 carry-over, balance estimated to be obligated by 6-30-70.	845,000
Housing with other agencies	Water and waste facilities	10,912,011	Anticipate obligation of all funds by June 30, 1970.	
Other	Water and waste facilities	628,000	Administrative reserve, Expenditure Control Act.	628,000
Total Sanitation		16,328,463		1,473,000
TOTAL UNOBLIGATED		21,983,913		3,575,051

Note 1 - Reflects unobligated balance as of 3-31-70 for sanitation facilities and 2-28-70 for other projects.

CONSTRUCTION FUNDS PLACED IN RESERVE, FISCAL YEAR 1970

Mrs. HANSEN. What construction funds, if any, have been placed in reserve during the 1970 fiscal year?

Dr. JOHNSON. Mr. Chadwick, can you respond to that?

Mr. CHADWICK. The construction funds in reserve, Madam Chairman, amount to $907,000. Of that, $628,000 is for sanitation facilities, $142,000 for the Lawton access road provided by the Congress last year, and five units of quarters amounting to $137,000 for the Tuba City-Window Rock, Ariz. area.

Mrs. HANSEN. How do you justify placing those necessary items in reserve?

Mr. CHADWICK. We were successful in getting the use of the construction funds that we do have within the definition of dollars for medical facilities and patient care activity.

Mrs. HANSEN. If you had more sanitation facilities you might need less medical facilities.

Mr. CHADWICK. So that accounts for the two items at Tuba City, quarters and the access road which didn't come within that criteria.

Mrs. HANSEN. If I recall correctly that access road led to a hospital facility.

Mr. CHADWICK. Yes. The access road at Lawton is one where the superhighway was constructed in a manner to cut off the access, and once you approach the hospital at point X it is now necessary to drive by that several miles and come back. Not only is there the considerable distance of 3 to 4 to 5 miles, but the way isn't that easy to find and when the Indian people come with an emergency they are almost at the hospital but they can't get across the road. They have to go up and come back.

Mrs. HANSEN. What is the amount of funds that have been placed in reserve?

Mr. CHADWICK. $907,000 total.

Mrs. HANSEN. How much of the Lawton funds are in reserve?

Mr. CHADWICK. $142,000.

Mrs. HANSEN. How many sanitation facilities funds were placed in reserve?

Mr. CHADWICK. The sanitation facilities within the $628,000 would be five in number.

Mrs. HANSEN. Where were they?

Mr. CHADWICK. North Many Farms project on the Navajo at $244,000; $126,000 for the Colville, Portland area; $100,000 for Wind River in the Billings area; $35,000 for privies on the Navajo——

Mrs. HANSEN. Weren't these funds included in the budget, because you considered them necessary?

Mr. CHADWICK. Yes, ma'am.

Mrs. HANSEN. It seems very strange to place sanitation facilities funds in reserve. We have received innumerable messages on the environment. The Federal Government has until December 31, 1972 to cease all pollution by Federal facilities. In the budget this year we discovered that the Bureau of the Budget placed in reserve the National Park Service pollution abatement construction funds.

The Forest Service also had pollution abatement funds placed in reserve. Again we find that the Indian health service sanitation facility funds, which were apparently high priority items, are in reserve. Isn't this correct?

Mr. CHADWICK. They were among our top priorities at the time.

Mrs. HANSEN. Please insert in the record the total funds placed in reserve and the number of people who would have been able to use the facilities that these funds would have provided.

(The information follows:)

PROJECTS FROZEN UNDER THE EXPENDITURE CONTROL ACT

1. LAWTON ACCESS ROAD—$142,000 [1]

The Lawton Hospital has a total service unit population of approximately 7,400 Indian people. In 1969, the hospital experienced 2,343 admissions and 29,679 outpatient visits.

2. TUBA CITY QUARTERS—5 UNITS—$136,698 [2]

The Tuba City Hospital has a service unit population of 10,650. In 1969, there were 2,457 admissions and 38,563 outpatient visits at the hospital.

3. SANITATION FACILITIES—$628,000 [1]

Under sanitation facilities, two complete projects at North Many Farms, Arizona, and the Coleville Reservation, Wash., and two partial projects at Wind River Reservation, Wyo., and Navajo Reservation privies in Arizona, New Mexico, and Utah are deferred. In addition, sanitation facilities in all Indian health areas for tribal and community buildings will be deferred. It is estimated that 231 Indian families will not receive running water and waste disposal facilities and another 350 families will not be provided with safe communal watering points.

Mrs. HANSEN. The Indian people are the responsibility of the Federal Government. We have a special obligation to make sure that the Federal Government is not perpetuating pollution or not perpetuating hazards to the environment. This is why this committee has tried to take special steps in providing funds for their sanitation facilities and why we have encouraged that expenditures be made.

The funds in this budget will be available until July of 1971. Isn't that correct?

Mr. CHADWICK. Yes.

Mrs. HANSEN. This leaves only 18 months to comply with the Federal order to cease all pollution on Federal facilities. At your present level of funding what percent of the need are you going to be able to meet?

Dr. JOHNSON. Mr. Green, can you respond to that, please?

NEED FOR SANITATION FACILITIES

Mr. GREEN. With the appropriation of the funds requested in the 1971 budget that we are now considering we would be able to handle all but around 28 percent of the Indian homes. I want to be sure that I am on the same base with the——

[1] Proposed for reprograming to fire and safety projects. The Bureau of the Budget approved the reprograming on Mar. 9, 1970. A letter requesting committee approval will be forwarded shortly.

[2] $10,266 proposed for reprograming to fire and safety projects. The Bureau of the Budget approved the reprograming on Mar. 9, 1970. A letter requesting committee approval will be forwarded shortly.

Mrs. HANSEN. You will be able to meet the needs of all but 28 percent of the Indian reservation homes?

Mr. GREEN. Yes, that is correct. We are not talking about Federal facilities here, are we?

Mrs. HANSEN. No, but you can't ignore the Federal lands. If you are going to comply with the Presidential order to cease all pollution on Federal facilities by December 31, 1972 you have to provide sanitation facilities.

Mr. CHADWICK. Through the request in 1971 we will have received $99,611,000 in total for this program. That would leave us with a dollar unmet need of $65 million in the continental United States and $43 million in Alaska.

Mrs. HANSEN. When was this program started?

Mr. CHADWICK. We started this program from 1961 to the current.

Mrs. HANSEN. You have a need of $60 million?

Mr. CHADWICK. $65 million in the continental United States and $43 million in Alaska, which is the $108 million remainder.

Mrs. HANSEN. Which would have to be included in the 1972 budget?

Mr. CHADWICK. If it were done it would.

Mrs. HANSEN. You can't exempt a Federal agency from complying with this order.

Mr. CHADWICK. I hate to comingle this further, but to the degree that we have new housing it would add to this figure to some degree. What I mean by some degree, sometimes it would be in lieu of these houses and sometimes in addition, so it wouldn't be a net addition.

Mrs. HANSEN. You will need an additional $65 million in 1 year?

Mr. CHADWICK. It is $108 million for the total.

Mrs. HANSEN. That budget will be considered next year. There are many agencies in the Interior and Related Agencies Bill that have the same spectacular deficiencies.

How much are you requesting this year for construction?

Mr. CHADWICK. We are asking for a total of $17,950,000.

Mrs. HANSEN. For sanitation?

Mr. CHADWICK. Right, and that is the total.

FUTURE CONSTRUCTION FREEZE

Mrs. HANSEN. How much of this will be placed in reserve by the Bureau of the Budget?

Mr. CHADWICK. $16,500,000 of this amount is for the Federal and tribal housing programs. To date none of this kind of money has been put in freeze. The 1 million more of it is the California package. As you recall, we told the committee we would include the million this year in lieu of last year. And then $459,000 is for special projects as we call them, to serve engineering studies, emergency work and support for those projects not yet enough developed to get a fix on their magnitude and to cover sheer emergencies and so on that may occur.

Mrs. HANSEN. When will these funds be released? It isn't reasonable to appropriate new funds when last year's funds for the same projects are in reserve.

Mr. CHADWICK. We are looking forward, Madam Chairman, to the day that there will not be these controls on construction and we can get to use these funds. They are needed.

Mrs. HANSEN. What you are asking me to do is to appropriate badly needed funds this year while last year's funds are still in reserve. This is ridiculous to place 1970 health facilities funds in reserve and then request more for 1971.

Mr. CARDWELL. I think one possible answer to your question about the money in reserve is that it was appropriated for individual projects and, hopefully, will at some point be released for those same projects. So, if you were to defer a similar amount in 1971 from this budget you would in effect be denying some fixed projects. It might pay to examine these projects.

ANTICIPATED RELEASE OF PROJECTS NOW FROZEN

Mrs. HANSEN. This committee believes in an orderly system of fiscal responsibility. I think we should have a statement as to when these funds will be released. There were projects which were carefully selected as your priority projects. Isn't that correct?

Dr. JOHNSON. That is correct.

Mrs. HANSEN. They weren't congressional add ons.

Mr. CHADWICK. They were our priorities. They were not only our priorities, Madam Chairman, they were the priorities of the Indian people themselves.

Mrs. HANSEN. That is right. These funds were to be used to meet the needs of the Indian people. It is obvious you could have spent another $30 million and not have accomplished your total goals. What percent of your construction budget was placed in reserve?

Mr. CHADWICK. The construction appropriation for last year was $20,950,000.

Mr. CARDWELL. One-twentieth.

Mr. CHADWICK. Including the most recent supplemental for the Fairbanks project.

Mrs. HANSEN. Was that an add on?

Mr. CHADWICK. Yes.

Mrs. HANSEN. Weren't the funds badly needed?

Mr. CHADWICK. Yes. When we provide the unobligated balances as of March 31, may we also give you our schedule for obligation because a lot of these moneys are related to the housing program?

Mrs. HANSEN. Insert in the record a list of the items in reserve.

(Information may be found on p. 1130.)

CONSTRUCTION UNOBLIGATED AS OF JUNE 30, 1969

Mrs. HANSEN. Please insert in the record a listing by construction project of all items having an unobligated balance as of June 30, 1969. This tabulation should indicate the year in which the appropriation was made for each project.

(The information follows:)

Unobligated Balances
as of June 1969 and Year of Appropriation

Project & Location	Project Description	Unobligated Balances as of 6-30-69	Fiscal Year of Appropriation
HOSPITALS			
Claremore, Oklahoma	Plan 60-bed hospital	$ 93,000	1967
Philadelphia, Miss.	Plan 30-bed hospital	80,000	1967
Phoenix, Arizona	Complete 200-bed hospital	188,158	1968
Tuba City, Ariz.	Plan 125-bed hospital	213,506	1965 & 1967
Harlem, Montana	Plan replacement 30-bed hospital	88,000	1967
Cherokee, N. Carolina	Plan addition	37,816	1967
Talihina, Oklahoma	Alterations (Planning)	40,918	1967
Gallup, New Mexico	Dental srea	272,264	1968
Kotzebue, Alaska	Rehab. foundation	24,300	1968
Mt. Edgecumbe, Alaska	Incinerator	86,525	1968
Talihina, Oklahoma	Shop-incinerator	60,935	1968
Tanana, Alaska	Complete sewage plant	8,890	1966
Anchorage, Alaska	Site stabilization	1,025,000 1/	1967
Shiprock, New Mex.	Plan expansion	42,000	1967
Pine Ridge, S. Dak.	Plan addition alterations	26,000	1967
Red Lake, Minnesota	Plan addition alterations	22,000	1967
Rosebud, S. Dak.	Plan addition alterations	28,000	1967
Whiteriver, Ariz.	Plan additions & alterations	27,000	1967
Browning, Montana	Plan additions & alterations	19,000	1967
Cass Lake, Minn.	Improvement to Dietary & relocation of OB ward	59,000	1969
Anchorage, Alaska	Space rearrangement	143,872	1969
Anchorage, Alaska	Emergency generator	72,000	1969
Mt. Edgecumbe, Alaska	Emergency generator	32,000	1969
Browning, Montana	Emergency water supply	20,000	1969
Talihina, Okla.	Water tower	42,000	1969
Clinton, Okla.	Water tower	35,000	1969
Miscellaneous Projects	To complete on-going projects	10,521	
	TOTAL HOSPITALS	2,797,705	
OUTPATIENT CARE FACILITIES			
Alakanuk, Alaska	Complete constr. health station	3,680	1968
Albuq., New Mexico	Plan school health center	32,000	1968
Beshbitoh, Arizona	Constr. school health station	132,000	1968
Dilkon, Arizona	Constr. school health station	132,000	1968
Four Bears, N. Dak.	Constr. health center	467,233	1968
Fort Wingate, N. Mex.	Complete school health center	6,010	1966
Lapwai, Idaho	Construct health station	151,617	1967
Many Farms, Ariz.	School health center	457,000	1968

San Felipe, N. Mex.	Constr. school health station	$ 132,000	1968
Sanostee, N. Mexico	Constr. school health station	132,000	1968
Wellpinit, Washington	Construct health station	140,664	1967
Whiteshield, N. Dak.	Construct health station	62,607	1968
Wanblee, S. Dak.	Construct health station	310,572	1967
Santo Domingo, N. Mex.	Provision of a dental clinic	46,000	1969
Selawik (Minto), Alas.	Complete constr. of health station	60,869	1968
Miscellaneous Projects	To complete on-going projects	5,890	
	TOTAL OUTPATIENT CARE FACILITIES	2,272,142	
PERSONNEL QUARTERS			
Beshbitoh, Ariz.	Construct 5 units	94,000	1968
Dilkon, Ariz.	Construct 5 units	94,000	1968
Four Bears, N. Dak.	Construct 15 units	288,000	1968
Many Farms, Ariz.	Construct 13 units	189,030	1968
Sanostee, N. Mex.	Construct 5 units	94,000	1968
Tuba City, Ariz.	Construct 5 units	136,698	1968
Wagner, S. Dak.	Construct 3 units	56,538	1968
Miscellaneous Projects	To complete on-going projects	2,174	
	TOTAL PERSONNEL QUARTERS	954,440	
SANITATION FACILITIES		2,060,792	1969
	GRAND TOTAL	8,085,079	

1/ 1970 Appropriation provides that $1,025,000 previously appropriated for Anchorage site stabilization be applied to the 1970 Program as follows:

Sanitation Facilities	$1,000,000
Neah Bay, Washington Quarters	25,000
	1,025,000

Mrs. HANSEN. At the beginning of fiscal year 1970, you carried over an unobligated balance of $8,085,079. Yet I notice on page 46 you estimate an unobligated balance of only $1,035,000 to be carried over to fiscal year 1971. What is the explanation for this sizable reduction in your unobligated carryover balance?

Mr. CHADWICK. Madam Chairman, the figure you have before you of $1,035,000 may need revising with this freeze that we have. The reason for the significant reduction in those amounts is because we have those dollars related to Four Bears, Lapwai and Wellpinit health centers and stations that have already been obligated now. And we have scheduled obligation for most every one of the other facilities that we have before June 30 this year with some pretty firm dates on them. And the housing program has lagged in the past in the early months of the year as you have seen. This year it is following the same schedule.

Mrs. HANSEN. That is not the only housing program that has lagged.

Mr. CHADWICK. Last year when we had housing obligations of $6,600,000, only $1,941,000 of that had been obligated through January. In other words, we relate to the date the HUD housing comes in. It is following that schedule this year. And they have assured us again before this hearing that they will build this number of housing and we are programed to accommodate them as they build them.

ADEQUACY OF INDIAN HOUSING

Mrs. HANSEN. What percentage of your housing is adequate?

Dr. JOHNSON. According to the Bureau of Indian Affairs there are some 68,000 Indian homes that either need replacing or major rehabilitation. I cannot give you the total number of Indian homes. It is a little more difficult to get a handle on. It is somewhere between 76,000 and 90,000.

Mrs. HANSEN. So about 90 percent of your housing is inadequate?

Dr. JOHNSON. About that.

REQUEST FOR SANITATION FACILITIES FOR NEW HOUSING

Mrs. HANSEN. $16,500,000 is requested for sanitation facilities for new or improved housing constructed by other agencies. Give us the details on this project.

Mr. GREEN. The 16½ million in this proposed budget is to provide sanitation facilities for those new houses which are built either under the auspices of the BIA or HUD, or which are improved under the auspices of BIA. There are 7,100 such homes, plus approximately 900 homes which will be provided with individual type facilities by the tribal housing authorities with backup of HUD money.

Mrs. HANSEN. When these houses are built will the sanitation facilities be included?

Mr. GREEN. It just has to be done. The house is not occupiable under anybody's ground rules unless the facilities are provided.

Mrs. HANSEN. $1 million is requested for other sanitation facilities. This is in California?

Mr. GREEN. That is correct.

Mrs. HANSEN. Justify this request.

Mr. GREEN. The million dollars is scheduled to provide facilities for existing homes in some 15 different identified locations.

Mrs. HANSEN. I get more letters per day on the Indian problems than anything else. There are a lot of people concerned about the Federal Government's conduct of Indian affairs. And if it isn't well conducted you are going to have some difficulties that you never dreamed possible. What proportion of the total need will this million dollars meet?

SANITATION FACILITY REQUIREMENTS FOR CALIFORNIA

Mr. GREEN. The million dollars will still leave approximately 12 projects.

Mrs. HANSEN. What will the total cost be?

Mr. GREEN. $1.418 million dollars is our current estimate.

Mrs. HANSEN. So, it will take almost $3 million to meet the needs in California?

Mr. GREEN. That is correct.

SANITATION FACILITIES REQUESTS FOR SPECIAL PROJECTS

Mrs. HANSEN. $450,000 is requested for special projects. What does this involve?

Mr. GREEN. This particular item, Madam Chairman, is for handling special facilities in connection with Indian ceremonial areas, tribal buildings used for community gatherings and for investigation and planning funds for urgently needed construction projects for which additional technical information is necessary before a final solution can be recommended. Then in addition, we need to have a small amount of money at hand to take care of real emergencies such as fire and pumps burned out and things like that which may be beyond the capability of the tribe to take care of themselves.

COMPTROLLER GENERAL'S REPORT

Mrs. HANSEN. At this point in the record, I will insert a digest of the Comptroller General's report B–164031(2) dated April 10, 1970.

(The digest follows:)

NEED FOR IMPROVED PRACTICES FOR OBTAINING EQUITABLE CONTRIBUTIONS TOWARD THE COST OF CONSTRUCTING SANITATION FACILITIES FOR INDIANS

WHY THE REVIEW WAS MADE

Under a law enacted in 1959, the Indian Health Service, Health Services and Mental Health Administration, Department of Health, Education, and Welfare (HEW), administers a program for the construction of sanitation facilities for Indians. The facilities include water supplies, sewage and waste disposal facilities, and other improvements for Indian homes and communities.

Through fiscal year 1968, Federal funds totaling about $47 million had been expended for the construction of sanitation facilities expected to benefit about 44,000 of the 69,000 potential beneficiary Indian families.

The legislative history of the authorizing law indicates, and the Indian Health Service's guidelines provide, that the construction of sanitation facilities for Indians is to be a cooperative effort among the Government, Indian tribes, and non-Indian beneficiaries of the facilities. The General Accounting Office (GAO), noting that little or no cash and labor contributions had been obtained from some Indian tribes or from non-Indian beneficiaries—families, business, or organizations—examined into the Indian Health Service's practices and procedures for obtaining contributions.

FINDINGS AND CONCLUSIONS

GAO's review of selected sanitation facility construction projects administered by four Indian Health Service Area Offices in the Western United States indicated that the Indian Health Service needed to improve its practices for obtaining cash and labor contributions from Indian and non-Indian beneficiaries of the facilities provided. The review showed that—

Cash contributions by Indian tribes either were not obtained or were obtained in amounts minor in relation to the tribes' apparent ability to pay. (See p. 13.) For example, six projects were constructed for one tribal group, for which the Indian Health Service paid $425,000. The tribe—whose average annual income was about $1.7 million during the 6-year construction period—contributed $41,500. GAO believes that equitable contributions toward the cost of constructing sanitation facilities from those tribes that have the ability to contribute would enable the Indian Health Service to provide a larger number of Indians with needed sanitation facilities at an earlier date.

The Indian Health Service generally did not collaborate with the Bureau of Indian Affairs, Department of the Interior, in its programing of funds awarded to Indian tribes by the Indian Claims Commission. For example, one tribe received an award of about $4.3 million; but none of the funds were made available for the construction of sanitation facilities because the funds had been programed for other purposes. (See p. 17.)

Frequently no arrangements were made for obtaining cash contributions from non-Indian beneficiaries of sanitation facilities constructed. For example, a water supply system was constructed at a cost of about $90,000. The non-Indian beneficiaries of the system did not contribute toward the construction cost although they used nearly one-half of the water supplied. GAO believes that these beneficiariees should have been requested to contribute toward the cost of the water system. (See p. 20.)

Some tribes were not required to comply with their commitments to contribute labor to construction projects. The necessary labor to accomplish the work was performed either under Indian Health Service contracts with the tribes or by work crews employed by the Indian Health Service. One of the program's basic objectives was to encourage the Indians to participate in the construction of sanitation facilities so that they might acquire the training necessary to accept responsibility for the future operation and maintenance of the facilities. (See p. 23.)

The Area Offices did not accumulate and systematically report accurate and complete data pertaining to contributions of cash, labor, material, and equipment. The Indian Health Service's annual justifications to the Congress for construction appropriations stated that contributions from Indians amounted to about one-third of the total cost of the sanitation facilities constructed. However, the stated value of Indian contributions was not adequately supported and appeared to be overstated by about $5 million. (See p. 34.)

RECOMMENDATIONS OR SUGGESTIONS

The Secretary of Health, Education, and Welfare should:

Emphasize, to officials responsible for administering the Indian sanitation facility construction program, the intended cooperative nature of the program which requires them to seek equitable contributions from Indian and non-Indian beneficiaries of the sanitation facilities.

Establish a joint policy with the Secretary of the Interior providing for cooperation between the Indian Health Service and the Bureau of Indian Affairs in assisting Indian tribes in the programing of funds awarded in settlement of Indian tribal claims, as well as tribal funds from other sources, so that some of these funds can be made available for constructing sanitation facilities.

Require the Indian Health Service to maintain, in its area offices, adequate records of project contributions, in cash and in kind, and other accounts receivable to improve management control and facilitate reliable reporting of program accomplishments.

AGENCY ACTION AND UNRESOLVED ISSUES

Both HEW and the Department of the Interior have agreed to cooperate in programing tribal funds for constructing sanitation facilities. However, HEW did not comment on GAO's recommendation that the Secretary empha-

size, to officials responsible for administering the sanitation facility construction program, the intended cooperative nature of the program. GAO believes that this matter requires further attention. (See p. 33.)

To improve management control over contributions, HEW has established a pilot system in one area office, which centralizes the records of contributions. The system is being evaluated for possible application to the other area offices.

MATTERS FOR CONSIDERATION BY THE CONGRESS

GAO is bringing its findings to the attention of the Congress in view of the interest expressed by committees and Members of the Congress in programs for the improvement of health and economic conditions of the Indians.

Mrs. HANSEN. Please provide for the record, your comments on the findings of this report.

Mr. CHADWICK. We will provide it.

(The information follows:)

COMPTROLLER GENERAL'S REPORT NO. B–164031(2)

The following comments are offered regarding the findings of the report to the Congress by the Comptroller General, entitled "Need for Improved Practices for Obtaining Equitable Contributions Toward the Cost of Constructing Sanitation Facilities for Indians", report No. B–164031(2) dated April 10, 1970.

Although we do not agree with all of the interpretation and conclusions contained in the report, we believe that the program review has been of significant value to the Health Services and Mental Health Administration, and to the Indian Health Service in reevaluating administrative and management practices.

In general the emphasis of the report is that inadequate contributions are being requested and received in carrying out projects involved in this construction activity. It must be pointed out that Public Law 86–121 authorized arrangements and agreements regarding contributions toward construction of facilities, and responsibilities for their maintenance, which are equitable and will best assure the future maintenance of facilities in an effective and operating condition. We feel that the practices used in carrying out this construction activity are in agreement with the legislative authorization. To insist upon contributions which would work an unusual hardship on the tribe or jeopardize the completion and future operation of the needed facilities would be contrary to the long term success of our efforts.

Three specific recommendations are listed on pages 2 and 3 of the report.

FIRST RECOMMENDATION

The Secretary of Health, Education, and Welfare should emphasize, to officials responsible for administering the Indian sanitation facility construction program, the intended cooperative nature of the program which requires them to seek equitable contributions from Indian and non-Indian beneficaries of the sanitation facilities.

COMMENT

This recommendation was not included in the draft report previously reviewed and commented upon by the Department of Health, Education, and Welfare in April 1969. Following a thorough review of the report and discussion of the findings with officials of the Indian Health Service full consideration will be given to the action recommended.

SECOND RECOMMENDATION

The Secretary of Health, Education, and Welfare should establish a joint policy with the Secretary of the Interior providing for cooperation between the Indian Health Service and the Bureau of Indian Affairs in assisting Indian tribes in the programing of funds awarded in settlement of Indian tribal claims, as well as tribal funds from other sources, so that some of these funds can be made available for constructing sanitation facilities.

COMMENT

Shortly after the Sanitation Facilities Construction Act was passed in 1959, meetings were held with Bureau of Indian Affairs headquarters officials and

agreements were reached on matters of mutual concern. Among the guidelines issued to implement the agreements reached was the following:

PHS and BIA will consult on the extent of proposed financial contributions by Indians to a specific project and encourage such financial, labor, material, and service contributions as are practicable.

On the basis of the recommendation made by the General Accounting Office on this point, officials of the Indian Health Service have initiated discussion with the Bureau of Indian Affairs toward assuring that the aforesaid policy instruction is being carried out by field personnel of our respective agencies.

THIRD RECOMMENDATION

The Secretary of Health, Education, and Welfare should require the Indian Health Service to maintain, in its area offices, adequate records of project contributions, in cash and in kind and other accounts receivable to improve management control and facilitate reliable reporting of program accomplishments.

COMMENT

To imrove management control over contributions, the Indian Health Service has established a pilot contribution accounting system in one of its eight area offices. Upon evaluation of the experience gained from the operation of this system, a standard system will be developed for use in all areas.

Mrs. HANSEN. Thank you very much.

COMMENDATION OF WITNESSES

Dr. Johnson, you have made an excellent presentation, and we understand your problems and your needs.

Dr. JOHNSON. Thank you.

Mrs. HANSEN. Mr. Secretary, we are glad to have you here today. I am sure you realize that the funds in this budget determine whether thousands of Indian people live or die.

Mr. CARDWELL. Thank you.

Dr. JOHNSON. One of the things that gives our program, particularly our field staff, the ability to do the things you saw, working the hours they do, and the dedication they have is because of their knowledge of this committee and to hear somebody cares. We appreciate it.

Mrs. HANSEN. We do care. This is probably one of the greatest unsolved problems in America. The tragic part of it is that it has been with the United States ever since the first day the early colonists set foot on this land. It seems to us that there are better answers needed in the 1970's than have been found. But these solutions require adequate funding. This committee cares, but until the entire country cares enough to provide the kind of funds that are needed you are not going to better the situation very much. I do want to express my appreciation to everybody here today.

Mr. Obey?

Mr. OBEY. I have nothing further to say. I think you have said it quite well, Madam Chairman.

Mrs. HANSEN. Mr. Reifel?

Mr. REIFEL. Thank you very much.

Secretary Cardwell, I want to express my appreciation to you and your evident interest in trying to ease the situation for Dr. Johnson in the case of Indian health. I am sure you will carry the message back to the Secretary, who is a man of compassion.

Mr. CARDWELL. I will. Thank you.

Mr. REIFEL. And we will get some help. I want to commend Dr. Johnson. I was in the Indian Bureau when the Division of Indian Services was a branch of the Bureau of Indian Affairs. I don't know whether you were there then or not.

Dr. JOHNSON. One day.

Mr. REIFEL. We had at that time a very fine and able gentleman, Dr. Foard, as you recall, who headed the program and assisted the transition over to the Division of Indian Health Services in HEW and U.S. Public Health Service. Then he was followed by Dr. Shaw, an outstanding person, then Dr. Wagner and then Dr. Rabeau, each of whom have made their valuable contributions which makes it possible for you to present Dr. Johnson before this committee and for the record this record shown in the index of the chart exhibits and what the progress has been on the Indian's health these last 15 years. And you have appeared today, Dr. Johnson, in the great tradition of those outstanding men and I think you have presented with the help of Mr. Chadwick and Mr. Green and Mr. Lewis an excellent statement and have helped develop an excellent record here. I want to commend all of you as Mrs. Hansen has done.

Dr. JOHNSON. Thank you, Mr. Reifel.

Mrs. HANSEN. May I urge, Mr. Secretary, that you, Dr. Johnson, and Mr. Chadwick, somehow get the message to the people in the Bureau of the Budget that the funds for construction of sanitation facilities are critical, because by their very nature they mean the lives of many people. You can imagine how you would feel and how this committee would feel if continued pollution caused several cases of typhoid, or some other kind of a preventable disease. You can't push aside the needs of Indian health and Indian schools and the lives and welfare of people in Alaska to say there are more important things than whether they live or die.

Thank you all very much for your courtesy.

Mr. CARDWELL. Thank you.

TUESDAY, APRIL 14, 1970.

PUBLIC LAND LAW REVIEW COMMISSION

WITNESSES

HON. WAYNE N. ASPINALL, CHAIRMAN
MILTON A. PEARL, DIRECTOR

Mrs. HANSEN. The committee will come to order.

This morning we have the Public Land Law Review Commission. It is the committee's great pleasure and privilege to welcome the principal witness, the Chairman of the Public Land Law Review Commission, the very distinguished Chairman of the House Interior and Insular Affairs Committee, Congressman Wayne Aspinall of Colorado. I had the good fortune to serve with Mr. Aspinall on the authorizing committee prior to coming on this committee.

Mr. Chairman.

GENERAL STATEMENT

Mr. ASPINALL. Madam Chairman and members of the committee, it is a pleasure to be with this committee once again and to acknowl-

edge the ability and work of this particular subcommittee on appropriations. I would ask unanimous consent, Madam Chairman, to have my statement made a part of the record and I will summarize it.

Mrs. HANSEN. It is so ordered.

(The statement follows:)

Madam Chairman, we come here this morning with a great deal of satisfaction. Despite the skepticism that you may have heard from others, we, Director Pearl and I, have never waivered from our commitment to have the Commission's work completed on a schedule that would permit submission of the report to the President and the Congress not later than June 30 of this year, as required by law. Accordingly, because the Commission will cease to exist during fiscal year 1971, this is my last appearance before this committee in my capacity as Chairman of the Public Land Law Review Commission.

In submitting our budgetary request for the next fiscal year, we are able to say to you: In addition to completing the work assigned to the Commission on time, we are going to do it well within the budgetary limits set by our organic act. After the Commission's report to the Congress and the President is delivered in the latter part of June, we will wind up the business of the Commission so that, in the words of the law establishing it, the Commission "shall cease to exist six months after submission of (our) report, or on December 31, 1970, whichever is earlier."

There has been appropriated $6,933,000 of the total authorization of $7,390,000. We are requesting, to wind up our work, the sum of $171,000, leaving $286,000 of the authorization untouched. There is satisfaction, not only in getting our work done on time, but in being able to accomplish it without asking for, let alone using, every dollar authorized.

OPERATING PROCEDURES

Before presenting our fiscal year 1971 plans, I should like to review very briefly, the events of the present as they relate to the Public Land Law Review Commission. When we appeared before you last, we were about to embark upon our busiest year.

During the last 12 months, the staff has completed the research program, consisting of 33 major studies, some of which were performed under contract, some by consultants, and some by the staff. These studies have been reviewed by members of the Advisory Council and Governors' representatives whose comments were then considered by the Commission along with the manuscripts and other data. Study reports have been revised and additional information obtained after these reviews.

Generally, the manuscripts have been of good quality and have contributed much data not readily available otherwise. Some of the data had never been collected before. We submit, Madam Chairman, that the comprehensive nature of the research program designed and carried out by or under the direction of the staff, will serve as a valuable source of information for many years for all who are interested in the natural resources of the Nation.

In February, the last meeting of the Advisory Council with the Governors' representatives in attendance was held. The Commission, in addition, has been holding a series of executive sessions which are continuing as we wind up our work and complete our recommendations. Since the Commission started operating in July 1965, we have had 37 meetings, most covering several days each, and the Advisory Council and Governors' representatives have participated in 23 of them. The last meetings of the Commission will be held here in the Capitol this coming Friday and Saturday and, if necessary to complete our work, Sunday.

REMAINDER OF FISCAL YEAR 1970

During the remainder of the current fiscal year, we will, as indicated, complete the final report and later this month send it to the printer so that copies will be available for distribution simultaneously with the submittal of the report to the President and the Congress. At the same time, we are continuing to make corrections and revisions in contractor and staff manuscripts so that they can be published and made available to the public by the Clearinghouse for Federal Scientific and Technical Information of the Department of Commerce.

Madam Chairman, we have with us a report showing the status of the research program that was conducted by or under the supervision of the staff and indicating which reports are available for purchase at this time.

It has always been our view that part of our task included informing the American public of the significance of the public lands on the Nation. We had, accordingly, planned to conduct a series of conferences under the supervision of the staff in various parts of the country with people who might be identified as opinion makers. Our staff was, however, never large enough to be able to undertake this and also complete the work necessary to provide the legal and factual foundation necessary for the Commission.

At a meeting of the Commission on March 6, 1970, a plan was approved to hold five meetings, using funds that were carried over to this fiscal year from fiscal year 1969. We would enter into contracts with universities and nonprofit organizations that would sponsor the meetings and be responsible for all of the detail work.

While the contracts would be entered into between now and the end of this fiscal year, the conferences would not be held until after June 30. It is proposed to have one conference for leaders of the news media, and four regional conferences for other opinion makers, representing groups not represented on our advisory council, to be held in the East, Midwest, Rocky Mountain West, and Far West.

Madam Chairman, we have sought to conserve funds wherever possible. The Director has been particularly diligent in employing only qualified members of the staff and consultants and then retaining them only so long as they are needed. Because of the scarcity of technically qualified people, the staff never did get quite to the size that had been envisioned as being necessary; and in recent months, it has been gradually reduced. Accordingly, we anticipate that we will have approximately $150,000 of savings effected this fiscal year that will be available for the program of conferences for opinion makers.

FISCAL YEAR 1971

After June 30, we will have at its peak a maximum of a 12-"man" staff—the Director, Assistant Director, and their assistants and secretarial force who will be needed to handle corespondence, retirement of files, processing of personnel actions, and closing out contracts. We are also requesting sufficient funds to finance a Commission meeting after submission of the report should one be necessary.

Most of the staff will be phased out shortly after the beginning of fiscal year 1971 and the balance sometime prior to the end of the calendar year.

One task that will require particular attention will be the settlement of contractor claims if we are unable to do so during fiscal year 1970. Seven contractors had filed claims approximating in the aggregate of $247,000. One claim has been settled and the remaining six claims total $238,332. Parenthetically we call your attention, Madam Chairman, to the fact that in our budget justification statement submitted earlier, we had estimated contractors' claims as aggregating $231,000 which was increased when the formal claims had all been submitted. We are not in a position at this time to say how much of these claims are valid. Accordingly, we cannot say whether contingency funds carried over from previous appropriations, and not included in the $150,000 referred to previously as being available for our conferences, will be adequate for the disposition of such claims.

We have always been appreciative of the understanding of both the chairman and the members of this subcommittee towards the work of the Public Land Law Review Commission. Obviously, without your cooperation our task would have been more difficult and maybe impossible. As long as I am a member of the House of Representatives, and more so for the time that I may continue to serve as Chairman of the Interior Committee, it will be my objective to work in close harmony with this subcommittee. But, Madam Chairman, the sense of nostalgia that touches my final appearance before you as Chairman of the Commission cannot be erased by the knowledge that we will be working together in other endeavors.

Milton Pearl, Commission Director, accompanies me this morning, and we shall be pleased to answer any questions that members of the committee may have.

Mrs. HANSEN. At this point in the record please insert the justifications.

(The justifications follow:)

PUBLIC LAND LAW REVIEW COMMISSION

SALARIES AND EXPENSES

For necessary expenses of the Public Land Law Review Commission, established by Public Law 88-606, approved September 19, 1964, including services as authorized by 5 U.S.C. 3109, and not to exceed $750 for official reception and representation expenses, $171,000 [$922,000] to remain available until expended.

(Department of the Interior and Related Agencies Appropriation Act, 1970)

PUBLIC LAND LAW REVIEW COMMISSION

Salaries and Expenses

FY 1969	$ 944,000
FY 1970	922,000
FY 1971	171,000

Program and Performance

The Public Land Law Review Commission, created by Public Law 88-606 (78 Stat. 982), will report as required by statute to the President and the Congress by June 30, 1970, recommending such modification in law, regulation, policy, and practice as will, in the judgment of the Commission, assure that the public lands of the United States shall be retained and managed or disposed of all in a manner to provide the maximum benefit for the general public. Thereafter, on or before December 31, 1970, the Commission will cease to exist.

In order to meet this schedule, the Commission during the present (1970) fiscal year is (1) completing its research program, (2) concluding its meetings with the Advisory Council and the Representatives of the 50 Governors, (3) meeting in executive session to develop positions upon which its recommendations will be based, and (4) preparing the final report.

A schedule has been established to insure that the Commission's deliberations are concluded so that its report will be completed and delivered to the printer in time for copies to be available for distribution at the time of submission to the President and the Congress in June.

Since submission of our last budget request to the subcommittee, during FY 1969 two study contracts were entered into as follows:

Study	Contractor	Amount
Federal Public Land Laws and Policies Relating to Use and Occupancy	Daniel, Mann, Johnson, and Mendenhall Los Angeles, California	$116,000
Trespass and Unauthorized Use of the Public Lands	Ireland, Stapleton, Pryor & Holmes Denver, Colorado	27,232

Fiscal Year 1970 Program

Inhouse studies and analyses were accomplished with the assistance, in many instances, of consultant help as follows:

User Fees and Charges for Public Land and Resources
Organization, Administration and Budgeting Policy
Inventory Information on Public Lands
Adjustment of Use Rights
Criteria to Help Judge Facts to Determine Maximum Benefit for the General Public
State Land Policies

In FY 1970 contracts have been entered into as follows:

Study	Contractor	Amount
Legal and Administrative Framework for Environmental Management of the Public Lands	Ira Michael Heyman Robert A. Twiss Berkeley, California	$20,000
Environmental Problems on the Public Land	Rocky Mountain Center on Environment (ROMCO) Denver, Colorado	80,000
General System for Environmental Resource Analysis	Steinitz Rogers Assoc. Inc. Cambridge, Mass.	11,400
Environmental Quality and the Public Lands	Landscapes, Inc. Madison, Wisconsin	15,800
Assembly and Analysis of Data for Demands on Public Lands	Robert S. Manthy Seattle, Washington	8,000

Study	Contractor	Amount
Use of Public Lands for New Cities	Urban America, Inc. Washington, D. C.	12,540
New Cities and the Public Lands	Urban Development Analysis, San Ramon, California	4,500
Land Acquisitions and Exchanges	Charles F. Wheatley,Jr. Washington, D. C.	33,510
Appraisal Techniques and Procedures Utilized in Connection with Actions Related to Federal Public Lands	Kronick, Moskovitz, Tiedemann & Girard Sacramento, California	56,230
Disposal Techniques and Procedures	Raleigh Barlowe East Lansing, Mich.	5,200
	Total contracted FY 1970	$247,180

Prior Years

The research program was initiated towards the end of fiscal year 1966 when the Commission retained a consultant to compile a definitive history of public land policy development. During each succeeding fiscal year additional elements of the program were programmed either under contract or inhouse. Several of the subjects were subdivided and more than one contractor utilized.

The studies and analyses completed to date, in addition to those heretofore referred to, together with their respective costs are as follows:

Study	Contractor	Amount
History of Public Land Law Development	Professor Paul Gates and Professor R. W. Swenson	$97,344 1/

1/ The individuals were obtained as consultants. The amount shown covers all cost for preparation of the History but does not include $32,914 for publication by the Government Printing Office. The book is on sale by the Superintendent of Documents.

Study	Contractor	Amount
Digest of Public Land Laws	Shepard's Citations, Inc.	28,989 2/
Projections of the Consumption of Commodities Producible on the Public Lands of the United States 1980-2000	Robert R. Nathan Associates Washington, D. C.	74,980
Withdrawals and Reservations of Public Domain Lands	Charles F. Wheatley, Jr. Washington, D. C.	61,446
Outer Continental Shelf Lands of the United States	Nossaman, Waters, Scott : Krueger & Riordan Los Angeles, California	68,950
Administrative Procedures and the Public Lands	University of Virginia	69,875
Fish and Wildlife Resources on the Public Lands	Colorado State University	77,719
Federal Land Laws and Policies in Alaska	University of Wisconsin	48,529 3/
Development, Management, and Use of Water Resources on the Public Lands	Charles F. Wheatley, Jr. Washington, D. C. Charles E. Corker University of Washington Thomas M. Stetson San Francisco, California Daniel J. Reed Los Angeles, California	97,640

2/ Does not include $12,662 which was the cost of having the volume printed by the Government Printing Office. The book is on sale by the Superintendent of Documents.

3/ Jointly financed by Public Land Law Review Commission - $48,529, and Federal Field Committee for Development Planning in Alaska - $200,000.

Study	Contractor	Amount
Impact of Public Lands on Selected Regional Economies	Consulting Services Corporation, Seattle, Washington	87,896
Federal Public Land Laws and Policies Relating to Intensive Agriculture	South Dakota State University (Resources portion)	93,562
	Kronick, Moskovitz, Tiedemann & Girard Sacramento, California (Legal portion)	49,000
Public Land Timber Policy	George Banzhaf & Company Milwaukee, Wisconsin	199,159
Forage Resource of the Public Lands	University of Idaho	198,150
Regional and Local Land Use Planning	Herman D. Ruth + Associates Berkeley, California	130,625
Federal Legislative Jurisdiction	Land and Natural Resources Division, U.S. Department of Justice	- - - -
Land Grants to States	Inhouse study	- - - -
Nonfuel Minerals	University of Arizona (Resources portion)	156,950
	Twitty, Sievwright & Mills Phoenix, Arizona (Legal portion)	96,325
Energy Fuel Minerals	Abt Associates, Inc. Cambridge, Massachusetts (Resources portion)	139,398

Legal portions as follows:

Federal Competitive and Non-competitive Oil and Gas Leasing Systems	Rocky Mountain Mineral Law Foundation Boulder, Colorado	64,096
Oil Shale on Public Lands	University of Denver School of Law	38,000
Coal Resources on Public Lands	University of Utah	31,740
Geothermal Steam Resources of the Public Lands	Inhouse study	- - - -
Outdoor Recreation Use of the Public Lands	Herman D. Ruth + Associates	132,000
Revenue Sharing and Payments in Lieu of Taxes	EBS Management Consultants, Inc. Washington, D. C.	316,403
	Total Cost of Program Prior to FY 1970	2,502,008 4/
	Total FY 1970 Contracts to date	247,180
	Total approximate cost of research contract program to date	2,749,188 5/

Some manuscripts previously programmed to be accomplished inhouse were contracted when it was impossible to obtain sufficient experienced technicians on the full-time staff.

4/ Includes $116,000 for Use and Occupancy and $27,232 for Trespass and Unauthorized Use.

5/ This amount is "approximate" because (a) some of the studies that have been submitted have not been accepted and final payment agreed upon, (b) additional work may be necessary in connection with some of the contracts, (c) at least six of the contractors have asserted claims for payment above the contract price for work alleged to be beyond the scope of the contract.

It is proposed to have all manuscripts published and made available for sale to the public. As indicated above, the History and the Digest have been published by the Government Printing Office and are on sale through the Superintendent of Documents. It is planned to have all other manuscripts published by the Clearinghouse for Federal Scientific and Technical Information of the Department of Commerce at no expense to the Commission. The Commission, however, plans to purchase 150 copies of each of these manuscripts for its own use.

In addition to work on the research program detailed above, the staff, augmented as necessary by consultants, continued the supervision and analysis of contract studies and the preparation of materials for use as the Commission undertook the development of positions.

The regular meetings of the Commission and of the Commission with its Advisory Council and the Governors' Representatives referred to above for the purpose of considering specific subject matter were initiated in FY 1969, were accelerated during FY 1970, and now have been completed.

While the Commission's Organic Act requires that the Advisory Council shall meet at least twice a year, the Commission found it necessary, in order to cover the subject matter involved, to have six meetings with its Advisory Council during FY 1970. In addition, the Commission has met in executive session in conjunction with each meeting of the Advisory Council as well as on separate occasions as necessary.

It was always considered to be one of the Commission's functions to acquaint people of the United States with the significance of the public lands and, therefore, the potential significance of the Commission's recommendations. It was planned to do this through staff meetings in various parts of the country, but the demands on the small staff made it impossible.

Accordingly, a program is being studied to arrange by contract for assistance in holding regional conferences with individuals who themselves are, or represent groups that are, opinion-makers throughout the country. While no money was specifically budgeted for this purpose, funds are available by reason of savings in other aspects of the program. Before

entering into any contracts for this purpose, the Bureau of the Budget and the respective Committees on Appropriations will be fully informed.

Personnel

Early in FY 1970 some of the Commission staff, who had completed their tasks or whose services were no longer required on a full-time basis, were separated from regular service. During the remainder of FY 1970 a phase-out program is being planned so that by the end of the fiscal year the majority of the staff will have been separated.

Inasmuch as it was necessary during FY 1970 to absorb pay increases that had not been budgeted and also to retain consultants to absorb the workload that had been anticipated to be fulfilled by some of the regular members of the staff, it is not anticipated that there will be any substantial savings in personnel funds from those budgeted and appropriated for FY 1970.

Program for Fiscal Year 1971

The Public Land Law Review Commission will require funds for a maximum of one-half of fiscal year 1971, during which time its entire work effort will be retirement of records, payment for work contracted in previous years, settlement of contract claims, and other "phase out work" such as inventory and disposition of equipment, furniture, and other property.

In accordance with PL 88-606, which established the Public Land Law Review Commission, it

> shall cease to exist six months after submission of (its) report or on December 31, 1970, whichever is earlier. All records and papers of the Commission shall thereupon be delivered to the Administrator of General Services for deposit in the Archives of the United States.

The budget estimate is based on (1) a maximum staff of 12, which will be phased out during the six month period involved; (2) one meeting of the Commission in the event it is deemed desirable in connection with the close out of Commission activities after submission of the final report; and (3) reproduction or purchase of contract manuscripts that will not have been available during fiscal 1970. Contingency funds, included in previous appropriations, remain available for additional compensation to be paid on any of the contracts.

However, it is not known whether such contingency funds will be adequate in view of the fact that, in connection with seven contracts, contractors have submitted claims for additional compensation for $231,000.

Summary Recapitulation

The Commission's Organic Act authorizes appropriations of $7.39 million for all of its work. Appropriations have been made as follows:

FY 1965	$ 350,000
FY 1966	750,000
FY 1967	907,000
FY 1968	860,000
FY 1968 Supplemental	2,200,000
FY 1969	944,000
FY 1970	922,000
Total appropriated	$6,933,000
Total authorized	7,390,000
Total appropriated	6,933,000
Authorized but unappropriated	457,000
FY 1971 request	171,000
	$286,000

STANDARD FORM 300
July 1964, Bureau of the Budget Circular No. A-11, Revised.
300-101

PUBLIC LAND LAW REVIEW COMMISSION
SALARIES AND EXPENSES

Program and Financing (in thousands of dollars)

Identification code 33-12-1300-0-1-402	1969 actual	1970 estimate	1971 estimate
Program by activities:			
Study of existing land laws and procedures (program costs, funded) 1/	2,287	2,549	171
Change in selected resources 2/	-875	-839	...
10 Total obligations	1,412	1,710	171
Financing:			
21 Unobligated balance available, start of year	-1,256	-788	...
24 Unobligated balance available, end of year	788	...	...
25 Unobligated balance lapsing	...	.....	...
40 Budget authority (appropriation)	944	922	171
Relation of obligations to outlays:			
71 Obligations incurred, net	1,412	1,710	171
72 Obligated balance, start of year	1,584	726	336
74 Obligated balance, end of year	-726	-336	...
90 Outlays	2,271	2,100	507

1/ Includes capital outlay as follows: 1969, $2 thousand; 1970, $1 thousand; 1971, $-0-.

2/ Selected resources as of June 30 are as follows: Unpaid undelivered orders, 1968, $1,714 thousand; 1969, $839 thousand; 1970, $-0-; 1971, $-0-.

STANDARD FORM 300
July 1961, Bureau of the Budget
Circular No. A-11, Revised.
300-101

PUBLIC LAND LAW REVIEW COMMISSION
SALARIES AND EXPENSES
PERSONNEL SUMMARY

Identification code	FY 69 actual	FY 70 estimate	FY 71 estimate
Total number of permanent positions	54	54	0
Full-time equivalent of other positions	2	10	0
Average number of all employees	48	54	6
Average GS grade	11.6	11.6	...
Average GS salary	$14,977	$16,613	...

STANDARD FORM 304
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
304-101

PUBLIC LAND LAW REVIEW COMMISSION
SALARIES AND EXPENSES

OBJECT CLASSIFICATION (in thousands of dollars)

Identification code 33-12-1300-0-1-402		19 69 actual	1970 estimate	1971 estimate
	Personnel compensation:			
11.1	Permanent positions	716	744	104
11.3	Positions other than permanent	28	174	2
11.5	Other personnel compensation	2	3	...
	Total personnel compensation	746	921	106
12.0	Personnel benefits	47	74	9
13.0	Benefits for former personnel			
21.0	Travel and transportation of persons	74	119	18
22.0	Transportation of things	2	3	1
23.0	Rent, communications, and utilities	24	30	9
24.0	Printing and reproduction	63	200	10
25.1	Other services	449	354	16
25.2	Services of other agencies			
26.0	Supplies and materials	7	8	2
31.0	Equipment	...	1	...
32.0	Lands and structures			
33.0	Investments and loans			
41.0	Grants, subsidies, and contributions			
42.0	Insurance claims and indemnities			
43.0	Interest and dividends			
44.0	Refunds			
99.0	Total obligations	1,412	1,710	171

ANALYSIS OF BUDGET AUTHORITY AND OUTLAYS

(in thousands of dollars)

PUBLIC LAND LAW REVIEW COMMISSION

Account and functional code	1969 actual	1970 estimate	1971 estimate	Increase or Decrease (-) Explanation
FEDERAL FUNDS				
General and special funds:				
Salaries and expenses--402 NOA	944	922	171	-751
Exp	2,271	2,300	307	-1,993

STANDARD FORM 306
July 1965, Bureau of the Budget
Circular No. A-11, Revised.
306-103

PUBLIC LAND LAW REVIEW
COMMISSION
SALARIES AND EXPENSES

DETAIL OF PERMANENT POSITIONS

	1969 actual	1970 estimate	1971 estimate
HIGHER LEVEL POSITIONS			
Special positions at rates equal to or in excess of $33,495:			
Staff director, $36,000	1	1	...
GS-18, $33,495:			
General Counsel	1	1	...
GS-17, $28,976 to $32,840:			
Assistant Director.	...	1	...
Assistant Director Program.	1	...	...
Chief, legal group.	...	1	...
Chief, resources and evaluation group	1	1	...
GS-16, $25,044 to $31,724:			
Assistant chief, resources and evaluation group	2	2	...
Assistant Director, administration...	1	...	...
Assistant to General Counsel	...	1	...
Chief, legal group	1	...	...
Research Specialist	1	1	...

Standard Form 300
July 1968, Bureau of the Budget
Circular No. A-11, Revised.
306-103

PUBLIC LAND LAW REVIEW
COMMISSION
SALARIES AND EXPENSES

DETAIL OF PERMANENT POSITIONS

	1969 actual	1970 estimate	1971 estimate
GRADES AND RANGES			
Special positions at rates equal to or in excess of $33,495	1	1	...
GS-18, $33495	1	1	...
GS-17, $28,976 to $32,840	2	3	...
GS-16, $25,044 to $31,724	5	4	...
GS-15, $21,589 to $28,069	6	4	...
GS-14, $18,531 to $24,093	8	7	...
GS-13, $15,812 to $20,555	5	5	...
GS-12, $13,389 to $17,403	5	5	...
GS-11, $11,233 to $14,599	2	2	...
GS-10, $10,252 to $13,330	2	2	...
GS-9, $9,320 to $12,119	4	5	...
GS-8, $8,449 to $10,987	2	2	...
GS-7, $7,639 to $9,934	4	6	...
GS-6, $6,882 to $8,943	4	4	...
GS-5, $6,176 to $8,030	1	1	...
GS-4, $5,522 to $7,178	...	2	...
GS-3, $4,917 to $6,393	2	...	...
Total permanent positions	54	54	...
Unfilled positions, June 30	-8	-42	
Total permanent employment, end of year	46	12	...

EXHIBIT 22E

PUBLIC LAND LAW REVIEW COMMISSION

NUMBERS OF CIVILIAN PERSONNEL

	Numbers of employees at end of year					
	1969		1970		1971	
	Full-time in permanent positions	Total	Full-time in permanent positions	Total	Full-time in permanent positions	Total
Salaries and expenses . .	46	62	12	12	...	...

Mrs. HANSEN. Mr. Chairman.

Mr. ASPINALL. Thank you very much.

We are glad to be here because we do have a feeling of satisfaction in the work that we have done, and there had been those who stated that we would not get our work done on time. But Director Pearl and I and other people on the staff and Commission have never waivered in our commitment to this committee and the Congress that we would complete our work as we had planned. Our report will be delivered to the President of the United States during the last week of June and will be filed with the President of the Senate and the Speaker of the House in accordance with the provisions of the law.

Madam Chairman, this, of course, requires us under the provisions of the law to continue the work of the Commission; that is, gathering up the reports and taking care of the tail ends and so forth.

This will be done either by the 31st of December in accordance with the provisions of the law, or earlier if we can make it. This means that this is my last appearance before the committee as Chairman of the Public Land Law Review Commission. We have, as this committee understands, an authorization of $7,390,000. There has been appropriated $6,933,000. We are requesting, as our justification shows, $171,000, which will leave a balance of $286,000 of authorized but unappropriated funds.

Mrs. HANSEN. This does not happen very often.

Mr. ASPINALL. No, this does not happen very often. All I can say is that this is largely due to the efforts of Mr. Pearl, the director of the staff, who has seen to it that he has the best people possible and he has used them efficiently and never any longer than necessary. We have never been able to obtain the use of the number of people that were authorized as far as the justification is concerned because they either were not available at the time or we did not have the ability to use them.

We have ready for publishing 33 major studies that have been done at the request of the staff and the Commission. Some are already published. Others are not published as yet. These are backup material to the recommendations that we will make.

Madam Chairman and members of the committee, it may interest you to know that we will have perhaps 150 to 160 recommendations in our report. Our report will be about 300 pages. It has to be delivered to the printer by not later than next Thursday in order for us to have it available to all interested at the same time we deliver it to the President and the Congress in accordance with the provisions of the law. So this means that our last meeting of the Commission will be this weekend.

We have things pretty well in hand. All the studies have been before the Commission. We have one subject where our review is not yet fully completed. For the rest, of course, we will be more or less reviewing the writing and considering gaps. It might interest this committee to know that we have employed Mr. Alvin Josephy, one of the better editorial writers on conservation matters, as an editorial consultant to the staff.

We have had two of our studies printed by the Government Printing Office, and they have been available for some time. They are the History of Public Land Law Development and the Digest of the Public Land Laws. The rest of the subjects are being printed for the public by the Clearinghouse for Federal Scientific and Technical Information of the Department of Commerce.

Madam Chairman, with your permission, I would offer for inclusion in the record at this point in my statement a memorandum from the Director giving the Commission policy on access to and publication of manuscripts as well as the present status of publication so you will know what are available now.

Mrs. HANSEN. Please do.

(The information follows:)

PUBLIC LAND LAW REVIEW COMMISSION, MARCH 25, 1970

MEMORANDUM

Subject: Reports for or by the Public Land Law Review Commission.
From: Milton A. Pearl, Director.

The Public Land Law Review Commission, established by Public Law 88–606, charged the staff with the responsibility of developing necessary legal and factual background information as a foundation of the Commission's conclusions and recommendations. To provide one source of information for Commission consideration, the staff planned and carried out a research program covering 33 subjects in connection with which reports were made by independent contractors, consultants, or the staff.

All of these reports are available for examination, and it is planned to have all of them published and available for purchase by the public. However, the initial manuscripts could not be obtained in sufficient quantity to permit distribution to the public, and they have been undergoing review for correction before publication.

In addition, it is planned to have the Commission's final report published and available for purchase at the time it is submitted to the President and the Congress. The report will be submitted not later than June 30, 1970, but the exact date has not been set.

The Commission's policy concerning the contractor and staff reports and the current status are set forth below.

1. POLICY ON PUBLIC ACCESS

The Commission's policy providing public access to all study reports emphasizes that the opinions, findings, conclusions, and data expressed in the reports are those of the authors and not necessarily those of the Public Land Law Review Commission. Each report constitutes only one of a number of sources of information utilized by the Commission in the conduct of its public land study program.

The reports may be examined at the Commission office, 1730 K Street NW., Washington, D.C. between the hours of 8:30 a.m. and 5:30 p.m., Monday through Friday. Members of the Advisory Council and the representatives of the Governors of the 50 States also have copies that can be examined on any basis that is agreeable to them.

Copies of all reports are also available for inspection at the National Archives in Washington, D.C., and its Federal Records Centers in Waltham, Mass.; New York, N.Y.; East Point, Ga.; Kansas City, Mo.; Chicago, Ill.; Fort Worth, Tex.; Denver, Colo.; San Francisco, Calif.; and Seattle, Wash. In addition, a set of reports is deposited with the Conservation Library, which is located in the Central Library Building of the city and county of Denver.

2. PUBLICATION OF STUDY REPORTS

The "Digest of Public Land Laws" and the "History of Public Land Law Development" are available for purchase from the Superintendent of Public Documents, U.S. Government Printing Office, Washington, D.C. 20402. The Commission's final report is also expected to be on sale by the Superintendent of Documents.

All other reports are being published by the Clearinghouse for Federal Scientific and Technical Information of the Department of Commerce, Springfield, Va. 22151. As manuscripts are published, announcements are made of their availability.

Orders for copies must specifically refer to order numbers indicated, and be sent directly to the Clearinghouse. Unless specified otherwise, prices per volume of Clearinghouse publications are $3 per paper copy and $0.65 for microfiche.

3. MANUSCRIPTS PUBLISHED

Digest of Public Land Laws.—Prepared by Shepard's Citations, Inc., of Colorado Springs, Colo. $6.50.

History of Public Land Law Development.—Written by Prof. Paul Wallace Gates of Cornell University with a chapter by Robert W. Swenson of the University of Utah. $8.25.

Federal Legislative Jurisdiction.—Prepared by Land and Natural Resources Division, U.S. Department of Justice. No. PB 185–920.

Withdrawals and Reservations of Public Domain Lands.—By Charles F. Wheatley, Jr., Washington, D.C., published in 3 volumes, Nos. PB 187–002, 187–003, 187–004.

Administrative Procedures and the Public Lands.—By the University of Virginia. No. PB 187–205.

Fish and Wildlife Resources on the Public Lands.—By Colorado State University. Published in two volumes, Nos. PB 187–246 and 187–247.

Public Land Timber Policy.—By George Banzhaf & Co., Milwaukee, Wis. Published in four volumes, Nos. PB 187–728, 187–729, 187–730, 187–731.

Federal Public Land Laws and Policies Relating to Intensive Agriculture.—Resources portion by South Dakota State University. Legal portion by Kronick, Moskovitz, Tiedemann & Girard, Sacramento, Calif. Published in four volumes. Legal portion, volume I, No. PB 188–071; resources portion, volume II, III, and IV, Nos. PB 188–062, 188–063, and 188–064.

Development, Management and Use of Water Resources on the Public Lands.—By Charles F. Wheatley, Jr., Washington, D.C., Charles E. Corker of the University of Washington, Thomas M. Stetson, San Francisco, Calif., and Daniel J. Reed, Los Angeles, Calif. Published in two volumes, Nos. PB 188–065 and 188–066.

Outer Continental Shelf Lands of the United States.—By Nossaman, Waters, Scott, Krueger & Riordan, Los Angeles, Calif. Published in six volumes, Nos. PB 188–714, 188–715, 188–716, 188–717, 188–718, and 188–719.

4. MANUSCRIPTS TO BE PUBLISHED

Revenue Sharing and Payments in Lieu of Taxes.—By EBS Management Consultants, Inc., Washington, D.C.

Federal Land Laws and Policies in Alaska.—By the University of Wisconsin.

Land Grants to States.—Prepared by the Commission staff.

Impact of Public Lands on Selected Regional Economies.—By Consulting Services Corporation, Seattle, Wash.

Forage Resource of the Public Lands.—By the University of Idaho.

Regional and Local Land Use Planning.—By Herman D. Ruth and Associates, Berkeley, Calif.

Trespass and Unauthorized Use of the Public Lands.—By Ireland, Stapleton, Pryor & Holmes, Denver, Colo.

Nonfuel Minerals.—Resources portion by the University of Arizona, Legal portion by Twitty, Sievwright & Mills, Phoenix, Ariz.

Energy Fuel Minerals.—Resources portion by Abt Associates, Inc., Cambridge, Mass. Legal portions accomplished as follows:

Federal Competitive and Noncompetitive Oil and Gas Leasing Systems, by Rocky Mountain Mineral Law Foundation, Boulder, Colo.

Oil Shale on Public Lands, by University of Denver School of Law.

Coal Resources on Public Lands, by University of Utah.

Geothermal Steam Resources of the Public Lands, by the Commission staff.

Outdoor Recreation Use of the Public Lands.—By Herman D. Ruth and Associates, Berkeley, Calif.

Federal Public Land Laws and Policies Relating to Use and Occupancy.—By Daniel, Mann, Johnson & Mendenhall, Los Angeles, Calif.

User Fees and Charges for Public Lands and Resources, by the Commission staff.

Adjustment of Use Rights, by the Commission staff.

Appraisal Techniques and Procedures Utilized in Connection with Actions Related to Federal Public Lands.—By Kronick, Moskovitz, Tiedemann & Girard, Sacramento, Calif.

Organization, Administration, and Budgetary Policy.—Accomplished in-house with consultants.

Inventory Information on Public Lands, by the Commission staff.
State Land Policies, by the Commission staff.
Future Demands on the Public Lands—
Policy Impacts of Future Demands.—Staff analysis with consultant assistant.
Projections of the Consumption of Commodities Producible on the Public Lands of the United States 1980–2000.—By Robert R. Nathan Associates, Washington, D.C.
Probable Future Demands on Public Lands.—By Robert S. Manthy, Seattle, Wash.
Probable Future Demands on the Public Lands for New Cities and Urban Expansion.—Papers by two contractors and two consultants.
Disposal Techniques and Procedures.—By Raleigh Barlowe, East Lansing, Mich.
Public Land Policy and the Environment—
Parts 1 and 5.—Accomplished in-house with assistance of contractors for parts 2, 3, and 4.
Part 2, Legal and Administrative Framework for Environmental Management of the Public Lands.—By Ira Michael Heyman and Robert H. Twiss, Berkeley, Calif.
Part 3, Environmental Problems on the Public Land.—By Rocky Mountain Center on Environment, Denver, Colo.
Part 4, Environmental Quality and the Public Lands.—By Landscapes, Inc., Madison, Wisc.; and *A General System or Environmental Resource Analysis*, by Steinitz Rogers Associates, Inc., Cambridge, Mass.
Federal Public Land Laws and Policies Relating to Multiple Use of Public Lands, by staff consultants.
Land Acquisitions and Exchanges. By Charles F. Wheatley, Jr., Washington, D.C.

5. STUDY UNDERWAY

Criteria to Judge Facts to Help Determine Maximum Benefit for the General Public. Completion of this in-house study dependent on Commission action.

Mr. ASPINALL. After the work is finished and the report is submitted, we think it would be advisable to hold five meetings for opinionmakers: One with the news media and four scattered throughout the United States; in the East, Midwest, the Rocky Mountain West, and the Far West, so that we can review with those who attend the meaning of Commission's report.

As I stated a few minutes ago, the Director has been very diligent. We have saved some money even this fiscal year. We believe we have enough to take care of these meetings and enter into the necessary contracts and pay the expenses for them. We think this would be particularly advisable as far as having others publicize the work of the Commission is concerned; not because of what the Commission has done, but because of what this means to the Nation generally.

In fiscal 1971, as I stated before, we will have to handle correspondence, take care of the retirement of files, the processing of personnel actions, and the closing out of contracts. For this the staff director, Mr. Pearl, has suggested that the maximum number of people that would be employed at any one time after July 1 would be 12. It would be composed of the Director, the Assistant Director and their assistants, and secretarial force as needed.

There is just one other thing that I would like to bring to your attention at this time, and that is we do have some outstanding controversies with the contractors. The total amount of claims submitted by seven of them is $247,000. One claim has been settled and the remaining six claims amount to $238,332. We estimated previously for some contingencies and some was absorbed in our study program. We may have enough to settle all claims. You just don't know about a

matter like this until you make your final decision. We are hoping that this means that we won't have to make any other request of the committee or of Congress. So far we have lived within our appropriation authorization and we hope to be able to keep it intact as I have reported to you.

With that, Madam Chairman, I want to say it has always been a pleasure to be here. I have a feeling of nostalgia as I make my final appearance before this committee for this particular purpose.

I will be before you in other capacities later on.

Mrs. HANSEN. I am sure you will and we will certainly be delighted. Please insert in the record the amount of funds that were carried over as of June 30, 1969.

(The information follows:)

The carryover balance as of June 30, 1969, was $788,000.

Mrs. HANSEN. On page 7 of the justifications, you say, "A program is being studied to arrange by contract for assistance in holding regional conferences." Please discuss this program for us.

Mr. ASPINALL. So far we have contacted the University of Denver to see if we cannot find some kind of format. We have been so busy on winding up our work that we have not been able to go into detail. But between the time we deliver the report to the printer and the time that it is being made available for delivery to the President we will have time to go ahead and take care of this.

Mr. Pearl can tell you approximately what the University of Denver has stated as a figure.

Mr. PEARL. Madam Chairman, we discussed this with the University of Denver on the basis of a broad format and they came up with an estimate of roughly $26,000 for conducting one of these conferences. That is the basis on which we made the overall estimate that we would be able to conduct five of these. We also recognize, and I think it is stated this way in our papers, that once we get down to trying to negotiate contracts, we may find that costs elsewhere will be more.

We will live within what we have.

Mrs. HANSEN. Isn't it true, Mr. Chairman, that this report will affect every facet of public land philosophy for perhaps decades, and that it is mandatory that the public understand every segment of it?

There must be complete understanding of the basic concepts of the Public Land Law Review Commission. Isn't it true that taken out of context, any one recommendation can be overplayed or underplayed and destroy the effectiveness of other recommendations.

Mr. ASPINALL. You are right, Madam Chairman. To show you how careful we have been in this, we took care of the subject first through an evaluation paper on the environment prepared by the staff and took tentative positions, but we read the language of the draft of report that had been prepared by the staff this past Thursday afternoon. Then all day Friday and all day Saturday we spent in trying to find out where there might be some differences or there might be some inconsistencies or gaps between one of these 33 subjects with another of the 33 subjects, or among the 20 chapters, and trying to get these inconsistencies worked out. After you have spent all the time we have you find you make up your mind on a certain subject and later on

you have another subject and your tentative position is a little bit different. So the staff had prepared for us this very intricate and detailed statement of inconsistencies or insufficiencies.

The chairman is exactly right because if you read a part of this, for example, the part on environment and leave out the part that has to do with mineral resources, we are likely to be in trouble. That is the reason for publicizing this the best we can, not only before the news media, but others who interpret for and inform the people of the United States who are really interested in these problems.

Mrs. HANSEN. Isn't it also true, Mr. Chairman, that each segment of the public is interested in a certain portion of this report? Yet there is a multiplicity of problems which are interrelated.

Mr. ASPINALL. I could say this this morning, and I believe I would be right. Five members of this committee are present. If I would ask you what your definition of multiple use is, there wouldn't be one of you that would be in agreement with the other one.

Mrs. HANSEN. That is right.

This, I think, is why the public must understand this report. The policies of this report will affect the activities of practically every person in the United States.

Mr. ASPINALL. The gentlewoman is correct.

Mrs. HANSEN. Thank you very much, Mr. Chairman.

I may say with a certain sense of nostalgia that the committee will no longer have you as a witness on behalf of the appropriations for the Public Land Law Review Commission. But I am very sure that the chairman will continue his deep interest in the programs of the Department of Interior. I remember when I first became a member of this subcommittee it was your custom to appear and make comments on the total Interior budget which the committee always welcomed.

Mr. ASPINALL. Thank you.

Mrs. HANSEN. There has been a deep and close association with the authorizing committee. We think we are very fortunate that three members of this Subcommittee on Appropriations have been members of your authorizing committee. Thank you again, Mr. Chairman.

Mr. Flynt.

Mr. FLYNT. Thank you, Madam Chairman.

I want to associate myself with the remarks of the distinguished chairman of the subcommittee in thanking you again, Mr. Chairman, for your appearance before us. We always not only welcome you when you appear before us, but there are many times when we seek out your advice and counsel before we go into the actual appropriations process.

I know of no man in the Congress with whom I presently serve or with whom I have served in the past who has a better grasp of the substantive law, not only affecting public lands, but also other matters within the jurisdiction of the Committee on Interior and Insular Affairs, than the gentleman from Colorado who is appearing before us today. We welcome your advice and counsel. Indeed, we solicit it on many occasions. We thank you for your appearance.

Mr. ASPINALL. Thank you very much.

Mr. FLYNT. I was interested just a minute ago about your comment on the fact that of the five members of the subcommittee who are

present here today that if you should ask ask each of us for our own definition of multiple use of such lands, that you would probably get five different answers.

I hope that is not literally true. I would certainly hope that you would find these five members in at least general agreement, although maybe not in specific agreement, on every individual point.

Mr. ASPINALL. Of course, that is what I meant.

Mr. FLYNT. Of course, and I understand that. At the request of various individuals and groups, I have made a special study of the concept of multiple use during the past 15 months, and I think it would be of great interest to the gentleman from Colorado to know that we in the southern part of the United States are also taking very close looks at some of these matters, and more than we did in the past.

During these past 15 months I certainly do not profess to have become an expert on the multiple-use concept, but I have at least gone through a process of continuing education in it. I have participated in several seminars, in one of which I was privileged to play a leading role. It has been a source of not only great pleasure but of educational interest to me, as I have certainly renewed my interest in this very important subject. I have watched with interest the work of your Commission on the Public Land Law Review, and I am sure that along with all members of this committee that we look forward to seeing your finished product. I do not feel that I am being premature when I congratulate you and the members of the Commission and Mr. Pearl on the finished product that we confidently expect to see.

Mr. ASPINALL. Thank you very much. We will have the subject of multiple use treated in this report, too, and I can say that, while there is not exactly unanimity on all details, there is unanimity on the overall.

Mr. FLYNT. Maybe you could give us a concise definition upon which we can all agree in the future.

Mr. ASPINALL. The report attempts to do so.

Mrs. HANSEN. Mr. Obey?

Mr. OBEY. In the northern part of my district, folks are most anxiously awaiting the report of the Commission. So I appreciate the opportunity to have you appear before us this morning.

Mr. ASPINALL. Thank you.

Mrs. HANSEN. Mr. Reifel.

Mr. REIFEL. Thank you, Madam Chairman.

Chairman Aspinall, it has been one of the great pleasures of my service in Congress for 10 years to make your acquaintance.

Mr. ASPINALL. It is mutual.

Mr. REIFEL. The people of this country are indebted to you in a measure they will never understand for the things you have done to make America more livable. I just want you to know my feelings about that. I want to express on behalf of the Indian people, because many do not understand what you have done, our deep appreciation to you for your help.

Mr. Pearl, this has been a monumental task, and has taken all of your time and energy and great ability. We are looking forward to

the completed report. It is going to be a landmark and high water mark in what we ought to do with our natural resources, that are the responsibility of the Federal Government. So to you we are also indebted.

Mr. ASPINALL. May I just say that many of us, including my very dear friend from South Dakota, have been working on a lot of these matters, including environment, for many years. Four years ago, or over 4 years ago, this was one of the subject matters that the staff and the commission decided upon. I think you will find the contract study on environment one of the better ones. I think you will find the chapter of the report on Public Land Policy and the Environment one of the more constructive chapters. We treat it as a problem of today and tomorrow, but we also call to the attention of the readers that it has been a problem with us for a long time. Many people have worked on this task of bettering our environment. It happens to be that today it is a glamorous subject. A lot of people are talking about it. It has the same place as all glamor programs. That does not mean to take away the necessity of it or the value of it.

When people find out that this really comes down to each one of the citizens personally, then I think the reaction is going to be a little better as far as a constructive approach to changing our environment is concerned. It is going to be a long struggle. I think you will be intrigued with our chapter on environment.

Mr. REIFEL. I am sure we will be.

I just wanted to have you state for the record that your interest in this has not been a Johnny-come-lately approach.

Mr. ASPINALL. My friend is right.

Mr. REIFEL. This committee under the leadership of Mrs. Hansen is not one that has just come on the scene. This committee has been pressing for more appropriations for the Bureau of Land Management, the Forest Service, and other natural resources in order to minimize pollution and improve the quality of our environment. We have not been heard to the extent that we would like to, and neither have you. Maybe with this Commission's report and the attention now being given to environmental quality, more will be accomplished.

Mrs. HANSEN. Mr. Chairman, I think it is a tribute to your intelligent appraisal of the problems and a tribute to your thoughtfulness that the Public Land Law Review Commission was created when it was. You are now ready to present your report at a time when the crisis has arisen. It is not something that has been hastily put together. The forethought and the foresight were present several years ago, long before people were discussing these problems.

The committee feels that had the general public and the press media been as interested in the warnings that this committee has issued on the scarcity of appropriations, that we would not have had some of the disasters that we have had, such as the oil spills.

Mr. ASPINALL. Thank you.

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